

**Unica Collaborate V12.1
Administrator's Guide**



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Chapter 1. Unica Collaborate

Unica Collaborate provides marketing organizations with the ability to distribute the execution of centrally managed marketing campaigns throughout the enterprise.

It allows centralized marketers to maintain control over corporate standards and business rules, while it allows remote users to tailor or provide input to the campaign for greater local customization and relevance, ultimately increasing response rates and revenue.

Collaborate supports campaign customization by remote users; however, the remote users can change only those parameters that are specified by the campaign designer.

For example, a retail company might want to centrally control certain selection criteria, but allow individual store owners to control selections that are related to their stores or locations.

Corporate marketers

Corporate marketers develop templates for reusable campaign logic and lists of customer contacts.

Corporate marketers manage corporate campaigns and oversee marketing activities of field marketers. They also specialize in designing and generating campaigns from which the field marketer can choose.

Primary corporate marketer tasks

In Collaborate, corporate marketers perform the following tasks:

- Design campaign flowcharts.
- Create corporate campaigns.
- Manage campaign workflow.
- Create reports that are used to assess campaign success.
- Design templates for Corporate Campaigns, On-demand Campaigns, and Lists, for use by field marketers and other corporate marketers.

Corporate marketer tasks in Campaign

Corporate marketers also frequently use Campaign, through which they design and build flowcharts that are associated with Lists, On-demand Campaigns, and Corporate Campaigns.

Corporate marketer roles

Corporate marketers must be assigned the Corporate Marketer role in the Global security policy, or its equivalent, to perform their tasks.

To work in Campaign, corporate marketers must be assigned the following roles:

- Global Policy Execute
- Global Policy Design
- Global Partition Design or Execute

Field marketers

Field marketers create and run local or regional marketing activities for a territory or line of products.

Field marketers work directly with customers, understand their needs, and can make good decisions on how best to reach their customers with on-demand or corporate marketing campaigns.

Field marketers may be line-of-business users, partners, branch office managers, retail store managers, or members of local sales forces. Field marketers create on-demand (local) campaigns that they can run at any time to target a local customer base.

Field marketers tasks

In Collaborate, field marketers work with:

- Lists

Field marketers typically create Lists in Collaborate and define criteria to select contacts for the Lists. These Lists can then be used by one or more On-demand Campaigns as needed.

- On-demand Campaigns

Field marketers can create and run On-demand Campaigns to target their set of customers.

- Corporate Campaigns

Field marketers subscribe to the Corporate Campaigns they want to participate in. For those Corporate Campaigns, field marketers review and choose which of their customers are targeted by the Corporate Campaign.

Field marketer roles

Field marketers must be assigned the Field Marketer role in the Global security policy, or its equivalent, to perform their tasks.

Logging in to HCL Unica

This procedure assumes that you know the website address (or URL) to your server and you have an assigned user name and password. If you need help, contact your HCL Unica administrator.

1. Open a supported browser and enter the URL to the HCL Unica server.
The prompts that display vary based on the security settings that are defined for your installation.
2. If prompted, accept the digital security certificate.
3. On the login page, enter your user name and password, then click **Sign In**.

If you are prompted to accept the digital security certificate, click **Yes** to accept the certificate.

The dashboard or the default start page displays. The options that are available to you depend on the permissions that are assigned to you by your HCL Unica administrator.

 **Note:** For a list of supported browsers, see the Recommended Software Environments and Minimum System Requirements guide.

Collaborate documentation and help

Collaborate provides documentation and help for users, administrators, and developers.

The following table describes the various tasks of Collaborate. The **Documentation** column contains names of documents where you can find more information about the tasks.

Table 1. Get up and running

This two-columned table describes the Collaborate installation or upgrade tasks in one column, and the corresponding documents in the second column.

Task	Documentation
Find out about new features, known issues, and limitations	Collaborate Release Notes
Learn about the structure of the Collaborate system tables	Collaborate System Tables and Data Dictionary
Install or upgrade Collaborate	One of the following guides: <ul style="list-style-type: none"> • Collaborate Installation Guide • Collaborate Upgrade Guide
Implement the IBM® Cognos® reports provided by Unica Collaborate Implement Unica Insights reports provided by Unica Collaborate	Cognos Reports Installation and Configuration Guide Unica Insights Installation and Configuration Guide

The following tables describe administrative tasks in Collaborate. The **Documentation** column contains names of documents where you can find more information about the tasks.

Table 2. Configure and use Collaborate

This two-columned table describes the Collaborate administrative and user tasks in one column and the corresponding documents in the second column.

Task	Documentation
<ul style="list-style-type: none"> • Set up and configure the system for users • Adjust security settings • Map tables, define offer templates and custom attributes • Run utilities and perform maintenance 	<i>Unica Collaborate Administrator's Guide</i>
<ul style="list-style-type: none"> • Create and deploy marketing campaigns • Analyze campaign results 	Unica Collaborate Corporate Marketer's Guide Unica Collaborate Field Marketer's Guide
Use REST APIs	Unica Collaborate REST APIs

The following tables contain information about online help and obtaining PDFs for Collaborate. The **Instructions** column describes how to open online help and access documentation for Collaborate.

Table 3. Getting help

This two-columned table contains information about how to start online help and access PDF documentation for the Collaborate. Second column contains instructions for the tasks.

Task	Instructions
Open online help	<ol style="list-style-type: none"> 1. Choose Help > Help for this page to open a context-sensitive help topic. 2. Click the Show navigation icon in the help window to display the full help.

Task	Instructions
	You must have web access to view context-sensitive online help. Contact HCL Support for more information about accessing and installing Unica Knowledge Center locally for offline documentation.
Obtain PDFs	Use either of the following methods: <ul style="list-style-type: none">• Choose Help > Product documentation to access Collaborate PDFs.• Choose Help > All HCL Unica suite documentation to access all available documentation.
Unica Knowledge Center	To access the Unica Knowledge Center, choose Help > Support for this product .

Chapter 2. Customize Collaborate

You can customize the Collaborate interface to meet your needs. Customization settings are available in Collaborate when you click **Settings** or **Settings > Collaborate Settings**.

The following table describes what you can customize.

Table 4. Options for customizing Collaborate

Option	Description
Set current page as Home	Set the current page to display automatically as soon as you log in to Collaborate.
Basic Settings	Set the security policy to apply to new items by default.
Timezone	Choose your local timezone.
Projects Options	Define the project list and view to show by default for projects.
Tasks Options	Define the task list and view to show by default for tasks.
Collaborate Analytics Options	Set a default report to display when you go to the Analytics > Collaborate Analytics page, and set the Analytics home page as your login page.
Instances Options	Customize your default view of Lists, On-demand Campaigns, and Corporate Campaigns.
Calendar/ Timeline Settings	Select options to customize how you view the calendar and task milestones.

You (or another user with the appropriate permission) can set up dashboards to show the information that you view most often. Each dashboard can include one or more "portlets" that present:

- List management.
- Subscription management.

- Campaign management
- Calendar

List portlets

If the reports package is not installed, you still have access to the list portlets that are available on your dashboard.

Your system administrator selects the portlets that members of your organization can add to the dashboard. To manage your dashboards and add portlets to them, select **Dashboard > Create Dashboard**.

Collaborate report portlets

The following table describes the Collaborate dashboard portlets that are available after the Collaborate reports package is installed.

Table 5. Standard Collaborate report portlets

Report
List management
Subscription management
Campaign management
Calendar

Setting your basic settings

Use the basic settings option to choose the security policy that is used by default when you create items.

To set the security policy, complete the following steps.

1. Select **Settings > Collaborate Settings**.

The **Administrative Settings** page opens.

2. Click **Basic Settings**.

The **Basic Settings** page opens.

3. In the **Default Security Policy** field, select the security policy to use by default when you create items in Collaborate.

You can leave **Global** selected, which is the default, to use the global security policy that is defined by your administrator. Otherwise, you can select a security policy that your administrator instructed you to select. As a best practice, do not change the security policy without the guidance of your administrator. For more information about security policies, contact your administrator or see the Collaborate Administrator's Guide.

4. Click **Save Changes** to save your changes.

Setting your instance options

You can use instance options to customize your default views of Lists, On-demand Campaigns, and Corporate Campaigns.

For example, you might want to specify that the On-demand Campaigns list that opens by default shows only On-demand Campaigns set to run in the current week.

1. Select **Settings > Collaborate settings**.

The **Administrative Settings** page opens.

2. Click **Instances Options**.

The **Instances Options** page opens.

3. In each of the List, On-demand Campaign, and Corporate Campaign sections, select the default view.

4. Click **Save Changes** to save your changes.

When you open the Lists, On-demand Campaigns, or Corporate Campaigns page, your default list is shown.

Setting your start page

The start page is the page that displays when you log in to HCL Unica. The default start page is the default dashboard, but you can easily specify a different start page.

If you do not want a dashboard page to display when you first log in to HCL Unica, you can select a page from one of the installed Unica products as your start page.

To set a page you are viewing as your start page, select **Settings > Set current page as home**. Pages available for selection as a start page are determined by each HCL Unica product and by your permissions in HCL Unica.

On any page you are viewing, if the **Set current page as home** option is enabled, you can set the page as your start page.

Calendar

Historically, organizations produced paper-based calendars and updated them with the latest information. The calendar feature provides marketing groups with electronic means to view and update calendar data.

Field marketers and corporate marketers can use the Collaborate calendar to view the time horizon for marketing campaigns.

Marketing organizations typically organize their work with calendars. For example, seasonal events drive marketing programs, and other external dates, such as store openings, and seasonal product announcements.

You can use the calendar as an aid for planning marketing campaigns.

- You can view and update the timelines for Lists, On-demand Campaigns, or Corporate Campaigns.
- You can get an up-to-date view of planned or run marketing efforts over time.

You can customize the appearance of the calendar in the following ways.

- You can set a default view of the calendar: Click **Settings > Collaborate Settings > Calendar/Timeline Settings**.
- You can choose the look of the calendar in the Set View Options dialog box.
- You can filter the items that are displayed on the calendar with Advanced Search.

Calendar features

The calendar in Collaborate displays Lists, On-demand Campaigns, or Corporate Campaigns. You can also edit the views.

The Collaborate calendar has the following features:

- The calendar includes start and end dates for the displayed items.
- You can display Corporate Campaigns and On-demand Campaigns on the same calendar in different colors for easy differentiation.
- You can open a Corporate Campaign, List, or On-demand Campaign directly from the calendar.

Default and per session calendar views

You can use one of two types of settings when you view the calendar:

- The default calendar settings, which are in effect every time you log in.
- The per session calendar settings. The per session calendar is the calendar that results from making temporary changes to the calendar view, without changing the default settings.

Objects displayed in a calendar

You can display any of the following objects in a calendar:

- Corporate Campaigns
- On-demand Campaigns
- Lists
- Corporate Campaigns and On-demand Campaigns

Calendar item dates

Each List, On-demand Campaign, or Corporate Campaign that is displayed in a calendar has a start and end date. These are the target start and end dates you set when you create the object.

Display options for the calendar

You can modify the calendar display in the following ways:

- You can modify the default calendar settings.
- You can set the calendar view for the current session.
- You can toggle between calendar views:
 - Timeline view
 - Calendar grid view
 - Text view
- You can use the advanced search feature to filter the Lists, On-demand Campaigns, or Corporate Campaigns that are displayed in the calendar.

Timeline view

This view displays a time-based view of the Lists, On-demand Campaigns, or Corporate Campaigns you select to display. You can select the time range for the calendar items you select to display in a timeline view.

In a timeline view, each calendar item is displayed as a horizontal bar across its date range. If you enable color coding, each calendar item is colored according to attributes you select.

You can select the date range for the timeline from the following options:

- **Week** displays one week. Each day is listed as a column. The starting day is either Sunday or Monday, depending on the default calendar settings.

- **Month** displays a single calendar month. Each day is listed as a column, and days are grouped into weeks.
- **Quarter** displays three calendar months. Each week is listed as a column, and weeks are grouped into months.
- **Fiscal Year** displays a fiscal year. Your administrator can configure the starting month for a fiscal year. Each month is listed as a column, and the months are grouped into quarters.
- **Calendar Year** displays a calendar year that starts in January and ends in December. Each month is listed as a column, and the months are grouped into quarters.

 **Note:** Any day that is specified as non-work time is disabled in a timeline view.

Month-based text or calendar grid view

A month-based calendar view displays a calendar for a selected month.

In addition to a month-based timeline view, you can select from the following month-based calendar views:

- **1-Month Text:** Each day contains a text listing of selected, Lists, On-demand Campaigns, or Corporate Campaigns.
- **1-Month Calendar Grid:** Each calendar item is displayed as a horizontal bar that begins on the item start date and ends on the item end date. If you enable color coding, each calendar item is colored according to attributes you select.

 **Note:** Any day that is specified as non-work time is indicated by a gray X in the background in a calendar grid view.

Color-coded by attribute view

You can color-code the calendar display for Lists, On-demand Campaigns, or Corporate Campaigns by selected attributes. You can apply color-coding to a calendar grid view or to a timeline view.

You can filter the calendar display for Lists, On-demand Campaigns, or Corporate Campaigns according to the values of a selected attribute, such as the following.

- Execution status
- Schedule status
- Template type

The calendar displays a legend in the lower-right corner of the screen.

For example, consider the following On-demand Campaign attribute and its possible values:

- Attribute name: Campaign Execution Status
- Valid attribute values: Active, Complete, Under development

If you group and display On-demand Campaigns by Campaign Execution Status, the resulting calendar is displayed with four colors in the legend. There is one color for each valid attribute value, and one for N/A.

 **Note:** The color that is assigned to N/A is displayed in the calendar when calendar items are not assigned a value for the selected attribute.

Horizontal bars used in calendars

The timeline view and calendar grid view display calendar items as horizontal bars.

Note the following information about bars:

- The bars represent the date range for objects that are displayed on the calendar.
- The bar color depends on values of an attribute you optionally select for color coding.
- The shape of the bars determines the following about item start and end dates:
 - Rounded left end: The start date is the date indicated by the left end of the bar.
 - Rounded right end: The end date is the date indicated by the right end of the bar.
 - Flat left end: The start date is before the visible date range.
 - Flat right end: The end date is beyond the visible date range.

Accessing the calendar

You can access the calendar for Lists, On-demand Campaigns, or Corporate Campaigns by clicking the **Set View Options** icon.

1. From the **Collaborate** menu, select **Lists, On-demand Campaigns, or Corporate Campaigns**.
2. From the **View** menu, select **Set View Options**.
3. Set the view options.
You can display the calendar as a Timeline, a Text Calendar, or a Graphical Calendar.
4. Click **Apply**.

Navigating the calendar

All calendar/timeline views contain the following icons:

Icon	Description
	Opens the Set View Options dialog box. Use this link to change the way that the calendar is displayed.
	Opens the Advanced Search dialog box.
	Changes the date range that is displayed, moving back one unit in time. For example, if your current calendar view is a monthly timeline of September 2009, clicking  displays August 2009.
Current date range	Opens a drop-down list of available date ranges. Use this link to quickly change to any other date range. For example, if you are viewing a monthly calendar for July 2009, you can change the view to January 2010 by clicking this link and then choosing January 2010 from the drop-down list.
	Changes the date range that is displayed, moving forward one unit in time. For example, if your current calendar view is a weekly timeline from 7/20/2009 through 7/26/2009, clicking  displays 7/27/2009 through 8/2/2009.

Setting per-session calendar views

You can change the views of the calendar from default settings by clicking View from the **Calendar** page or a listing of Lists, On-demand Campaigns, or Corporate Campaigns.

1. Access the calendar.
2. Click **View**.

The Set View options dialog box opens.

3. Select options to change the view.
4. Click **Apply**.

Accessing calendar objects by date

You can filter the calendar to display all of the Collaborate objects for a selected date.

You can view all the objects at a more granular level. For example, if the calendar is displaying Corporate Campaigns for June 2009, you can click **7** to open a list page that contains all Corporate Campaigns whose date ranges contain June 7th, 2009.

Click the date in an open calendar that displays Lists, On-demand Campaigns, or Corporate Campaigns.

Accessing an object from the calendar

You can view the List, On-demand Campaign, or Corporate Campaign from its calendar.

Click the List, On-demand Campaign, or Corporate Campaign on the calendar.

The List, On-demand Campaign, or Corporate Campaign opens.

Exporting the calendar

You can save a snapshot of the current calendar in HTML format.

1. With the calendar open, click the menu next to the print icon () and select **Export**.
2. Choose one of the following options:
 - Click **Open** to open the compressed file of the calendar.
 - Click **Save** and choose a location to save the calendar to disk.
 - Click **Cancel** to return to the Calendar screen without publishing.

The system publishes the calendar into a compressed file archive.

Publishing the calendar

You can save a snapshot of the calendar at a certain moment in time. When you publish the calendar, you chose which information you want to display and how you want to display it.

To get a snapshot of the current calendar, save it in HTML format (into a ZIP compressed archive file).

1. Choose the calendar view to publish.

Select the objects, time range, and appearance for the calendar view. You can make selections in either of the following ways:

- From the **Local Marketing** menu, select **Calendar**. Then, select items to view.
- At a list page for Lists, On-demand Campaigns, or Corporate Campaigns, click the **View** icon () and choose a calendar view.

 **Note:** If the current calendar view includes projects, Project data is exported as well. The exact data that is exported depends on how the project template was set up; Summary and custom tabs might be exported for some or all projects.

2. Click the **Print** icon () and select **Export**.
3. Take one of the following actions.
 - Click **Open** to open the compressed file of the calendar.
 - Click **Save** and choose a location to save the calendar to disk.

- Click **Cancel** to return to the **Calendar** page without publishing.

The system publishes the calendar into a compressed file archive. You can use any application for working with compressed files to access the calendar HTML pages. You can go to the next and previous pages of the calendar view in your web browser. If you exported any project data, you can also go to that data from the calendar HTML pages.

Viewing the timeline

If you choose a timeline view, you can choose from several date ranges. The screen can display data for a single week all the way up to data for an entire year.

Timeline view of the calendar

If you choose a timeline view, you can choose from several date ranges. The screen can display data for a single week, up to data for an entire year.

The timeline view displays a grid-like view of the objects that you selected and filtered (for example, Active Lists). The objects are organized by a unit of time, depending on which timeline view you selected.

Each object is displayed in a horizontal bar across its date range. The name of the object displays on the bar.

 **Note:** If you select **Enable Color Coding** from the calendar view options screen, the bar for each object is displayed in a color that is based on an attribute you chose.

Choose a date-range for the timeline.

- **Week:** displays one week, with each day listed as a column. The starting day is either Sunday or Monday depending on the option that is selected in the **Calendar/Timeline Settings** page.
- **Month:** displays a single calendar month. Each day is listed as a column, and days are grouped into weeks.
- **Quarter:** displays three calendar months. Each week is listed as a column, and those weeks are grouped into months.

- **Fiscal Year:** displays a fiscal year. The starting month depends on a configuration setting, `firstMonthInFiscalYear`. Each month is listed as a column, and the months are grouped into quarters.
- **Calendar Year:** displays a calendar year, which starts in January and ends in December. Each month is listed as a column, and the months are grouped into quarters.

 **Note:** Any day that is specified as non-work time has its column that is disabled. Additionally, the name of the non-work time (for example, "Labor Day") displays when you point to the date. This feature is not available when the time scale is Quarter, Fiscal Year, or Calendar Year.

Navigating the timeline view

You can navigate the timeline by doing any of the following:

- Click the expand icon (+) next to an object to display objects that are contained in the hierarchy.
- Click the expand icon (+) next to an object to display tasks within the workflow for that object.
- Click the object name to drill down to a timeline that contains the objects contained in its hierarchy.

 **Note:** Clicking a task opens the **Workflow** page of the project with which the task is associated.

- Click the zoom in () and zoom out () icons. These icons are displayed above the timeline. Zooming changes the date range of the timeline. For example, zooming in from a monthly timeline takes you to a weekly timeline. The top level is (fiscal) yearly, and the lowest level is weekly.

Text or graphical calendar views

The calendar views display data for a selected month. The view contains a cell for each day of the selected month. The cell for a day contains either a list of items active on the day (text) or a portion of a horizontal bar for each active item (graphical).

The page displays a grid that contains a column for each day of the week: either five columns that represent the weekdays, or seven, if you choose to display weekend days. You set this option on the **Calendar/Timeline Settings** page. The page contains either five or six rows, each representing a week.

Monthly calendar

The monthly calendar view displays a calendar of the selected month. It lists the objects you selected and filtered on (for example, Active Lists).

Choose either of these monthly calendar views.

- **1-Month Text:** Each day contains a list of objects. An object is displayed for all days in its date range.
- **1-Month Graphical:** Each object is displayed in a horizontal bar that begins on its start date and ends on its end date. If you select **Enable Color Coding** from the calendar view options page, the bar for each object appears in a different color.

 **Note:** Any day that is specified as non-work time is indicated by a gray X in the background. Additionally, the name of the non-work time (for example, "Labor Day") displays when you point to the date.

Navigating the text/graphical calendar

Navigate the calendar by performing any of the following actions:

- Click the object to display its summary page. For example, clicking a project opens the project's List opens the List's Summary page.
- Click the date to display a list page that contains objects that fall on that date.

Calendar color coding

You can display objects in a color-coded manner on either the graphical calendar or in the timeline views.

First, select the **Enable Color Coding** check box in either the **Calendar/Timeline Settings** page or the **Set View Options** dialog box. After you check the box, the **Based on values for** menu opens. This list contains attributes for your Lists, On-demand Campaigns, and Corporate Campaigns (depending on which objects you are currently displaying in the calendar).

From this list, you can choose any attribute that is an enumerated type. For example, consider the following attribute:

- Name: Product Family
- Valid values: CDs, Credit Card, Home Mortgage

If you choose to group objects by this attribute, your calendar contains four colors: one for each valid value, CDs, Credit Card, and Home Mortgage, and **N/A**. **N/A** corresponds to any objects that do not contain a value for the Product Family attribute.

The calendar also displays a legend in the lower-right corner of the screen. The legend lists all valid values (CDs, Credit Card, and Home Mortgage, and **N/A**) along with the color corresponding to that value.

 **Note:** You can also color code by the template on which the project is based.

Horizontal bars on the calendar

The timeline view and graphical calendar view display horizontal bars. The bars help illustrate the duration and dates of calendar objects.

Note the following information.

- The bars represent the date range for objects that are displayed on the calendar.
- The name of the object displays on the bar.
- The bars can be colored based on an attribute you select.

- The shapes of the bars indicate the following conditions of the object.
 - Rounded-end "start": indicates that the object starts on the date where the bar has a rounded end.
 - Rounded-end "end": indicates that the object ends on the date where the bar has a rounded end.
 - Flat-end "start": indicates that the object starts before the visible date range.
 - Flat-end "end": indicates that the object ends after the visible date range.

Color-coding calendar items

You can use color-coding to display objects in a calendar according to a selected attribute.

You can display different colors of Corporate Campaigns, according to whether the Corporate Campaign is active or not.

 **Note:** You can also set color-coding for the default calendar settings.

1. Open one of the following:

- Calendar
- Lists
- Corporate Campaigns
- On-demand Campaigns

2. Click **View**.

The Set View Options dialog box opens.

3. Check **Enable Color Coding**.

4. Choose a calendar item and corresponding attribute on which to base color-coding from the lists that are displayed.

5. Click **Apply**.

Zooming in or out of a timeline view

When you select a timeline view, you use the zoom feature to expand or collapse the date range for the view.

The top level for zooming out displays a year-based date range.

The lowest level for zooming in displays a week-based date range.

For example, zooming in from a monthly timeline takes you to a weekly timeline.

Click the zoom in icon () or zoom out icon () to change the view.

Chapter 3. Administrative Settings page

When you select **Settings > Collaborate Settings**, the **Administrative Settings** page appears.

User Personalization section

Table 6. Administrative settings: User Personalization section

Section	Description
User Personalization	Contains links for users to customize Collaborate to view and receive information that is important to them. See the Collaborate User's Guide for details.

System Administration Settings section

Table 7. System Administration Settings section: Restricted Options

Link	Description
Security Policy Settings	Contains links to all security policies defined in your system. See Creating a security policy (on page 56) for details.
User Permissions	Lists all users authorized to use Collaborate, organized by the groups to which they are assigned. See Assigning security policy roles (on page 61) for details.
Synchronize Users	Synchronizes the users in Collaborate with the users in the Platform. See Synchronizing users (on page 31) for details. When you synchronize users in a clustered environment, any changes propagate to the other servers when they next synchronize with Platform.
Synchronize Menus	Synchronize the menus in the Platform with the menus defined in Collaborate.
Flowchart Runs Monitoring	The Flowchart Runs Monitoring page displays any errors in flowchart runs for your system and helps you troubleshoot the problems.

Table 8. System Administration Settings section: Accessible Options

Link	Description
Default Alert Subscriptions	Opens a page for setting up and editing default alert subscriptions for Collaborate objects. See Set default alert subscriptions (on page 36) for details.

Table 9. System Administration Settings section: Other Options

Link	Description
List Definitions	Contains links to the available lists where an administrator can populate or define list values. See Customizable lists (on page 42) for details.
Template Configuration	<p>Contains links to features for working with templates and template components. See Building and managing templates (on page 68) for details.</p> <p> Note: In a clustered environment, you must shut down all but one server before you initiate any template configuration tasks.</p>
Non-working Business Days	Opens a page for updating the set of system-wide non-work dates. See System-wide non-work dates (on page 39) for details.
Published Searches	Opens a page for publishing searches saved by Collaborate users. See Publishing advanced searches (on page 40) for details.
Upgrade	Opens a page where you can select Collaborate components to upgrade. See the Installation Guide for details.
Data Migration	Offers options to export and import metadata. See Exporting and importing metadata (on page 48) .

Customizing the calendar appearance

The calendar displays a time-centric view of your business processes. You can customize the appearance of the calendar to suit the needs of your organization.

When you view the calendar, its appearance depends on several options that you can set.

- Open the calendar by selecting **Local Marketing > Calendar Operations > Calendar**.
- To change to the calendar view from the list pages, click **View Options**.
- To change to the calendar view from the list pages for Lists, On-demand Campaigns, and Corporate Campaigns, click **View Options**.
- To set the default appearance for the calendar, use the **Calendar/Timeline Settings** page. Select **Settings > Collaborate Settings > Calendar/Timeline Settings**.
- To change calendar appearance, select **Local Marketing > Calendar Operations > Calendar**. Then, click **View Options** ().
- To choose the type of calendar (timeline, text calendar, or graphical calendar) and the time scale (such as fiscal year, quarter, or month), click **View Options**.

Calendar display options

You can customize the appearance of the calendar and timeline to suit your needs.

You can set the appearance of the calendar in the following ways:

- Set an initial, default view of the calendar.
- Change options while you view the calendar.

You set the default view on the **Calendar/Timeline Settings** page (**Settings > Collaborate Settings > Calendar/Timeline Settings**).

Table 10. Fields on the Calendar/Timeline Settings page

Field	Description
Include Weekend Days	<p>You can choose whether the calendar shows a five-day week or a seven-day week with this option.</p> <p>Select Yes to display a seven-day week.</p>
Weeks Should Begin On	<p>You can specify whether the calendar displays Monday as the first day or Sunday as the first day, even if weekends are shown on the calendar.</p> <p>Select either Sunday or Monday. Sunday is the default.</p>
Default Content of Calendar Section	<p>You can choose the objects to display on the calendar. Select:</p> <ul style="list-style-type: none"> • Instances • On-demand or Corporate Campaigns • Lists • On-demand Campaigns • Corporate Campaigns
Default Search of Calendar Section	<p>Selects the filter for the objects that display on the calendar.</p> <p>Select a saved search to be the default when you click the Calendar menu item. The list of available items depends on which objects you selected for the Default Content field. For example, if you selected Projects for the default content, you can choose Active Projects for the default search. For example, if you selected Corporate Campaigns for the default content, you can choose Active Projects for the default search.</p>
Display the timezone for the logged in user	<p>Displays the timezone in which all times are shown in workflow columns.</p> <p>If you have users in many locales, selecting this option can help you track of work across different timezones. If all your users are in the same timezone, you can turn this option off to save screen space.</p>

The following parameters are available on both the **Calendar/Timeline Settings** page and on the Set View Options dialog that opens when you click **Options (Local Marketing > Calendar Operations > Calendar** or list pages).

Table 11. Fields on the Calendar/Timeline Settings page and Set View Options dialog box

Field	Description
Default Layout of Calendar Section	On the Calendar/Timeline Settings page, you use this option to choose timeline view and a time range to display, or a one month text or graphical calendar.
Display as / Time Scale	On the Set View Options dialog, you use the Display as and Time Scale fields to make these selections.
Enable Color Coding	Color codes the calendar based on an attribute you select. Check this box, and then select the attribute to use for color coding objects on the calendar.
When displaying tasks, only show milestonesShow only selected milestone types in tasks	Limits the amount of information to show when the calendar displays tasks. Check this box, and then choose the milestone types to display. Only the selected milestone types display.

The following option is available only on the **Set View Options** dialog when selected for tasks.

Table 12. Fields on the Set View Options dialog box

Field	Description
Brief/Detailed	Determines the amount of information that is displayed for tasks. This option is available for tasks only.

Setting your default calendar options

You set all available options for the calendar by using the Calendar/Timeline Settings page. The settings that you choose remain in effect between your sessions. That is, if you log out of HCL Unica and then log back in later, your calendar appears with the options you last set on this screen

1. Select **Settings > Collaborate Settings**.

2. Click **Calendar/Timeline Settings**.

The Calendar/Timeline Settings page appears.

3. Supply the details on the Calendar/Timeline Settings page.

4. Do one of the following actions:

- Click **Save Changes** to save your changes.
- Click **Revert to Saved** to discard your changes, and reload the settings from your previous save.
- Click **Cancel** to exit the page.

Users and user groups

You create and manage users and user groups with features installed with the Platform

Before you work with other users, verify that the **Region setting** preference for your own Collaborate user matches the default locale of your installation. The installation default locale is defined by the **defaultLocale** property under Settings > Configuration > Collaborate. For details on creating users and user groups, setting user preferences, and assigning application access, see the Platform Administrator's Guide.

After you create users, you assign them to a user group that has an appropriate level of access, such as CollaborateUserRole or CollaborateAdminRole. This process authorizes users to access Collaborate.

After you create users and user groups, you must synchronize the Collaborate user tables with the Platform user tables. This step assigns the default security policy roles to the users. See [Synchronizing users \(on page 31\)](#).

Then, you assign access rights for the authorized users by assigning security policies within Collaborate.

If you do not see the users that you expect, or if users receive an error when they log in, make sure that the user group has application access rights to Collaborate. Next, make sure that you synchronized the user tables.

User permissions

After you edit the Global security policy and add any additional security policies that contain roles and permissions, you must assign users to the roles you defined.

After you assign users to roles, users can access only information and perform tasks for which they have permission.

Note the following information:

- If you do not assign a role to a user, the Global policy determines the user's permissions.
- If you decide to remove a role from a security policy, all users that are assigned to the role immediately lose access to anything that the role allowed them to access. This occurs even if the user is logged in.

Assigning roles to a user

To assign roles to a user, you need to have administrative permissions.

1. Select **Settings > Collaborate settings**.

The **Administrative Settings** page opens.

2. Click **User Permissions**.

The **User Permissions** page opens.

3. Expand the Administrators, Corporate Marketers, or Field Marketers group.

4. Select the user for whom to assign a role.

The Properties screen for that user opens. The roles that you can assign the user to appear categorized under each security policy in the Available Roles list box.

5. Expand the security policy that contains the role to assign to this user in the Available Roles list box.

6. Select the role and click the arrow button to move the role to the Selected Roles list box.

To assign more than one role to a user, you can continue to use the arrow buttons to move roles into the Selected Roles list box.

7. Click **Save Changes** when you finish adding all the roles for this user.

The role appears under the Assigned Roles column in the User Permissions screen.

Repeat this task for other users as necessary.

Synchronizing users

Synchronizing users assures that system tables contain all of the user information that is entered through either Platform or Collaborate. You must synchronize users when you create new users.

Automated synchronization takes place on the schedule that is set by the **usermanagerSyncTime** property under **Settings > Configuration > UDM Configuration Settings**.

You can also manually synchronize the Collaborate user tables with the Platform user tables. This procedure enables new users to log in to Collaborate and for changes to take effect before the next scheduled synchronization takes place.

Synchronizing users manually

You synchronize users between Platform and Collaborate. Do this task each time you add new users or to troubleshoot problems with users.

1. Log in to Collaborate.
2. Click **Settings > Collaborate Settings**.
3. Click **Synchronize Users**.

Flowchart Runs Monitoring page

You can use the **Flowchart Runs Monitoring** page to check on the status of flowchart run requests that were sent to Campaign.

There are two panes in the **Flowchart Runs Monitoring** page: Flowchart defective runs and Scheduler jobs.

 **Note:** For more information about why a flowchart did not run successfully, you can view the logs for the campaign in Campaign.

Flowchart defective runs pane

The **Flowchart defection runs** pane shows requests to run flowcharts that stayed in a Scheduled, Queued, or Running state for longer than a specified time.

If a request was not succeeded, it is displayed in the **Flowchart defection runs** pane, as well as in the **Scheduler jobs** pane.

There are two check boxes next to each entry on the **Flowchart defection runs** pane, **Get Results** and **Reset Run Status**. These two check boxes are enabled or not, depending on the current state of the request.

Checking **Reset Run Status** of a queued request sets its status to Failed, and removes it from the Flowchart defective runs pane; it still appears in the **Scheduler jobs** pane as a Failed request.

Scheduler jobs pane

The **Scheduler jobs** pane shows information about all tasks that are currently in the Queued (Not Started) or Running state and jobs that failed after they were started by Campaign.

Following are the possible job states:

- **Running**

The task is running in Campaign.

The maximum number of tasks that can be running simultaneously is controlled by the combination of the initialization parameters

flowchartServiceSchedulerServices10ThrottleType and

flowchartServiceSchedulerServices10ThrottleValue, as defined under **Platform > Configuration > Collaborate**.

 **Note:** You cannot cancel or delete a job in the Running state.

- **Results Pending**

The task was run, but the results were not received by Collaborate. If a job gets stuck in Results Pending status, the results can sometimes be retrieved by checking **Get Results** in the **Flowchart defection runs** pane and clicking **Save**.

- **Not Started**

The job is scheduled, but not yet run. This is the same as a Queued state in the **Flowchart defection runs** pane. You can cancel a job in the Not Started state by deleting it, which removes the job from the queue and sets its status to Failed. An unlimited number of jobs can be in the Not Started state.

- **Failed**

The job was reported as failed by Campaign. You should investigate the failure by examining the campaign's logs in Campaign. When you resolve the issue, you can delete the failed job.

Setting the delay time before a flowchart run is reported as defective

You perform this task to modify the time delay before a flowchart run task is reported as defective in the **Flowcharts Run Monitoring** page.

To perform this task, you must have write-access to the Collaborate installation directory.

1. Go to **Platform > Configuration > Collaborate**
2. Set the value for the **minimumDelayForExecutionMonitoring** parameter.
The default value is 10,800 seconds, or three hours.
3. Save and close the file.

You must restart Collaborate for the change to take effect.

Refreshing the **Flowchart Runs Monitoring** page

You refresh the **Flowchart Runs Monitoring** page to see the newest jobs and changes in the status of existing jobs.

1. From the **Settings** menu, select **Collaborate Settings**.
The **Administrative Settings** page opens.
2. Click **Flowchart Runs Monitoring**.
The **Flowchart Runs Monitoring** page opens.
3. Click Update at the top right.

The list of defect runs and schedule jobs is updated.

Resetting the run status of a queued request

You reset the run status for a queued request to set its status to Failed, which removes it from the Flowchart defective runs pane; it still appears in the Scheduler Jobs pane as a Failed request.

1. From the **Settings** menu, select **Collaborate Settings**.

The **Administrative Settings** page opens.

2. Click **Flowchart Runs Monitoring**.

The **Flowchart Runs Monitoring** page opens.

3. In the Flowchart defective runs pane, next to the request with the status of Queued, check **Reset Run Status**.

4. Click **Save Changes**.

The run status is changed from Queued to Failed. The task appears in the Scheduler Jobs pane as a Failed request.

Getting job results for a task

You can get job results for a task in the Results Pending state. Depending on why the task results are not received by Collaborate, this task might not successfully retrieve the task results.

1. From the **Settings** menu, select **Collaborate Settings**.

The **Administrative Settings** page opens.

2. Click **Flowchart Runs Monitoring**.

The **Flowchart Runs Monitoring** page opens.

3. In the Flowchart defective runs pane, next to the run with the status of Results Pending, check **Get Results**.

4. Click **Save Changes**.

If possible, the results are sent to Collaborate. If the results are not successfully sent, you should examine the campaign's logs in Campaign for information about the problem.

Deleting a scheduled task

You can delete a task in the Failed or Not Started state.

1. From the **Settings** menu, select **Collaborate Settings**.

The **Administrative Settings** page opens.

2. Click **Flowchart Runs Monitoring**.

The **Flowchart Runs Monitoring** page opens.

3. In the Scheduler Jobs pane, next to the run with the status of Not Started or Failed, check **Delete**.

4. Click **Save Changes**.

The selected tasks are deleted.

Set default alert subscriptions

Administrators can define a set of default alert subscriptions. For each object type, you select the team members who receive different types of alerts by subscribing or unsubscribing their object access roles.

You set up default alert subscriptions for the following Collaborate objects and access roles.

Table 13. Object access roles that you can subscribe to receive alerts

Object type	Object access roles
Project	<ul style="list-style-type: none"> • Project Owner

Object type	Object access roles
	<ul style="list-style-type: none"> • Project Participant
List	<ul style="list-style-type: none"> • Owner • Participant
On-demand Campaign	<ul style="list-style-type: none"> • Owner • Participant
Corporate Campaign	<ul style="list-style-type: none"> • Owner • Participant
Change Tracking	<ul style="list-style-type: none"> • Owner • Corporate Marketer

* Applies only to installations with Collaborate-Campaign integration enabled.

Default subscriptions are set according to the level of access level for users (participant or owner), and by Collaborate object. For example, you can set up default alerts for Corporate Campaigns so that owners and participants are notified when a workflow task is started.

To set up default alert subscriptions, click **Settings > Collaborate Settings > Default Alert Subscriptions**. For each object type, a list of different alerts displays. To subscribe team members with a corresponding access role, you select a check box. For example, to send notifications when a new member is added to a project, you could select the check box for project owners and project participants, and clear the check box for project requesters.

Notes® on setting default alert subscriptions

When you work with default alert subscriptions, note the following.

- You are creating a default setting. Users (who have appropriate security permissions) can change these default settings for each object instance.
- When you modify the default alert subscriptions, existing object instances are not affected. Your changes affect only object instances that are created after your modifications.

User overrides of default alert subscriptions

Users can subscribe to alerts within the following objects.

- Lists
- On-demand Campaigns
- Corporate Campaigns

This allows them to control the alerts that they or members of their team receive, regardless of the default subscriptions that are set for the particular object type.

For each object instance, users can review the alerts that they are subscribed to by default

and change them. To do so, they open a object instance, click **Communicate** () , and select **Subscribe to Alerts**.

Setting default alert subscriptions

You can set default alert subscriptions by selecting the appropriate check boxes from the **Default Alert Subscriptions** page.

1. Select **Settings > Collaborate Settings > Default Alert Subscriptions**.

The **Default Alert Subscriptions** page lists all of the alerts, which are grouped by object type.

2. To subscribe the team members who have one of the object access roles, select the appropriate check boxes.

To unsubscribe team members, clear the appropriate check boxes.

3. Click **Save Changes**.

System-wide non-work dates

In Collaborate, you can account for dates when, by default, no work is done on tasks.

Collaborate does not include non-work time in task duration calculations.

After you define one or more different types of non-working dates (such as "Holiday") you can enter specific non-work dates, singly or in date ranges. For more information about non-working date types, see [List definitions \(on page 42\)](#).

Adding non-work dates

You can add non-work dates, such as holidays, on which no work is done.

When you add a non-work date, you must specify its type. To verify that the Non-working Date Types list contains the options that you need, click **Settings > Collaborate Settings > List Definitions**. See [List definitions \(on page 42\)](#).

1. Select **Settings > Collaborate Settings**.
2. In the Other Options section, click **Non-working Business Days**.
The **Non-working Business Days** page displays.
3. Enter a **Start Date** and an **End Date** for the new non-work time. The end date defaults to the start date, for easily entering single-date events.
4. Type a name for the non-work time in the **Name** field.
5. Select a type for the event from the **Type** list.
6. Click **Accept**.

A message reminds you to click **Save Changes** for your changes to take effect.

 **Note:** You cannot add past dates (that is, dates that already occurred).

7. Click **Save Changes**.

If your changes affect any projects, the system lists the affected projects with the names and email addresses of the project owners.

8. Click **Return to Previous Page** to add more non-working business days.

Removing non-work dates

You can remove dates on which no work is done, for example, if the holiday calendar changes.

1. Select **Settings > Collaborate Settings**.
2. In the Other Options section, click **Non-working Business Days**.
3. Select a date or dates from the list.
4. Click **Remove**.

A message reminds you to click **Save Changes** for your changes to take effect.

 **Note:** You cannot delete past dates (that is, dates that already occurred).

5. Click **Save Changes**.

If your changes affect any projects, the system lists the affected projects with the names and email addresses of the project owners.

6. Click **Return to Previous Page** to remove more non-working business days.

Publishing advanced searches

To help users find objects efficiently, Collaborate provides an advanced search feature. After users enter criteria for a search, they can provide an identifying name and save the search for future use. Administrators manage saved searches.

When administrators use the advanced search feature and save a search, the system provides an option to publish the search. Publishing a search makes it available to all of the

Collaborate users. Administrators can also review all of the saved searches, and choose which ones to publish or unpublish.

For more information about searches, see the Collaborate User's Guide.

To publish a saved search

1. Select **Settings > Collaborate Settings**.

The **Administrative Settings** page opens.

2. Click **Published Searches**.

The **Published Searches** page opens.

3. In the **Search By User Name** field, select a user who saved a search to publish.

The system populates the **Available Saved Search** list box with the selected user's saved searches.

4. Use the >> and << buttons to add or remove searches from the **Publish Saved Search** list box.

5. Click **Save Changes** to publish the searches that are listed in the **Publish Saved Search** list box.

Published searches are available to all users, and they display as folder links on object list pages.

Notes on published searches:

- Published searches must have unique names.
- A private and published search **can** share same name.
- You cannot delete a published search. To delete, first change it back to private.

Publishing or unpublishing saved searches

After a user saves the criteria for an advanced search, an administrator can publish it to make it available to all Collaborate users. Alternatively, if a previously published search is no longer widely needed, you can change it back to a private search.

1. Select **Settings > Collaborate Settings > Manage Published Searches**.
2. By default, the **Manage Published Searches** page lists only your own searches. To work with a search created by another user, select that user in the **Search by User Name** field.
3. To publish a search, select it in the **Available Saved Search** list, then click **>>**.
The search moves to the **Publish Saved Search** list.
4. To make a search private, select it in the **Publish Saved Search** list, then click **<<**.
The search moves to the **Available Saved Search** list.
5. Click **Save Changes**.

List definitions

The user interface of Collaborate presents several list box controls that you can configure to provide a customized set of options.

Examples include a list of the roles, or job functions, held by people in your organization, and a list of the types of days observed as non-working days, such as national and company holidays. As an administrator, you populate these lists by defining options for them.

Customizable lists

You can customize the lists in Collaborate by providing your own site-specific options.

The lists that you can customize, and where users encounter them in the user interface, follow.

Table 14. Customizable lists

List type	Description	Location
Roles	<p>Job functions or skill sets. Roles make it easier to assign people to tasks in a project.</p> <p> Note: These roles are functional, and are not the same as the security roles that determine access to areas of the Collaborate interface.</p>	<p>Users identify the roles that are needed to complete the project, and assign team members to those roles, on the People tab. Then, on the Workflow tab, users can assign roles or team members to tasks.</p> <p>When users add an On-demand or Corporate Campaign, they can assign people to functional roles or roles to tasks.</p>
Non-working Date Types	<p>Categories for non-work time. For example, national holidays, corporate off-sites, and company holidays.</p> <p>For more information, see System-wide non-work dates (on page 39).</p>	<p>When administrators enter Non-working Business Days, they identify the Type for each date.</p> <p>Then, when users add or edit project workflow tasks, they can specify a Schedule Through setting. Task schedules can include only business days, business days and weekends, business days and these non-working date types, or all dates.</p> <p>When users add an On-demand or Corporate Campaign, they can choose to schedule work during organizational non-work dates.</p>

List type	Description	Location
Workflow Milestone Types	<p>Milestones that can be included in a project workflow.</p> <p>You can set milestones for tasks within a workflow for an Advanced List, On-demand Campaign, and Corporate Campaign.</p>	<p>When users add or edit a project workflow task, they can identify it as a project milestone by selecting its Milestone Type.</p> <p>You can update Workflow Milestone Type by clicking Collaborate Settings > List Definitions.</p>

List properties

To define the entries for a customizable list, you supply values on the **List Properties** page and then click **Save Changes**.

For more information, see [Adding options to a list \(on page 45\)](#).

Field	Description
List Name	Displays the name of the selected list.
Description	Enter a description of the list. Collaborate provides a default description that you can edit or replace.
Display	Specify how you want options for this list to display and be ordered: by code number followed by name, or by name followed by code number.
Storage Location	Displays the name of the database table that stores options for this list.
New or Selected Item	<p>To add an option, enter a unique identifying code and display name, then click Accept. Collaborate adds the option to the <code>List Items</code> field.</p> <p>To edit an existing option, click the option in the List Items field to select it. These fields display the code and name for you to edit as needed. Click Accept when your changes are complete.</p>

Field	Description
List Items	This field displays all options that are defined to populate the list.

This page also provides controls to enable, disable, and remove options in the **List Items** field. For more information, see [Enabling, disabling, or removing a list option \(on page 46\)](#).

Control	Description
Disable	Keeps the selected option in the database but does not display it in the Collaborate user interface. The List Items field displays disabled options in gray font. If you disable an option that has already been selected for objects, the option remains associated with those objects. However, users cannot select the option for any other objects.
Enable	Restores a disabled option to full operation in the user interface. By default, new options are enabled.
Remove	Deletes the selected option from the Collaborate user interface and the List Items field. You cannot remove an option that has already been selected for objects.

Adding options to a list

As an administrator, you can populate customizable lists with values.

For a description of the lists you can customize, see [Customizable lists \(on page 42\)](#).

1. Click **Settings** > Collaborate Settings.

The **Administrative Settings** page displays.

2. Click **List Definitions**.

The **List Definitions** page displays.

3. Click the name of the list that you want to populate with options.

The **List Properties** page displays.

4. Supply values for the fields on this page. For detail on each field, see [List properties \(on page 44\)](#).
5. Click **Save Changes** to save your changes.

Enabling, disabling, or removing a list option

As the needs of your organization change, you can remove options that are no longer in use. When you remove an option from a list, it is permanently deleted. If you want to add the option again, you must readd it.

After you add an option to a customizable list, it displays in the user interface as a value that users can choose.

You can also disable an option, which keeps it available for possible future use while preventing it from appearing on a list. When the option is needed again, you enable it.

1. Follow the procedure that is described in [Adding options to a list \(on page 45\)](#).
2. From the **List Items** field, select a value to enable, disable, or remove.
You can also use Ctrl+click or Shift+click to select multiple items.
3. Click **Disable**, **Enable**, or **Remove**.
4. Click **Save Changes**.

Collaborate reports

By default, Collaborate provides a set of reports and dashboard report components.

The Collaborate reports package provides extra reports and dashboard report components that are created in IBM Cognos, a separate business intelligence application.

Users access reports from Collaborate by selecting **Analytics > Collaborate Analytics** to see Cognos reports that present data from more than one object.

The reports administrator can modify the reports, create new ones, add custom attributes, set up filters, and so on.

For information about installing the Collaborate reports package, see the "Installing Reports" chapter in the Cognos Reports Installation and Configuration Guide.

Setting up alerts

Alerts are notifications of important changes that users need to know about, or reminders about actions that they need to take.

Example of alerts include notifications of a project status.

Collaborate users receive their alert notifications in these ways:

- In Collaborate: the **Alerts** icon () appears at the top of every page, and includes a counter that increments for each alert received. Users click this icon to view notification messages in the **Alerts** dialog.
- By email: users who are set up with a valid email address receive notifications as messages in their email applications.

To set up alerts, you define values for configuration properties. You configure how often the system checks for the event-triggered alerts that track past changes separately from the alarm-type alerts that remind users of upcoming events.

You also specify default alert subscriptions.

 **Tip:** Users can override the default notification subscriptions for specific instances of the Collaborate objects. For information about how users work with alerts, see the *Collaborate User's Guide*.

Exporting and importing metadata

You can transfer data structures (metadata) between Collaborate systems using the export and import features.

To transfer metadata efficiently from one Collaborate system to another, you export the metadata from one instance and import it into another instance.

For example, you create templates on a test server and then test and refine them to assure they meet the needs of your organization. When you are ready to deploy the templates for general use, you use the export feature on the test server to create a compressed archive file, then use the import feature on the production server to load the file and install the templates.

Collaborate offers options to package and migrate metadata in bulk. You can migrate the following types of metadata in bulk.

- Security policies and related user roles
- Templates

When you migrate metadata from one Collaborate system to another, be aware that:

- Both the source and target systems must be running the same version of Collaborate.
- The source and target systems can be running under different operating systems.
- The source and target systems can be using different types of database servers.

Chapter 4. Security

You configure security policies that grant users permission to access specific objects and features through assigned access roles.

Every installation of Collaborate requires Platform. You access the features of both applications through an integrated user interface. To set up security for Collaborate, you use features of both Platform and Collaborate. Before you begin, see the Platform Administrator's Guide for information about security features in Platform.

You create and manage users and user groups with Platform. The permissions that are granted to an access role are determined by a security policy. Any user who is not assigned any roles is governed by the default security policy, Global.

Collaborate provides security through several layers of access roles, and access roles can be assigned to users in different ways. For example, administrators assign default, or baseline, access roles to users, and then the project leaders who create projects/marketers who create Lists, On-demand Campaigns, and Corporate Campaigns further specify which users can participate and with what roles.

Roles

In every organization, the people who use an application have different responsibilities and complete different tasks.

To support secure collaborative work in Collaborate, you grant or block access to system features by defining roles and assigning them to users.

When Platform is installed, it supplies the Global security policy. The Global security policy has a set of predefined roles for each application in the HCL Unica suite, including Collaborate. You can alter these predefined roles as needed and then assign them to users, or set up your own security policies and roles.

To control access to specific objects and projects in Collaborate, you also use object access roles and project roles.

There are three types of roles in Collaborate - object instance, template, and security policy - and there are three default security roles that support the Global security policy.

Default security policy roles

Default roles, Collaborate Administrator and Collaborate UserField Marketer, Corporate Marketer, and Collaborate Administrator, are included in the default Global security policy.

These roles provide application access levels for Collaborate in Platform and they are always in effect.

- When, using Platform, you add a user to a user group that has the CollaborateAdminRole level of access, that user is assigned the Collaborate Administrator user role in Plan. By default, users with this role have access to all administrative and configuration settings.

If, in Platform, you add a user to a user group with the Collaborate Administrator level of access, that user is assigned the Collaborate Administrator access role in Collaborate. By default, Collaborate administrators have access to all administrative and configuration settings.

- When, using Platform, you add a user to a user group with the CollaborateUserRole level of access, that user is assigned the Plan User user role in Collaborate. By default, users with this role are granted few permissions.

If, in Platform, you add a user to a user group with the `field` level of access, that user is assigned the Field Marketer access role in Collaborate. By default, field marketers are granted few permissions.

- If, in the Platform, you add a user to a user group with the `corporate` level of access, that user is assigned the Corporate Marketer access role in Collaborate. By default, corporate marketers are granted administrative permissions.

These role assignments display on the **Settings > Collaborate Settings > User Permissions** page.

You cannot override these role assignments on the Collaborate **User Permissions** page, and you cannot remove these roles from the Global security policy. To change the default

security policy role that is assigned to a user, you must change the user group assignment by using Platform.

Any changes that are made to users in Platform are reflected in Collaborate only after you synchronize the user database tables. User synchronization occurs automatically at regular intervals, as specified by **Settings > Configuration > Collaborate > UDMConfigurationSettings > userManagerSyncTime**. Or, to manually synchronize the user database tables, you or another administrator can start **Settings > Collaborate Settings > Synchronize Users**.

Object access roles

When users do their work in Collaborate, the system assigns them the appropriate object access role.

Each object type in Collaborate has a set of object access roles. For projects, object access roles are also called "access levels."

Each List, On-demand Campaign, and Corporate Campaign has a set of access roles.

For example, a person who creates a project has the project owner access level, and the users who are assigned to project roles have the project participant access level. Corporate Campaign is the Corporate Campaign owner and the users who are assigned to Corporate Campaign roles are the participants. Object roles for projects are also called access levels because project participants with the appropriate permissions can assign both object access roles and project roles to participants.

Every object type has an owner, by default the person who created it. Many object types also have extra roles, as described in the following table.

Table 15. Object types and associated roles

Object type	Object access roles / Access levels
Project	Project Owner, Project Participant

Object access roles support general system processing. As a result, they are not accessible through custom security policies.

Custom security policy roles

Custom security policy roles are exactly that: roles that you set up within the security policies that you add.

These roles are meant to control access to Collaborate functionality that is based on a job title or function that characterizes user responsibilities in your organization as a whole.

The roles that you add to security policies, plus the default roles (Administrator and User), are the roles that you assign to individual users on the **User Permissions** page.

Security policies and permissions

Security policies are made up of roles that reflect job titles or responsibilities.

Each role in a security policy is a set of permissions: rules that grant or block user access to features and options in Collaborate. For example, you can configure security policies that ensure the following.

- Managers have access to all the Lists, On-demand Campaigns, and Corporate Campaigns in their business units.
- Users' access to Lists, On-demand Campaigns, and Corporate Campaigns is based on both their business unit and their job function.
- Only select users can create new Lists, On-demand Campaigns, or Corporate Campaigns.

Any object that is created in Collaborate is governed by a security policy. The security policy that is assigned to a new object is determined by the template that was used to create it.

Permissions

You manage permissions for a security policy on the **Permissions for <security policy>** page.

See [Creating a security policy \(on page 56\)](#).

To set the permissions for a role in a security policy, you use a set of tables. The table columns present all of the roles in the security policy, and the rows represent features or options, grouped by the tab on which they are accessed.

When you configure security for projects, you also select a template. When you do, extra columns display for each project role that is defined in the template.

The permissions that you configure for security policies control access throughout all the functions of Collaborate.

For example, the results of searches are constrained by access rights. If a user does not have access to On-demand Campaigns, these objects are not retrieved by a search.

For example, the results of searches are constrained by access rights: if a user does not have access to the Workflow tab of a specific project, tasks from that project do not display in the **All Tasks** search. Additionally, if a user does not have the ability to add attachments to a project, that user does not receive the alerts that are triggered when another participant performs an attachment task.

The security policy in effect at a given time for a given object depends on the security policy that is specified by the object's template. For example, when template developers create project templates, they specify the security policy on the template Summary tab. Then, when instances are created from that template, access to those instances is determined by the security policy that is specified in the template.

Security policy permission settings

To configure permissions on the **Permissions for <security policy>** page, you click the table cell at the intersection of a role and a feature or option.

Clicking in the cell toggles through the following settings:

Table 16. Permission settings on the Permissions for <security policy> page

Symbol	Name	Description
	Granted	Grants users in the role access to the function.

Symbol	Name	Description
⊗	Blocked	For system and security policy roles only, denies users in the role access to the function. (You cannot block functions by project or object roles.) A permission block supersedes any other setting.
⬇	Inherited	Not explicitly defined. An explicit permission setting for the project and object roles that are assigned to the user is inherited. If none of the other roles has the permission set, the setting in the appropriate default Global security policy role (Administrator or User) is inherited. If none of the roles grants the user permission, the function is blocked.
N/A	Not accessible	For project and object roles, indicates that the permission setting cannot be changed.

If a user qualifies for more than one role, the permissions are cumulative. For example, if a user's security role grants different permissions than the role in the current project, that user has all of the permissions that are granted by both of the roles.

Global security policy

The Global security policy acts as the default security policy for the system. The term "global" does not indicate that every user has full access to everything, but rather that this security policy is associated globally with every user by default.

You can create more security policies that extend the Global security policy, but the Global security policy is always in effect, regardless of any other security policies you create.

The Global security policy:

- Applies to anyone who logs in to Collaborate
- Cannot be disabled

- Supersedes all other policies. When the system determines access rights for a user, the role that the user has in the Global security policy is always considered.
- Contains permission settings for the default roles, Collaborate Administrator and Collaborate UserCollaborate Administrator, Corporate Marketer, and Field Marketer. The permission settings for these roles are used as the fallback or default for any user who does not currently qualify for an object or security policy role a role in another security policy, object role, or project role.

Planning security policies

Before you begin to add and configure security policies, determine the security needs of your organization and then plan your security strategy.

First, determine how many security policy roles and project roles you need. Then, determine whether you need to create a security policy with different roles, or whether you can simply modify the roles that are supplied by the Global security policy to meet your needs.

- If all of the business units in your organization can implement the appropriate differences in access through a combination of project and security policy roles, it makes sense to implement one security policy: a modified Global security policy. You can add as many roles as necessary to the Global security policy.
- If there are numerous functional groups in your organization that require different types of access, leave the Global security policy in its default state and add a security policy with one or more roles for each functional group.
- At any time, a user can have an object role, a project role, and a security policy role. It is best practice to assign a user one security policy role only, from a single security policy. Therefore, if you have users who multi-task in such a way that they need more than one security policy role in addition to their project and object roles, it is recommended that you create more security policies and assign that user one role from each of the appropriate security policies.

As a best practice, try to implement the smallest number of security policies possible.

Within a single security policy, you can configure different permissions for each marketing

object type. You can also configure different permissions for each of your project and request templates. Additionally, for each project template you can configure different security role and project role permissions for each tab (custom as well as standard) separately for projects and project requests.

When you set up permissions for the roles, the individual permission settings are granular. For example, if you want users in a particular role to be able to edit the Summary tab of a project, you must grant that role both Edit and View permissions. If you forget to grant the View permission, users in that role do not see the Summary tab, so their permission to edit it is useless. In another example, it would not make sense to grant permission to post messages without also granting permission to read them.

Configure security policies

After you determined your security strategy, you configure and create the appropriate security policies and roles and then specify to which users the people with those roles can assign project roles and access levels.

Creating a security policy

If you must use more than one security policy to implement the security setup for your organization, leave the Global security policy in its default state and complete the following steps.

1. Select **Settings > Collaborate Settings > Security Policy Settings > Add Security Policy**.
2. On the **Properties for <security policy name>** page, enter a **Policy Name** and **Description**. The name must be unique.
3. In the Roles section, enter a **Name** and **Description** for the first two roles that are planned for this security policy. If you need more than two roles, click **Add Another Role**.
4. Click **Save and Edit Permissions**.

The **Permissions for** <security policy> page displays. This page contains a table interface so that you can grant or block access to features for each role.

You use the **Access to** list to select each object type, and then configure permissions for the roles in the security policy.

5. Click **Save and Finish**.

To disable the security policy at any time, go to the **Security Policy Settings** page and click **Disable**. Disabling a security policy means that users cannot select it in any subsequent projects that users create and you can no longer assign users to the security policy.

Editing the Global security policy

You can add or modify the permissions for a specific role or for Lists, On-demand Campaigns, or Corporate Campaigns.

You must have administrative permissions to complete this task.

1. Select **Settings > Collaborate settings**.

The **Administrative Settings** page opens.

2. Click **Security Policy Settings**.

The **Security Policy Settings** page opens.

3. Click **Global**.

The **Properties** page opens.

4. To add a role:

a. Click the **Add** icon (.

A line that is added for the new role is added at the end of the list of roles.

b. Enter a name and description for the new role.

Repeat these steps for each role you must add.

5. Click **Save and Edit Permissions**.

The Permissions screen opens. By default, permissions for Lists are displayed.

6. Modify permissions for Lists as needed.

To change a permission for a specific role that is part of the Global security policy, click in the field that is in the column for that role, and the row for that function. The field toggles between:

- A check, to enable that function for that role
- An *x*, to disable that function for that role
- A blank field, to indicate that the permission is inherited.

7. To change the permissions for On-demand Campaigns or Corporate Campaigns, select that option from the **Access to** drop-down list.

The list of permissions changes to reflect the type of object you select. Modify permissions as you did in the previous step.

8. When you set permissions for all object types, click **Save Changes**.

Creating a new security policy

To create a security policy, you need to have administrative permissions.

1. Select **Settings > Collaborate settings**.

The **Administrative Settings** page opens.

2. Click **Security Policy Settings**.

The **Security Policy Settings** page opens.

3. Click the **Add** icon (.

The **Properties** page opens, with rows for two roles.

4. Enter a policy name and description.
5. Enter a name and description for the two automatically created roles.
6. To add a role:

- a. Click the **Add** icon ()

A line that is added for the new role is added at the end of the list of roles.

- b. Enter a name and description for the new role.

Repeat these steps for each role you must add.

7. Click **Save and Edit Permissions**.

The Permissions screen opens. By default, permissions for Lists are displayed.

8. Modify permissions for Lists as needed.

To change a permission for a specific role that is part of the Global security policy, click in the field that is in the column for that role, and the row for that function. The field toggles between:

- A check to enable that function for that role
- An **x** to disable that function for that role
- A blank field to indicate that the permission is inherited.

9. To change the permissions for On-demand Campaigns or Corporate Campaigns, select that option from the **Access to** drop-down list.

The list of permissions changes to reflect the type of object you select. Modify permissions as you did in the previous step.

10. When you set permissions for all object types, click **Save Changes**.

Configuring the user visibility option for roles

On the people tab of Lists, On-demand Campaigns, and Corporate Campaigns, to restrict the list of users that are displayed in the **Select Team Members** or **Select Member Access Levels** windows for users with a given security policy role, you can configure the user visibility feature for that role.

When Lists, On-demand Campaigns, and Corporate Campaigns are created, participants are specified. By default, there are no restrictions on which users can be added as participants.

 **Note:** User visibility is not applied by the Notify Field Marketer task in Corporate Campaigns. Any users who have the contact list to review are notified and added as participants regardless of the security policy role.

To configure the user visibility option for roles, complete the following steps:

1. Select **Settings > Collaborate Settings > Security Policy Settings**.
2. On the **Security Policy Settings** page, in the **Global Security Policy** section, click the name of the role.

The **Role: <role name>** page is displayed for user visibility selection.

3. From the list of user groups on the left, select the groups that you want users with this role to see in the list.
4. Click **>>** to move them to the list on the right.

When users who have the selected role add participants, they can select from the set of users who are in a group in the list on the right.

5. Click **Save Changes**.
6. Repeat steps 2 through 5 for each role that you want to configure.

Assigning security policy roles

When you finish adding roles to security policies, you can assign the roles to the appropriate users.

If a user is not explicitly assigned a security policy role, the system uses the Global security policy to determine the permissions for that user.

You assign security policy roles directly to individual users on the **User Permissions** page.

1. Select **Settings > Collaborate Settings**.

The **Administrative Settings** page displays.

2. Click **User Permissions**.

The **User Permissions** page displays.

3. Expand the user group that the user belongs to and click to select the user.

The **Properties for <user name>** page displays.

4. Click in the **Available Roles** list box to expand the security policy with the security role you want to assign this user.

5. Select the role, then click **>>** to move it to the **Selected Roles** list.

It is a best practice to assign one role from one security policy to each user.

6. Click **Save Changes**.

The role displays under the Assigned Roles column on the **User Permissions** page.

7. Repeat steps 3 - 6 as needed for other users.

Controlling access to templates

You can control which users can create and view templates.

As described in the sections about security policies, you use permissions in security policies to control the following kinds of access:

- Security policy roles control which users can create new projects and so on Lists, On-demand Campaigns, and Corporate Campaigns.
- Security policy roles control which users are allowed to view and interact with items that other users create, even if they cannot create those items themselves.
- Project and object roles control which tabs users have access to when they create Lists, On-demand Campaigns, or Corporate Campaigns.

You also use security policy roles to specify which project or request templates a user can select when you create an item.

When a template developer creates a template, the Summary tab includes one or more security policy fields. The value that is specified in the security policy field determines which users can access the template; if you do not have a role that grants you the ability to create objects of that type in the security policy that is assigned to the template, the template does not appear in your template list when you create an object of that type.

Hiding template standard attributes

You can hide template standard attributes for Lists, On-demand Campaigns, and Corporate Campaigns.

The Collaborate administrator is the only one who can configure templates so that standard attributes are hidden.

1. From the template for a List, On-demand Campaign, or Corporate Campaign, click **Customize**.
2. Seven standard attributes have a drop-down menu next to them. You can mark them as **Visible** or **Hidden**.

The seven standard attributes are

- Description
- Team Members

- CC/ONDC/List Code
- Datasource Name
- Security Policy
- Target Start Date
- Target End Date

For Corporate Campaigns, Target Start Date and Target End Date are visible but disabled. Also, the Team Members field is not shown because the Team Member field does not appear on the summary screen during view mode and edit mode.

3. Attributes that are marked as hidden are not shown in wizard and edit mode.

 **Note:** Corporate marketers and field marketers can see the value of all the fields, even the disabled ones, when they are in view mode.

If some attributes are completed and the administrator chooses to hide them, then the attributes are hidden.

For users who are upgrading to 9.1.0, the standard attributes are marked **Visible**, by default.

Chapter 5. Templates

Templates are definitions of a List, On-demand Campaign, or Corporate Campaign that corporate and field marketers use to create new objects.

As an administrator, you create templates and specify various parts of the object. For example, among the many settings you determine for a Corporate Campaign template are:

- The associated flowchart in Campaign
- Team members
- Workflow
- Custom tabs

All Lists, On-demand Campaigns, and Corporate Campaigns are based on a template you create, and the object inherits all settings from the template. Corporate or field marketers can change the object's settings as needed.

Why use templates?

Templates are the required building blocks for Lists, On-demand Campaigns, and Corporate Campaigns. Users cannot create these objects without templates.

By using templates, you help users save time because they do not have to configure objects from the beginning; they need to only change settings that are specific to the List or campaign.

For example, if your organization is running multiple Corporate Campaigns that have the same team members and workflow, you can create a template with the right settings for the team and workflow. Corporate marketers then create the Corporate Campaigns that are based on this template, and do not have to configure the team members or workflow.

Template components

Templates are made up of other components that the administrator creates and manages.

Specifically, templates can include the following components.

Component	Description
Tabs	Individual screens for the campaign. Tabs contain one or more forms.
Forms	Subsection of a tab, containing fields.
Field	Data element that is contained within a form. Each field has a specific format; some fields, for example contain text, and others contain a set of radio buttons. You can place fields into groups, and display them in either a 1- or 2-column layout.
Data mapping	Mappings of data between Collaborate and Campaign.
Icons	Small images that represent the object within the Collaborate user interface.
Attachments	Files or folders that are displayed on the Attachment tab of the List, On-demand Campaign, or Corporate Campaign.
Custom links	Hypertext links are displayed on selected tabs.
Workflow	The set of stages and tasks that are displayed in the project's workflow tab.

Template creation

You create a template by assembling existing components. As you set up your system, you must create the other components before you can create templates.

Plan your templates

Before you begin building templates, you must analyze your organization's needs, then decide on the templates you need.

For example, your organization might run three different types of On-demand Campaigns, with different target selection criteria and different workflows. You most likely need three different templates for these On-demand Campaigns.

In addition to planning the number and types of templates, you must plan for the types of objects you need in those templates. For example, the three On-demand Campaign templates you need can share the Summary form, but require different Selection Criteria forms and Workflows.

Plan template contents

After you plan the types of templates you need, you must determine the contents of those templates; that is, you must decide which fields to include, and how to organize those fields.

You should capture this information about paper or in a spreadsheet, then use the Forms Editor to define the tabs and fields you need.

For example, you might determine that an On-demand Campaign template must include a field for the business unit that requests the campaign. You could list the requirements for this field as follows:

Field Attribute	Value
Internal Name	Business Unit
Display Name	Business Unit
Tab/grouping	In the Summary tab, under the Collateral Request Info section
Input field type	Single-Select
Possible values or database table to retrieve values from	Retail Banking, Investment Services, Insurance, Credit Card Brochure, Postcard, DataSheet, Intro Folder, White Paper, Print Ad, or a table name or column name where Collaborate should look up these values.
Required field/error message, if missing	Business Unit is a required field.
Help Tip	Enter the business unit that requests this collateral piece.

As a best practice, create a similar table for each field you require before you begin creating fields and tabs in the Forms Editor.

Before creating templates

Templates depend on the existence of other, lower-level components. Therefore, you must set up the following objects before you set up templates:

1. Forms
2. Icons
3. Data Mapping
4. Workflows
5. Roles

Chapter 6. Building and managing templates

To create and manage templates and template components, you use the **Template Configuration** page. Select **Settings > Collaborate Settings**. Then, click **Template Configuration**.

The items and functions on the **Template Configuration** page are organized into two sections, **Template Configuration** and **Templates Components**. There is also an option to validate all templates.

Template Configuration section

The template configuration section of the **Template Configuration** page contains the **Templates** link. This link opens a page that lists all the existing templates and template folders that are organized by marketing object type. You use the links on that page to create, delete, and organize templates, and to edit or export individual templates.

Validating templates

To run a utility that validates templates and forms and shows any validation errors, click **Validate Templates** in the template configuration section.

Templates Components section

The templates components section of the page contains the following links.

Table 17. Links in the Templates Components section

Links in the Templates Components section

Link	Description
Forms	Opens the Form Definitions page, which lists the form definitions and provides options for working with forms. The following information shows for each form definition: <ul style="list-style-type: none">• Name of the form definition Name of the form

Link	Description
	<ul style="list-style-type: none"> List of templates that use the form <p>Click Create Form () to add a form.</p> <p>Use the links and icons on the Form Definitions page to create, import, enable, disable, delete, export, copy, publish, and manage forms.</p>
Workflow	<p>Opens a list of separately saved workflow templates and shows the following information.</p> <ul style="list-style-type: none"> Name The number of stages and tasks in the workflow template When it was first created and last modified Whether it is enabled <p>You create workflow templates by saving the work that is done on the Workflow tab of a projectList, On-demand Campaign, or Corporate Campaign template or instance. You can use the links on this list page to delete, enable/disable, import, or export a workflow template.</p>
Data Mapping	<p>Opens a list of data maps and shows the following information.</p> <ul style="list-style-type: none"> Data mapping file names Type: Campaign Data Mapping Type: Campaign Metrics Import (if you have data maps from previous versions, you might see other values) List of templates that use the mapping. Click Add () to add a data mapping file. <p>You can use the links on the Data Mapping page to add and delete data mapping files.</p>

Link	Description
	For more information, see Data Mapping Definitions (on page 94) .
Icons	<p>Opens a list of icons and shows the following information.</p> <ul style="list-style-type: none"> • Icon images; large and small • Icon name • List of templates that use the icon • Delete link for deleting the icon (does not delete the file from its location on disk) <p>Click Add () to add an icon.</p> <p>Click Add Icon to add an icon.</p> <p>For more information, see Icons page (on page 96).</p>

You can also transfer templates from one computer system to another using the export and import features.

Templates Definition page

Use the links and commands on the **Templates Definition** page to work with templatesassemble template components into project, templates.

The page is organized by object types and lists all the existing templates for these object types. The sections, from top to bottom, are in the following order:

- Project templates

From this page, you can perform the following actions:

Action	Description
Edit	Click the template name to edit the template.

Action	Description
Enable or disable	<p>Click the link to toggle the state of the template, from Enabled to Disabled and back.</p> <p>When a template is enabled, you can use it to create an object.</p>
Delete	<p>Click to delete a template from the system. The link is only available for templates that do not have any objects that are created from them.</p>
Add	<p>Click Add template in the section of the list for the type of template you want to add a template.</p> <p>Click the Add icon () to add a template. From the icon's drop-down list, select the type of object for which you want to create the template.</p>
Open folder	<p>Click the folder name to open the folder.</p>
Jump to Folder	<p>Click Jump to Folder to navigate to and open another template folder.</p>
Move items	<p>Select the items to move, then click the Move Items icon () to display a screen where you can choose a new folder for selected items.</p> <p>Select the items to move, then click Move Item(s) to. You then select a template folder to which to move the template.</p>
Add folder	<p>Click Add Folder to create a template folder.</p> <p>Click the Add Folder icon () to create a template folder.</p>

Building a template

Before you create templates for objects Lists, On-demand Campaigns, and Corporate Campaigns, determine whether you must add custom tabs. If you do, see the chapter on the Forms Editor and use the procedures in that chapter to create forms for custom tabs or metrics templates.

When the template components you need are available, create a template and assemble the pieces. The steps to create a template are generally the same for each object type, with the following exceptions:.

- You can specify a workflow template for project templates and you can create workflow templates from project templates

1. From the **Settings** menu, select **Collaborate Settings**.

The Administrative Settings screen opens.

2. Click **Templates**.

The Template Configuration Screen opens

3. Click the **Add** icon ().

4. Click **Add Template** in the section of the page in which you want to create a template.

5. From the icon's drop-down list, select the type of object for which you want to create a template.

6. Use the information that is provided in the rest of this chapter to determine how to complete each of the tabs for this template.

 **Important:** When you assemble a template, click **Save Changes** when you finish editing a tab, before you navigate to another tab in the template. Otherwise, your changes are not saved.

Effects of template changes

When you edit a template, be aware you are changing all instances of objects that were previously created from the template.

The exceptions are workflow and attachment folders. When you change the workflow or metrics template for an object template, or add or remove an attachment folder, your changes apply only to objects you create after the changes are made. Existing workflows are not changed, nor are the attachment folders.

The exceptions are workflow, people, or an attachment. When you change the workflow template, add or remove roles, or add or remove an attachment, your changes apply only to objects you create after the changes are made. Existing workflows are not changed, nor are roles or attachments for any existing Lists, On-demand Campaigns, or Corporate Campaigns.

Template folders

You can create folders for templates in the Templates Definition screen.

You can move templates to any existing folders.

You can create folders for any template. You can move templates between any of the folders for that type of template.

You can jump to any of the folders for a specific template type.

Editing a template

Template editing is spread across the following tabs. Depending on the object type, only a subset of these tabs may be available.

- **Properties:** basic template properties, such as name and description.
- **People:** roles definition.
- **Campaign:** Campaign integration settings Project templates only, when Collaborate-Campaign integration is enabled.(Corporate Campaign templates only)

- **Recurrence:** recurrence settings.
- **Workflow:** workflow settings (not available for simple Lists).
- **Tabs:** Tab definitions; add additional forms and custom tabs.
- **Attachments:** files that are attached by default to all objects created from the template.
- **Custom Links:** custom links to web pages, and so on.

1. Click **Settings > Collaborate Settings**.
2. In the **Administrative Settings** screen, select **Template Configuration** (located under **Other Options**).
3. Select **Templates**.
4. Select the name of the template you want to edit.

The Properties tab of the selected template is displayed. You can edit fields on any of the object templates tabs; click a tab in the menu bar to navigate to it.
5. Click **Save Changes** to save any changes you made to the template.

Template Properties tab for defining the template

For all objects, the template Properties tab contains properties for you to set, such as name, description, and security policies.

The properties that you set on this tab display on the Summary tab when you create a project. More properties display on this tab for project templates.

Table 18. Properties for all templates

Property	Description
Name	The display name for the template, which displays on the Templates list page.

Property	Description
Description	Short description of the template. Displays on the template selection page when users add a marketing object instanceList, On-demand Campaign, or Corporate Campaign.
Icon	Large and small icon images for the template. The large icon displays when users create an instance that is based on this template. The small icon displays next to the template name in the Templates list page. Click Change Icon to import different image files.
Security Policies	List of security policies that determine which users have access to the template.  Note: Different fields display for project templates.
Template ID	Internal identifier for the template. Use lowercase alphanumeric values only. Do not include accented or non-roman characters or spaces.  Note: <ul style="list-style-type: none"> • Template IDs must be unique across Collaborate.object type. For example, you cannot have two project templates, both having an identical ID, such as <i>tradeshow</i>. If you have two trade show project templates, use a different ID for each one, such as <i>tradeshow01</i> and <i>tradeshow02</i>. <p>Additionally, after you use a template ID, you cannot use it again, even if you delete it.</p> <ul style="list-style-type: none"> • You can edit this field only until a user creates the first object instance that is based on this template.
Default Name	The default name to give to an object instance. You can leave this field blank.
ID Prefix	Prefix for the external ID of the object. For example, the ID for the first project might be 1001.Each List, On-demand Campaign, and Corporate

Property	Description
	<p>Campaign has an external ID assigned to it. For example, you enter an ID Prefix of <code>TRS</code> for the Tradeshow On-demand Campaign template. The first tradeshow On-demand Campaign that you create would then have an ID of <code>TRS1001</code>.</p> <p>You can set the ID prefix by template, to easily determine the template on which an object is based. For example, you choose an ID Prefix of TRS for the Tradeshow project template. The first tradeshow project that you create would then have an ID of <code>TRS1001</code>.</p>
ID Generation Class	<p>Java™ class to specify a numbering algorithm for objects. By default, Collaborate assigns a sequential number to each object (project).</p> <p>However, you can configure Collaborate to use an algorithm that you define to set the external ID. If you choose this configuration option, the ID Generation Class specifies the Java class that is used to generate the code. You must edit this attribute only if you want to generate IDs according to an algorithm other than the default.</p>

To export metadata for an individual template, click **Export Template** at the top of this tab. See [Exporting a single template \(on page 102\)](#).

In addition to the properties that apply to all templates, templates for projects contain the following properties.

Table 19. Properties for project templates

Property	Description
Security Policy Use Model	<p>Specifies how a "use" security policy is determined when a project request becomes a project. When the value of this field is User Security Policy, the Use Security Policy field on this tab is disabled. The person who creates a project or request from this template specifies the "use" security policy when the item is created. When the value of this field is Template Security Policy, the Use Security Policy field on this tab is enabled and the template developer selects the "use" policy.</p>

Property	Description
View Security Policies	Specifies the security policy that determines which users can select this template when they create a project or request.
Use Security Policy	Specifies the security policy that determines which users can access the projects or requests after they are created.
Export Tab	<p>Select the project tab to export when you export the Calendar. You can choose the Summary tab or any custom tab.</p> <p>When users export a Calendar, a link to the specified tab and the data for the tab are included with the exported calendar data. Users can click the link to view the data that is exported for the project.</p>

Template People tab

The People tab of a template defines roles that are added to Lists, On-demand Campaigns, or Corporate Campaigns that are created from this template.

You must define list definitions for roles before you add roles to a template.

To add a role, select a role from the drop-down list. The available values are populated from the list definitions.

To delete a role, click **Remove** next to the role you need to delete.

 **Note:** You do not need to add roles here if they exist on the workflow template. Roles that are defined in the workflow template are added to the People tab when an instance is created.

Template Recurrence tab

The Recurrence tab establishes properties for a recurring campaign. Recurring campaigns reference a basic workflow; you can set up recurrence properties to define how many times the basic workflow should recur.

Depending on permissions, users can modify recurrence properties when they create or edit a Corporate Campaign, On-Demand Campaign, or List. If they do so, all tasks in the workflow are replaced by new tasks, with dates that are calculated based on the new recurrence properties.

This tab is displayed in both templates and in the actual instance of a Corporate Campaign, On Demand Campaign, and List. When you create a template, you can access this tab only after you create a Workflow template.

The Recurrence tab contains the following settings:

Property	Description
Campaign Workflow Type	<p>Specifies whether the workflow used by the Corporate Campaign, On-Demand Campaign, or List contains a recurring stage. Options are:</p> <ul style="list-style-type: none"> • Nonrecurring • Recurring <p>If you select Recurring, the properties on this tab are applied to the stage in the Workflow that is marked for recurrence.</p> <p> Note: Recurrence properties that you set up here can apply to only a single stage of a workflow.</p>
Frequency	<p>Specifies the recurrence pattern. Options are:</p> <p>Daily-Occurs on a daily basis. When you select Daily, you must specify the number of days between each occurrence of the workflow or workflow stage.</p>

Property	Description
	<p>Weekly-Occurs on a weekly basis. When you select Weekly, you must specify the number of weeks between each occurrence of the workflow or workflow stage. (To specify every other week, enter 2 for the number of weeks between each occurrence.) You must also specify the day or days of the week on which the occurrence should take place.</p> <p>Monthly-Occurs on a monthly basis. When you select Monthly, you must specify the number of months between each occurrence of the workflow or workflow stage. You must also choose one of these options:</p> <ul style="list-style-type: none"> • Each date of month-Choose this option if you want the occurrence to take place on a specific date each month. • Each day of week-Choose this option if you want to schedule the occurrence to run on a specific day of a specific week each month. For instance, if you want to run the campaign monthly, on the third Thursday of each month, you should select this option. <p>Keep in mind that your calendar options apply to your recurrence schedule; that is, the recurrence schedule is built using your settings for valid working days.</p>
Ending	Specifies the total number of occurrences of the workflow or workflow stage. You can also choose to specify a date by which the recurrence should end.
Permissions to modify the recurrences in the instance	<p>Allows you to specify the recurrence options that can be changed in each Corporate Campaign, On-Demand Campaign, or List.</p> <p>This field is displayed only in the Corporate Campaign, On Demand Campaign, or List template; it is not displayed in the actual instance of the Corporate Campaign, On-Demand Campaign, or List. Options are:</p> <ul style="list-style-type: none"> • All options-Users can change all recurrence options.

Property	Description
	<ul style="list-style-type: none"> • No options-Users cannot change any recurrence options. • All options but frequency-Users can change all options except frequency.

Project template Workflow tab

The Workflow tab identifies and organizes tasks for a projectList, On-demand Campaign, or Corporate Campaign. When you create a template, you can include data on its Workflow tab to provide an initial workflow structure for each marketing object instance that users create. To review and define a workflow on the template, you use a spreadsheet-style interface. Users access a similar spreadsheet interface to update the supplied workflow as needed for individual instances.

For more flexibility, the data on the Workflow tab in any template or any individual instance can be saved as a separate workflow template component. Template components, which can include metrics and forms in addition to workflows, make designing templates to meet different needs more modular and efficient. Any workflow template component can be imported into any projectList, On-demand Campaign, or Corporate Campaign type template or instance.

Initially, the Workflow tab displays in view mode. To set up the stages, tasks, milestones, dependencies, and other data that make up the workflow, you switch to editing mode.

 **Note:** When you design the workflow for a template, you can specify team member roles to associate with each task. To do so, you must first define values on the Project Roles tab.

 **Note:** When you design the workflow for a template, you can specify team member roles to associate with each task. To do so, you must first define values on the People tab. For more information, see [Template People tab \(on page 77\)](#).

For detailed information about configuring a workflow, including options for scheduling, calculating dates, and updating tasks, see the Collaborate User's Guide.

Creating and editing workflow templates

The workflow that you create on the Workflow tab of any projectList, On-demand Campaign, or Corporate Campaign template or instance can be saved as a workflow template. Then, you can reuse the workflow in similar projectLists, On-demand Campaigns, or Corporate Campaigns.

1. In any projectList, On-demand Campaign, or Corporate Campaign template or instance, select the **Workflow** tab.

You can start with a new template or instance, or select one that already has a defined workflow.

2. For a new template or instance, change to edit mode. Set up the tasks, dependencies, and values that you want the template to supply as a starting point for new projectLists, On-demand Campaigns, or Corporate Campaigns. For an existing template or instance, review the workflow.

3. With the Workflow tab in view mode, click task names to review or define settings.

4. Click **Save as Template** ().

5. Enter a descriptive name for the template and click **Continue**.

6. Click **Save**. The workflow template displays on the **Workflow Templates** page, and can be imported into any template or instance.

To edit a workflow template, open a projectList, On-demand Campaign, or Corporate Campaign template and import the workflow template that you want to edit into its Workflow tab.

Typically, you set up a new template for this purpose because importing a workflow template overwrites any previously defined values. You can then edit the workflow and save the workflow as a new template with the same or a different name.

Importing workflow templates

You can import an existing workflow template into your projectList, On-demand Campaign, or Corporate Campaign template. Then, you can customize the workflow template for your new projectList, On-demand Campaign, or Corporate Campaign template.

Before importing a workflow template that references role data in list definitions, ensure that the role data in the import and export environments is the same. For example, if you export a workflow template, import the template into another environment, and then try to change the template's role data in the import environment, the role data reverts to the data that was exported.

1. Create the projectList, On-demand Campaign, or Corporate Campaign template.

If the workflow template you plan to use includes Project Roles, you do not need to define them. The Project Roles are imported with the workflow template.

2. Select the **Workflow** tab.

3. With the Workflow tab in view mode, click **Import Template** ().

The system presents a warning displays that the import overwrites the existing workflow.

4. Click **OK**.

A list of workflow templates opens.

5. Select a template from the list and click **Import**.

The Workflow tab displays the workflow tasks and stages from the workflow template.

Any roles that are referenced by task rows also display on the Project Roles tab.

6. With the Workflow tab in view mode, click tasks to configure approvers.

7. To modify or add stages or tasks, click **Edit**.

Then, customize the workflow as necessary for the project template. Remember to save your changes.

8. When the workflow is complete, click **Save and Finish** to return to view mode.

Adding workflow to templates

To set up a projectList, On-demand Campaign, or Corporate Campaign template that includes workflow data, you create the template, specify team member roles, and then edit the Workflow tab.

If the integration with Workflow Services is configured, you can use the Advanced Workflow capabilities for workflows.

1. Select **Settings > Collaborate Settings**.
2. Click **Templates**.
3. Click **Add Template** () and select a template type.
4. Locate the project template section and click **Add Template**.
5. Complete the fields in the **Template Properties** form and click **Save Changes**.
6. On the **Project People** tab, specify participant roles then click **Save Changes**.
7. Select the **Workflow** tab and click **Edit** ().
8. Select **Enable for Advanced Workflow execution** to enable Advanced Workflow capabilities.
9. Add system and user tasks workflow and organize them into stages.

Remember to save frequently while you work.

10. Edit task dependencies, define task scheduling and duration, and enter other values to supply when users create instances from this template.

For more information, see the *Collaborate User's Guide*.

Remember to save frequently while you work.

11. When the workflow is complete, click **Save and Finish**. The tab returns to view mode.

12. To configure more information for each task, click the task name when the Workflow tab is in view mode.

For workflow tasks, you can configure whether users can add attachments.

For list review tasks, you can configure the list display.

13. Click **View > View as a process flowchart** to display the workflow as a process flowchart.

Template Campaign tab

You use this tab in a Corporate Campaign template to set up communication between Collaborate and Campaign. This tab is not available for On-demand Campaigns and Lists.

The Campaign tab contains the following settings:

Property	Description
Campaign Service URL	<p>The URL used to start Campaign. For example:</p> <pre>http://engsvr1:9001/Campaign/services/CampaignServices</pre> <p>Collaborate uses this value to access services provided by a Campaign server when you create a linked campaign.</p> <p> Note: Enter a value here only if you are mapping data between Collaborate and Campaign.</p>
Campaign Data Mapping	<p>The XML file that contains the data map for creating a Campaign campaign from a Collaborate object instance.</p>

Property	Description
Options	<p>A single check box, Use Campaign Code Generated by Campaign. Check this box to force Campaign and Collaborate campaign codes to match.</p>
Partition ID	<p>The Partition ID identifies the partition of the Campaign instance that contains the linked campaign.</p> <p>The default value is <code>partition1</code>, which is correct if Campaign is installed to a single partition. If Campaign is installed on multiple partitions, you can specify the partition to use for creating campaigns.</p> <p>If you leave this field blank, Collaborate obtains the partition ID from the <code>defaultCampaignPartition</code> parameter under Platform > Configuration > Collaborate.</p>
Folder ID	<p>The folder ID where Campaign stores campaigns that are created from within Collaborate.</p> <p>This ID comes from the <code>CampaignUA_Folder</code> system table. You must set up this system table in Campaign before you define it here.</p>

Template Tabs tab for customizing the user interface

Use this tab to add forms to the **Summary** tab, or to create custom tabs for the marketing object types that support this feature.

For example, you want to collect information about the outside vendor that users plan to contract with to get collateral printed. To do so, you create a form with an attribute for users to select a printing company from a list of several vendors. You also include a text box for users to enter the quoted price of each page of the collateral. You then use the Tabs tab in a project template to add a custom tab and name it **Printing**.

 **Tip:** You cannot rename the standard tabs that display for object instances.

When you configure security policies for your organization, you can configure custom security permissions for these tabs.

Table 20. Fields for defining a new tab

Field	Description
Display Name	The display name for the new section on the Summary tab or the new custom tab.
Page Style	<ul style="list-style-type: none"> • Select summary to add a form to the bottom of the Summary tab. Use this option for forms that contain relatively few attributes and forms that users need to see frequently. • Select tab to create a custom tab specifically for the form. Use this option for forms, or groups of forms, that require their own page, as in the Printing tab example. <p>This option is not available for all template types.</p>
Form	Select the form to add.
Visibility	<p>Select Show in Wizard to display the new Summary section or custom tab in the series of pages that display when users create a marketing object. If you clear this option, the section or tab displays only after users save the object.</p> <p>For project templates only, select Show in Request if this new Summary tab section or custom tab applies to both projects and requests. If you clear this option, the section or custom tab displays for projects only.</p>

Adding tabs to templates

Add a tab or form to templates to collect information about the marketing object. You can add more forms to the Summary tab. For some types of templates, you can add custom tabs, on which you add forms.

1. Add or edit the template then click its **Tabs** tab.

2. Click the **Add a Tab** icon ().

3. Click **Add Tab**.

4. Enter a descriptive name for the tab in the **Display Name** text box.

The name that you choose becomes the name of the tab that users see when they create instances from this template.

5. Choose whether to show the form on the **Summary** tab or its own custom tab.

This option is not available for all template types.

6. Select a form from the **Form** list.

This list contains all the forms available in Collaborate, except for the TCS® (Target Cell Spreadsheet) forms used by campaign projects.

 **Note:** For List templates, forms of type Campaign are not listed.

7. Select the visibility options for the tab.

This option is not available for all template types.

8. Click **Save Changes** to save the tab, **Add a Tab** icon () to add another tab.

Moving tabs and forms on templates

You can change the position on forms on tabs. You can also change the order of custom tabs as you change and refine templates.

1. Edit the template then click its **Tabs** tab.

2. Click one of the following buttons after **Move**:

- **Down** to move a tab down. Moving a summary tab down places it lower on the object's **Summary** page. Moving a separate tab down places it further to the right

in the tab list. For example, if the tab was fourth in the list, moving it down once makes it fifth.

- **Up** to move up a tab. Moves it up or forward one position.

 **Note:** Summary tabs must come before non-summary tabs.

3. Click one of the following buttons after **Move**.

- **Down** to move down the tab or form. Moving a form on the Summary tab down places it lower on the object's **Summary** tab. Moving a custom tab down places it further to the right in the tab list. For example, if the tab was fourth in the list, moving it down once makes it fifth.
- **Up** to move up a tab. Moves it up or forward one position.

 **Note:** On the Summary tab, the standard form for instance properties must come before any custom forms.

Deleting custom forms and tabs from templates

You might want to remove forms from tabs or custom tabs from templates. Consider whether you want to change the template by deleting the form or create a new template. If you delete a form or tab, data in existing object instances is lost.

 **Important:** Deleting a custom form or tab from a template also deletes it from all existing object instances that are created from the template. Do not delete a custom form or tab from a published template if users already created object instances from it. If you do, data is lost.

1. Edit the template then click its **Tabs** tab.
2. Scroll to the section that defines the form or custom tab you want to remove and click **Delete** (on the right side of the page).

The form or custom tab is removed from the object template.

3. Click **OK**.

4. Click **Save Changes**.

Template Attachments tab for adding folders and files

Use this tab to manage attachments in your templates. You can add attachments and folders for future attachments.

On this tab, you:

- Add one or more attachment folders so that users can add and organize attachments: Click the **Add a folder** icon.
- Change the relative position of the folders on the tab: Click **Up** and **Down** to reorder attachment folders.
- Delete folders: Click **Delete** next to the folder you want to remove. All attachments in the folder are also deleted.
- Attach one or more files to the template, so that whenever an object is created from the template, certain images and documents are attached by default. Click **Add an Attachment**.
- Delete default attachments: Click **Delete** next to the file you want to remove.

To add folders and default attachment files:

1. Add or edit the template then click its Attachments tab.
2. Add at least one folder to the tab: Click the **Add a folder** icon and provide a **Name**.
3. To add an attachment, click **Add an Attachment** next to a folder.
The **Upload Attachment** dialog opens.
4. Enter the file path and name, or click **Browse** to locate the attachment.
5. Click **Save** to attach the file.
The attachment file displays in a list under its folder.

6. On the Attachments tab, click **Save Changes** to save the new folder and its attachment.

Repeat these steps to add as many folders and attachments as needed.

Template Custom Links tab for accessing other websites

Use this tab to create custom links that display on one or more tabs for the object instances that are created from this template. For example, you might want to link to an application that your organization uses to generate ID codes for collateral pieces or direct marketing offers.

To add a custom link, click **Add a Custom Link** (). For each link, you can add a parameter, such as the query portion for a dynamic URL. To form the complete URL for the link, Collaborate appends a question mark (?) to the end of the URL you supply and then adds the parameter. To include a parameter, click **Add a Parameter**. More fields display for the parameter.

This tab contains the following properties. When your work is complete, click **Save Changes**.

Table 21. Properties for custom links

Property	Description
No. of links per row	Specifies the number of links to display in a single horizontal line at the bottom of the selected tab or tabs. The display number depends on the width of the browser window. If blank, the links display continuously and wrap onto more lines. For example, you create 6 custom links to display on the Summary tab. To organize the links into 3 rows with 2 links in each row, enter 2.
Display Name	Enter a name for the link. This value becomes the name of the link.
ID	Enter a unique internal ID for the custom link.

Property	Description
Description	Enter some descriptive text for the link. This text is shown as a tip when a user moves the cursor over the link.
URL	Enter the fully qualified URL (including http://) of the website to open when users click the link. The website opens in a new browser window.
Tab VisibilityShow in tab	To define where this link displays to users, select one or more tabs. The link displays at the bottom of every selected tab. You can select the Summary tab and the custom tabs previously added to any template of the same type.
Options	For project templates, you can make the link display for both requests and projects that are created from the template, or only for projects. Select Show in Request to display the link for both.

Custom link URLs can include a parameter. For example, the link can open one page for an object that is Not Started, and another page for an object that is In Progress.

Table 22. Fields for custom link parameters

Property	Description
Name	Enter a name for the parameter.
Value	Select a value from the list to define the type of object property to use. Depending on your selection, another Value list can display to collect more specification. The choice that you make determines the options available from the subsequent list. For example, if you select a value of <object type> Properties , a list displays values including Target Start, Actual End, Security Policy, and other relevant properties for the object.

You can add more than one custom link: Click **Add a Custom Link** to display a new set of property fields. If you add more than one custom link, you can change their relative positions: Click **Up** and **Down** to reorder the links.

Workflow Templates page

You use the options on the **Workflow Templates** page to import, export, delete, enable, or disable previously created and saved workflow templates.

The **Workflow Templates** page lists all the workflow templates and presents the following information and functions.

Table 23. Options on the Workflow Templates page

Control	Description
Name	The name of the workflow template.
Stages / Tasks	The number of stages and tasks in the workflow, which is separated by a '/' character. For example, the value in this column for a workflow that has 5 stages and 30 tasks is 5 / 30 .
Created Date Creation Date	The date the template was created.
Last Modified Date Last Modify Date	The date of the most recent change that is made to the template.
Status	Whether the template is enabled or disabled. When a workflow template is created, its status is set to Enabled by default.
Export link	Exports the workflow template to an XML file. You can then import it into another Collaborate system.
Import Workflow Template link Import icon ()	Imports an XML file with workflow template data. Typically, you create these files by exporting them from another Collaborate system.
Enable/Disable Workflow Template link	Marks the selected templates as enabled or disabled. A disabled workflow template cannot be imported into a projectList, On-demand Campaign, or Corporate Campaign template.

Control	Description
Enable/Disable	
Delete Selected Workflow Template link Delete icon ()	Deletes the selected workflow templates.

Exporting workflow templates

You can export individual workflow templates to use in other List, On-demand Campaign, or Corporate Campaign templates. In some cases, you might want to edit the exported XML file and reimport the workflow template into Collaborate.

1. Select **Settings > Collaborate Settings**.
2. Click **Template Configuration**.
3. Click **Workflow**.
4. Click the **Export** link for the workflow you want to export.
5. Choose a location to save the XML file, and save it.
6. Open the file with a text or XML editor, make your changes, and then save the file.
7. Navigate back to the templates library (**Settings > Collaborate Settings**).
8. Click the **Import Workflow Template** icon () and browse to your edited XML file.
9. Click **Import Workflow Template** and browse to your edited XML file.
10. Name the file to differentiate it from the previous version.
For example, if you export `Marketing Collateral`, you can name your edited file `Marketing Collateral 2`. You can always rename the file later.

11. Create a template and use the new workflow or open an existing template and replace the old workflow template with the new one.

Data Mapping Definitions

The **Data Mapping Definitions** page maps data between campaign projects in Collaborate and campaigns in Campaign, objects in Collaborate and campaigns in Campaign. Use the **Data Mapping** link on the **Template Configuration** page to configure data mapping.

The **Data Mapping Definitions** page contains the following columns:

Column	Description
Name	The name of the data mapping file.
Type	<p>Campaign Metrics Import: Maps Plan project metrics to Campaign contact and response counts.</p> <p>Campaign Data: Maps Collaborate attributes to Campaign attributes.</p> <p>If you have map files from previous versions, you might see other values in the Type column.</p>
Used By	A list of templates that use the data map.

 **Note:** You cannot create a map file within Collaborate. Use a text or XML editor to create and edit the necessary map files.

The **Campaign Service URL** field on the Campaign tab in a Corporate Campaign template behaves as follows:

- If it is blank, data mapping does not occur.
- If it contains information, the value in the field is used to map data between Collaborate and Campaign.

Adding data mapping files

Use a text or XML editor to create or edit a data mapping file. After you have a data mapping file, you add it to Collaborate.

1. Select **Settings > Collaborate Settings**.
2. Click **Template Configuration > Data Mapping**.

3. Click **Add a data mapping** ().

The Upload Data Mapping dialog box opens.

4. Enter a name for the data mapping file.
5. Browse to the XML file that defines the data mapping.
6. Click **Continue**.

Editing data mapping files

If you want to update a data mapping file, you must first edit the XML file, and then reload it back into Collaborate.

1. Open the data mapping XML file in a text editor and make your changes.
2. Select **Settings > Collaborate Settings**.
3. Click **Template Configuration > Data Mapping**.

4. Click the file name that you are updating.

The **Update Data Mapping** dialog opens.

5. Select **File**, and browse to the XML file.
6. Click **Continue**.

You are prompted to overwrite the existing file.

7. Click **Save** to overwrite the existing file with the newer version.

Icons page

On the **Icons** page, you review and add icon files. These icons display in various parts of Collaborate user interface to identify a type of template or object instance.

Click the **Icons** link on the **Template Configuration** page (or **Change Icons** on the template Summary tab) to manage the icons that identify templates and the objects that are created from them.

The **Icons** page contains the following columns:

Column	Description
ImagesImage files	A large and small image for each icon. Click the images to change the icon name or the image files.
Name	The name of icon.
Used By	A list of object templates that use this icon. You specify the icons that are used by a template on the template Properties tab. See Template Properties tab for defining the template (on page 74) .
Delete	A link to delete the icon image file. This link is only available for icons that are not used in any templates.

Collaborate is installed with a set of default icons. You can choose from these icons, or add icons that are customized for your organization. When you add your own custom icons, you upload two file sizes for each icon:

- File image:Main icon: the large (46x54 pixels) image that displays when users create an object instance. For example, the main icon displays next to each template in the List,

On-demand Campaign, or Corporate Campaign template selector (the dialog box that opens when users click Add for an object type).

- **List icon image:**List icon: the small (20x24 pixels) image that displays on the list page next to an object instance. For example, the ProjectList, On-demand Campaign, or Corporate Campaign list page contains the list icons for all of the projectLists, On-demand Campaigns, and Corporate Campaigns on the page.

The image files must be in JPEG, PNG, or GIF format.

Adding and editing icons

You can add or edit icons to use on templates.

1. Click **Settings > Collaborate Settings > Template Configuration**.

2. Click **Icons**.

3. To add an icon, click **Add an Icon** ( **Add Icon**.

To edit an icon, click the icon image (large or small).

4. Enter a **Name** for the type of template and object the icons identify, such as the name of a type of projectList.

5. Upload the icon image files:

- To upload a main icon, under **File Image** enter a path and file name or click **Browse**.
- To upload a list icon, under **List Icon Image** enter a path and file name or click **Browse**.

To replace an existing file, you must select the check box next to the type of icon you want to change.

6. Click **Continue** to load the files into Collaborate.

7. Click **Save Changes** to confirm the upload.

The new or edited icon displays in the list.

Importing and exporting templates

The template import/export functionality allows you to:

- Export templates into a self-contained archive, and
- Import templates that were previously exported or saved to a self-contained archive.

Specifically, the export command downloads a ZIP archive to your computer; import uploads a ZIP archive to the Collaborate server.

 **Note:** The Collaborate installation does not install the Unica example templates. If you want to use the examples, you need to import them.

You can use the import and export commands to create a portable archive. For example, you can export all of your templates from a test server after you verify that they work correctly, then import them to a production server.

 **Note:** If you localized roles, they are exported/imported to/from the archive as well.

Importing templates

You can use the import button to import workflow templates that were created in the same version of Collaborate that you are using. To import templates from an earlier version of Collaborate, you must upgrade.

1. From the **Settings** menu, select **Collaborate Settings**.
2. Click **Template Configuration**.
3. Click the **Import** icon (). Click **Import**.

The **Import Templates** dialog is displayed.

4. Enter the path name of the template archive you are importing, or navigate to it using the **Browse** button.
5. Select the template types to import. By default, all types are imported; clear any types that you do not want to import.
6. In the **Update Database** section, choose which database scripts to run:
 - Drop tables
 - Create/Update tables
 - Drop Lookup Tables
 - Create/Update Lookup Tables

Checking all the boxes fully imports the template. However, you lose any data you had if you are reimporting the same templates.

Checking all the boxes fully imports the template. However, if you are reimporting a template and you drop the tables, you lose data in any existing object you created by using the template. For example, if you reimport a campaign project template and drop the tables, you lose any data that you entered in the TCS in any project that created by using that template.

 **Note:** If you are concerned about overwriting data, you can examine the SQL script files in the template archive to see the details, and create the necessary tables and columns manually.

7. Click **Continue** to import the selected templates.

A summary page is displayed, detailing templates that are being imported, and any warnings about current template files that are overwritten.

8. Click:
 - **Save Changes** to import the templates, or
 - **Cancel** to stop the import, and avoid overwriting any existing templates.

The system reads the template files and analyzes them, and reports any errors. Imported templates are saved to the template database, and then all available templates are reloaded from the database.

 **Note:** The archives that contain the example templates are in the `\tools\admin\sample_templates` folder under your Collaborate installation. Use the archive for your database type. (For example, use `sample_templatesDB2` if you are using a DB2® database.)

Template exporting

If you create or edit a group of templates on a development or test Collaborate server, you can export them and then import them to a production server.

The template export feature in Collaborate allows you to export a group of templates or a single template. In either case, the system creates a self-contained ZIP archive; you can use this archive to import the templates to another Collaborate server.

Export creates separate SQL scripts. These separate scripts give you more control over updating your database to work with the new templates when you import them. For example, if you need to add a column here or there, you can run only the create/alter scripts, so as not to needlessly delete tables and existing data.

The system generates the following script files (to use when you import the template archive).

Table 24. Generated script files

File	Description
<code>create.sql</code>	Adds columns to existing tables, and creates new tables that are needed for the templates.
<code>createlkup.sql</code>	Adds columns to existing lookup tables, and creates new lookup tables that are needed for the templates.
<code>drop.sql</code>	Deletes existing tables that are used by the templates. If you do not mind possibly deleting data, you run this script before <code>create.sql</code> to ensure that the database is set up correctly.

File	Description
<code>droplookup.sql</code>	Deletes existing lookup tables that are used by the templates. If you do not mind possibly deleting data, you run this script before <code>createlookup.sql</code> to ensure that the database is set up correctly.
<code>insertlookup.sql</code>	Inserts data into the lookup tables. This script makes it possible to save complete lookup tables (schema plus data) with the template archive.

Exporting a group of templates

1. From the **Settings** menu, select **Collaborate Settings**.
2. Click **Template Configuration**.
3. Click the **Export** icon (). Click **Export**.

The **Export Templates** dialog is displayed.

4. Select the template types to export. By default, all types are exported, so you can clear any types that you do not want to export.
5. Select the **Database Type** from the pull-down list.

This determines the format of the SQL script files that are generated with the exported templates.

6. Click:
 - **Continue** to export the templates, or
 - **Cancel** to stop the export; skip the remainder of the instructions.
7. Click **Open** or **Save** from the File Download dialog that is displayed.

The system creates a ZIP archive that contains the template and SQL script files.

Exporting a single template

You can export a single template by clicking on the template you want to export and clicking **Export Template**.

1. From the **Settings** menu, select **Collaborate Settings**.
2. Click **Template Configuration**.
3. Click **Templates**.
4. Click the name of the template to export.
The Properties tab displays.
5. Click the **Export** icon (). Click **Export Template**.
6. Specify the **Database Type** of the system that receives the template metadata through an import operation. The selected database type determines the format of the SQL script files that are generated by the export process.
7. Click **Export** to export the template, or **Close** to cancel the export; skip the remainder of the instructions.
8. On the File Download dialog, click **Open** or **Save**.

The system creates a compressed archive that contains the XML and SQL script files for the selected template. Open or extract the archive file to view these files.

Template validation

Validate your templates to check for errors.

Collaborate offers two types of predefined template validation checks:

- Database validation
- Attributes validation

You can perform these validation checks on all of your templates at any time: on the **Template Configuration** page, click **Validate Templates**. Information about these validation checks follows.

Database validation

Database validation checks the validity of the database schema, and whether form attributes match their data type in the database.

The system validates the database when you import, upgrade, and export templates. When you export templates, only forms that are not linked to any template are validated.

When you import and upgrade, you can save templates even if they are invalid. You receive a warning, but you can still save. However, when you add a form, you cannot save the form if validation finds any errors.

Attribute validation

Collaborate has two types of validation to check for inconsistencies in forms.

When you save templates, the system validates the attributes. Collaborate has two types of attribute validation: template attributes validation and template attribute type validation.

- **Template attributes validation:** Checks whether two or more form attributes point to the same table column in both Summary tab and other, non-Summary tabs. If two or more form attributes on different tabs point to the same table column, the system generates an error message that describes the duplicated references.
- **Templates attributes type validation:** Checks whether two form columns, of different types, from two templates point to same table column but with different type. If two or more form attributes with different types point to the same table column, the system generates an error that describes the inconsistency.

Templates attributes type validation checks whether two form columns from two templates point to same table column but with different type (for example, one has a type of select and the other is multi-select).

If two or more form attributes with different types point to the same table column, the system generates an error that describes the inconsistency.

Chapter 7. Form Editor

The Form Editor creates and edits template components. Forms capture information about the List, On-demand Campaign, or Corporate Campaign.

Forms are also the way a field marketer provides input to Campaign flowcharts.

Forms and attributes

Forms are collections of attributes. Attributes are used to collect data about Lists, On-demand Campaigns, or Corporate Campaigns.

Forms define how the attributes are displayed for input by field marketers or corporate marketers, and how the supplied values are stored in a database.

Forms and Campaign flowcharts

When a flowchart is published in Campaign, an associated form is automatically created in Collaborate.

How forms and Campaign flowcharts relate

When a flowchart is published in Campaign, an associated form is automatically created in Collaborate.

You use this form to capture and send information from Collaborate to Campaign.

By using the form in this way, you give field marketers control over certain aspects of On-demand Campaigns and Lists.

The administrator does this by exposing parameters in Campaign, publishing the flowchart, and then working with the automatically created form in Collaborate.

Campaign tasks

In Campaign, you must create flowcharts, expose parameters, and publish the flowcharts. The typical workflow is as follows:

1. Create an input flowchart. The function of this flowchart is to create a list as an input to Collaborate.
2. For the input flowchart, expose the parameters that the field marketer should be able to control, for example, `gender` and `income range`.
3. Create an output flowchart. The function of this flowchart is to hold the final list of prospects for the On-demand Campaign.
4. For the output flowchart, expose the parameters that the field marketer should be able to control.

For example, you may want to field marketer to be able to customize the greeting and the branch name.

5. Publish both the input and output flowcharts.

Collaborate tasks

In Collaborate, you must create a template for an On-demand Campaign or List. The typical workflow is as follows:

1. Run the SQL commands that are produced as part of the flowchart publishing process.
2. Edit the forms that were created when the flowcharts were published in Campaign.
3. On the Form Definitions screen, click **Publish** next to the form to make the form available for use in templates.
4. Create a template for an On-demand Campaign or List.
5. Add two tabs to the template, one for the input form and one for the output form.
6. Create an On-demand Campaign or List by using the new template.
7. Generate the list.
8. Run the On-demand Campaign or List.

Offer integration in On-demand Campaigns

Offer integration takes the assigned offers corporate marketers design in the flowchart in Campaign and publishes it to Collaborate.

While the corporate marketer designs the flowchart, they can assign offers to target cells. When the field marketer runs a flowchart, the offers that are configured by the corporate

marketer are used. They also configure On-demand Campaign templates with the same flowchart form, and after the template is ready, field marketers can use the template.

The field marketer is only able to choose between available offers for each cell, and the offer selection is used during a flowchart execution in Campaign.

Field marketers are not able to view or select offers in an instance if offer integration is turned off. If offer integration is turned on, the field marketer is able to view and select offers in an instance.

To enable offers in On-demand Campaigns, in the **Template Properties**, select the **Enable Offer Selection** check box. You are able to view your offers on the **Form Definitions** page.

 **Note:** By default, settings for offer integration at template level are disabled.

Republish flowchart after changes

A Campaign user can edit the process configuration of a mail list or call list by changing the offer association with the target cells. Any additional offers or deletion of offers to a target cell creates a version of the flowchart. If the flowchart is already published, **Save & Finish** automatically republishes the flowchart. To notify Collaborate about the changes that are made, the Campaign user saves and publishes the flowchart.

 **Note:** If the corporate marketer does not publish the updated flowchart form, the field marketer receives an error message and is not able to run the flowchart.

After the changes are made, a new set of offers with their ID, name, description, and cell information is shown in Collaborate. On the **Form Definitions** page, a merge notification is displayed for that flowchart form. You receive alerts about form republishing or an invalid form whenever a flowchart is republished. You can turn off the form valid/invalid notifications from the **Notification Subscription** page. Opening the form asks the user to merge with the latest list of offers.

Delete offers

Campaign users might delete offers currently being used in flowcharts and in Collaborate campaigns.

If a cell or offer that is used in the flowchart is updated or deleted from the campaign but the user does not publish the flowchart, there is not a version mismatch for the flowchart. While the system runs the flowcharts from Collaborate, if the system verifies that the offer or cell that is used for execution is not correct, the flowchart execution fails.

Deleting offers behaves the same way as republishing flowcharts after changes are made.

Adding a form generated from Campaign

An associated form is automatically created in Collaborate when you publish a flowchart in Campaign.

The underlying schema for the associated form does not yet exist in the Collaborate database.

When you open such a form, you are presented with a screen where you can select the database type and the action to take. You select one of the following:

- **Preview SQL**

Select this option to preview the SQL script that is used to create the database table for the form.

- **Run SQL Script**

Select this option to run the SQL script to create the database table for the form.

You cannot work with the form unless the underlying schema exists. That is, before you can edit or publish the form, someone must run the generated SQL commands to create the tables to store the contents of the form.

Invalid forms

Invalid forms are forms that are associated with a flowchart in Campaign that are modified in Collaborate. Templates that use the form also become invalid. All flowchart run tasks that use the form are canceled.

To make the form and templates that use it valid, and to be able to run flowchart run tasks that use the form, you must run the SQL generated by the republished flowchart.

 **Note:** Invalid forms are marked with a red exclamation point. For example, if a form is deleted when a flowchart is removed in Campaign, then the template is marked with a red cross.

For an upgraded system, if you want to use a user variable value with 450 characters for existing values or tables, then you must manually alter the look-up table that you want to use. Otherwise, the form is invalid.

Form Definitions page

The **Forms Definition** page uses links and commands to work with forms.

You access the **Forms Definition** page by selecting **Settings > Collaborate Settings**, then clicking **Template Configuration**, then **Forms**.

The following table describes the links that are contained in the **Forms Definition** page:

Link	Description
Name	The name of the form. Click the name to open the form.
	The Pencil icon after a form Name indicates that the form is updated but the changes are not yet published.
	The red exclamation mark indicates that a form is temporarily invalid because the associated flowchart was republished from Campaign.
	The yellow triangle icon indicates that a form is republished and there are changes that must be validated. You must run a SQL script to validate the form.
Disable/Enable	Link to toggle the form between Enabled and Disabled states.

Link	Description
	<ul style="list-style-type: none"> • Disable: indicates that the form is Enabled. Click to disable the form. Disabling the form prevents it from being selected in a template. • Enable: indicates that the form is Disabled. Click to enable. Enabling a form allows it to be selected in a template.
Used By	The list of templates that currently use the form. Click a template name to open that template.
Publish	Click to publish the form.
Revert	Click to discard all the changes that are made to the form and revert it to the previous published version.
Delete	Click to delete the form.

 **Note:** When you work with existing or newly published forms, Collaborate does not support working with multiple browser windows or tabs with the same browser session.

Editing a form

You cannot edit a form in the Published state. You must first disable a published form to edit it. The system continues to use the published version of the form while you are editing it.

1. From the **Settings** menu, select **Collaborate settings**.

The Administrative Settings screen opens.

2. Click **Template Configuration**.

The Template Configuration screen opens.

3. Click **Forms**.

The Form Definitions screen opens.

4. Make changes to the form as necessary.

If you are making multiple changes, you should periodically click **Save Changes** to save the form and continue working.

5. When you are finished editing the form, click **Save and Exit**.

The Form Editor closes and you return to the Form Definitions screen.

You must now either republish or revert the form.

Reverting a form

You can revert a form to its last published state when you do not want to use recent changes.

1. From the **Settings** menu, select **Collaborate settings**.

The Administrative Settings screen opens.

2. Click **Template Configuration**.

The Template Configuration screen opens.

3. Click **Forms**.

The Form Definitions screen opens.

Changed forms are indicated by a pencil icon ().

4. In the row for the modified form, click  .

The form reverts to its last published state.

Deleting a form

You cannot delete a form that is referenced by a template.

1. From the **Settings** menu, select **Collaborate settings**.

The Administrative Settings screen opens.

2. Click **Template Configuration**.

The Template Configuration screen opens.

3. Click **Forms**.

The Form Definitions screen opens.

4. In the row for the form, click **Delete**.

You are prompted to confirm the deletion.

5. Click **OK** to delete the form.

The form is removed from the system.

Run History series

Collaborate produces a series of run histories, with each series conceptually tied to a version of the form that is used to generate the results.

You view the run history series in the Run History drop-down menu in the Analysis tab. You can see all revisions of the "run history series" from the Run History drop-down menu, with the most recent one selected by default.

Merge forms

When a flowchart is republished in Campaign, a new form is generated that must be merged with the old one.

If the new flowchart shows a new parameter, you must merge the form to have that parameter appear.

When you merge forms, note the following.

- For trivial flowchart changes (for example, when a lookup value for an existing user variable is added), you do not need to take any action, other than republishing the flowchart in Campaign. Collaborate recognizes these changes automatically.

 **Note:** However, in this example, you do have the option of not merging the change if Collaborate uses different lookup values.

- If user variables are added to or deleted from the flowchart, the system alerts marketers to the fact they need to revalidate their Lists and On-demand Campaigns.
- Some small changes that are made to a flowchart are ignored by Collaborate. For example, changes to localized text such as labels, prompts, and option prompts are ignored, because Collaborate users typically modify this data. Therefore, the system does not overwrite these changes.
- If you show new user variables in a flowchart, and there are already objects in Collaborate that use this flowchart, the system does not update the existing objects with a default value for any new attributes.

Republishing a form

You must republish a form when its associated flowchart in Campaign changes.

1. From the **Settings** menu, select **Collaborate settings**.

The Administrative Settings screen opens.

2. Click **Template Configuration**.

The Template Configuration screen opens.

3. Click **Forms**.

The Form Definitions screen opens.

Forms for which the associated flowchart has changed are indicated by a pencil icon

().

4. In the row for the modified form, click  .

5. Edit the form as necessary.

If you are making multiple changes, you should periodically click **Save Changes** to save the form and continue working.

Field marketers should revalidate List and On-demand Campaign instances that use the updated form.

Changing values displayed in forms

You can modify the display values contained in lookup tables that are used to present choices in drop-down lists and selection tables that are contained in forms.

This allows you to display choices to corporate and field marketers in your organization in their native language. You do this in the Form Editor by modifying individual elements of the form.

1. Edit the form for which you want to modify how values are displayed.
2. Select an element.
3. Click **Update Lookup Table**.

The **Update Lookup Table** window opens.

4. Modify or translate the values in the table.

For example, translate the values for Acquisition, Cross-selling, and Loyalty into a language other than English.

Your changes replace the text that is displayed in the drop-down list or display table that is populated by the lookup table.

 **Note:** This step fails if the lookup table is a view rather than a table.

5. Save and republish the form when you are finished.

Form status

There are three form status values: published, disabled, and enabled.

The follow table lists the possible form status values:

Status Value	Description
Published	The form is published and is available for use in templates. You cannot edit a form in this state; you must first disable it. A Published form is also Enabled.
Disabled	A previously Published form was disabled so that it could be edited.
Enabled	A previously Disabled form was enabled so that it could be used by templates.

Form Editor page

The Forms Editor is a visual tool to help you lay out how you want pages to appear to corporate and field marketers.

The form layout is displayed in the main area of the page. In this area, you can:

- Change the format and labels of the parameters.
- Rearrange the layout by selecting and moving elements around the page.
- Add help text, default values, and mark parameters as required

Form Editor tabs

The Form Editor contains three tabs:

- [Add an Element tab \(on page 116\)](#) tab
- [Element Properties tab \(on page 125\)](#) tab
- [Form Properties tab \(on page 125\)](#) tab

Form Editor Commands

The Form Editor contains the following commands:

Command	Description
Save Changes	Saves the changes that are made to this form and continue editing.
Save and Exit	Saves the changes that are made to this form and returns the user to the Form Definitions page.
Preview	Opens a pop-up window that shows how the form looks to corporate and field marketers.
Cancel	Discards the non-saved changes and returns to the Form Definitions page.

Add an Element tab

You can use the Add an Element tab of the Form Editor to select elements and drag them to the appropriate location on the form.

In this tab, you work with two kinds of elements:

- General Elements, which include the Attribute Group Header
- Custom Elements

Attribute Group Header

You can add group headers to group the fields on the form. When you add a group header, you specify its properties, then drag it onto the form. The following table describes the properties for a group header:

Property	Description
Group Internal Name	Internal name of the group.
Group Display Name	The label that is displayed to users on the form.

Property	Description
Description	Descriptive text for the group; this is useful for determining the purpose. This text is not displayed to users.
Show Group Heading	Determines if the Group Display Name is shown on the form.
Group Layout	Determines whether the group is displayed in one or two columns. The value of this property sets the form layout until the next group header on the form appears.

Custom Attributes

You can add custom attributes to the form.

You must first create custom attributes; the custom attributes you create are only available on the current form.

The following custom attribute types are supported:

Type	Description
Text - Single-Line	Text field allowing users to enter a single line of text.
Text - Multi-Line	Text field allowing users to enter multiple lines of text.
Single-Select	Enumerated field, allowing a user to select one value from a list. The choices are driven by a hardcoded list of options you specify when creating the attribute.
Single-Select Database	Same as the Single-Select attribute, except that the list of choices is loaded from a database table that contains valid items.
Single-Select Database Attribute reference	Represents a single property (column) from a row in the lookup table that is used by the parent SSDOR attribute.
Single-Select Database Object reference	Extends the capability of an SSDB attribute, and provides users the ability to create attributes that represent an entity with multiple properties.

Type	Description
Multiple-Select Database	Same as the Single-Select Database attribute, except that you can choose more than one item from the list.
Searchable Multiple-Select Database	Extends the capability of the Multiple-Select Database attribute by searching and selecting large values at one time.
Yes/No	<p>Boolean field, allowing a user to select one of two values. Can appear in any of the following ways:</p> <ul style="list-style-type: none"> • Check box • Drop-down list • Radio button group
Date Select	Date selector, where the user can enter a date or select a small calendar from which to choose a date.
Integer	Numeric field, allowing users to enter whole numbers.
Float	Numeric field. You can specify the number of decimal places.
Money	Numeric field, allowing users to enter currency values. The system uses the localized currency symbol. You can specify the precision (number of decimal places) for the field.
User-Select	Creates a user selector, which is populated (from Platform) with all system users. You can use this attribute where the value should come from a list of users.
List of Lists	Special type of multi-select attribute that displays all of the lists of a field marketer in a multi-select format.
Hidden	<p>Used to pass the <code>ListID</code> and <code>Username</code> properties from a Campaign flowchart that is brought into Collaborate as a form.</p> <p>You can also use this type to create a field to which you assign a default value that you do not need users to see, for example, a field that is used only for reporting.</p>

 **Note:** Note the following:

- Each attribute type can be displayed with different controls as indicated by the icon in the list.
- To create an attribute, click **Add custom attributes** on the Add an Element tab.

Creating an attribute

You can create custom attributes from the Add an Element tab of the Form Editor.

Before you can create any custom attributes for the form, the database schema for the lookup tables must be created. You must do this outside of Collaborate with your database management software.

1. Open the Form Editor for the form to which you want to add a custom attribute.
2. With the Add an Element tab open, click **Add custom attributes**.
3. Enter information in the Basic Options section as needed.
Fields that are marked with two red asterisks (**) are required.
Additional Basic Options fields may be added, and the Display Options may change based on the Attribute Type you select.
4. Set the Display Options as needed.
5. Click **Save and Exit** to save the attribute and return to the Form Editor.

The custom attribute is now available for use in this form.

 **Note:** Custom attributes that you create are only available in the form you are editing.

Creating a dependent attribute

Dependent attributes are attributes whose values are constrained by another attribute value.

You can make only the following attribute types dependent on other attributes:

- Single-Select - Database
- Multiple-Select - Database

If you want to have a field that displays all the cities for a selected state, you can make the City attribute dependent upon the State attribute.

1. Create the parent attribute.

To continue with the example above, you would create the State attribute.

2. Place the parent attribute onto the form.

3. Create the child attribute.

For example, you would create the City attribute.

4. In the child attribute, check the field **This field is dependent on the following column.**

5. Select the database table column on which this attribute is dependent.

For example, you would select the State column.

6. Click **Save and Exit** to save the attribute and return to the form editor.

The dependent custom attribute is now available for use in this form.

Deleting a custom attribute

You cannot delete custom attributes from forms that were created automatically from a published Campaign flowchart.

1. In the Form Editor, select the custom attribute to delete from the Custom Attributes list.

The custom attribute to delete must be in this list, and not in the form itself.

2. Click **Delete the selected attribute.**

You are prompted to confirm the deletion.

3. Click **OK.**

The custom attribute is deleted.

4. Click **Save Changes** or **Save and Exit** to save the form with the deletion.

To cancel the deletion, click **Cancel**.

Single Select Database

Single Select Database (SSDB) gives you the ability to create single select drop-down attributes that are based on database tables.

You use single select databases when the underlying lookup table exhibits a key-value relationship, and when one entity can be defined by one attribute and identified by one key column.

You can select only one value at a time from a drop-down list or a radio button group, depending on the display format that is selected while you create the attribute.

These tables must follow certain conventions.

1. The table names must have a prefix: *lkup*.
2. It must have at least two columns: a key column and a column that stores display values.
3. It is recommended to have the key column with a primary key constraint to avoid repetition. Even if the lookup table that is pointed to is a view, ensure that the data in the view has unique records.
4. It is recommended to not have more than three columns, where the third column refers to the relationship with another SSDB attribute. Having more than three columns in the lookup table renders the unused columns redundant.
5. Set the **Sort-by Column** field to the same column as the **Display Column**, so that your Display Column values are visible when you select a column sort order.

Single Select Database Object Reference

Single Select Database Object Reference (SSDOR) attributes extend the capability of a single select database attribute, and provide users the ability to create attributes that represent an entity with multiple properties.

Use the following conventions while you create a single select database object reference.

- Select the database lookup table that has numerous columns that are representing an entity.
- Select the key column carefully as this table might have many columns, and based on the value in the key column, the dependent attributes are populated. You need to use a primary key constraint on this table, as data might keep growing in this table. If the lookup table that is being pointed to is a view, ensure that the data in the view has unique records that are identified by a unique key column.
- Choose the appropriate columns from the available ones to be displayed at the instance level.
- SSDOR attributes are mandatory, but are not read-only.

The underlying database lookup table has multiple columns. An entire row in the lookup table would represent the object (entity). The data in this table may keep on growing.

SSDOR attributes allow users to select the columns they would like to view so that they can make more informed choices of the value to be selected at the outset.

 **Note:** Date/date time type fields are not supported in the SSDOR display column.

Single Select Database Attribute Reference

A Single Select Database Attribute Reference (SSDAR) represents a single property (column) from a row in the lookup table that is used by the parent SSDOR attribute.

Selection of the lookup table is automatic, depending on the parent SSDOR selected. The lookup table for an SSDAR always points to a parent lookup table.

Use the following conventions while you create SSDAR attributes.

- The form must have at least one SSDOR attribute.
- Select the parent attribute carefully, and the lookup table is populated automatically.
- Give intuitive names to attributes to easily map the attribute to the database column.
- By default, SSDAR is a read-only attribute.

The parent lookup table must have a unique key in the table. The unique key must be made the attribute key in the Form Editor as well. The parent key column should be present in the child attribute lookup table.

Searchable Multiple-Select Database attribute

You can use the Searchable Multiple-Select Database (SMSDB) attribute along with the existing Multiple-Select Database (MSDB) attribute.

There are several dependencies of this functionality.

1. If an SMSDB attribute is a child of an SSDB attribute, then the result is filtered on the parent attribute's selected value.
2. All the dependency-related features of MSDB attribute behave the same way, in case of this new type of attribute SMSDB.

The difference between MSDB and the SMSDB attribute would be the way user selects the values.

1. SMSDB: Behaves as described by using the pop-up window.
2. MSDB: Existing multi-select box with no pop-up window. There is no change in behavior.

You are able to convert any MSDB into SMSDB, and vice versa, by using the Form Editor user interface. The values that are selected before the conversion are retained after the conversion.

Using the Searchable Multiple-Select Database attribute

You use the Searchable Multiple-Select Database attribute when you want to search and select large values at one time. A long list is defined as more than 10 values.

1. To create an attribute for SMSDB, first select **Multiple-Select - Database**.
2. Then, select **Searchable Multi-Select** from the **Attribute Type** list in the Display Option section of the Custom Attribute tab.

Other settings for SMSDB remain the same as the MSDB type of attribute.

The Sort-by column is used to decide order of rendering of search results and selected values in view mode of the form tab.

3. After the form is created and published, and then used in a template and an instance of the template that was created, the SMSDB field is displayed in edit mode of the form.

The user interface now has a read-only select box with a **Select** button.

The select box display values that were previously selected in the pop-up window.

The new SMSDB pop-up window has a text field and the **Find** button. When you type in the text you want to search and click **Find**, the result is shown in the same pop-up window in the left pane called **Search Results**.

The **Clear** button next to **Find** is disabled until the search is performed. When **Clear** is enabled and clicked, then the search text field and **Search Results** select box are cleared, and the **Clear** button is disabled until a new search is performed. The **Clear** button does not clear the values that are selected in **Selected Values**. The search term finds all occurrences of the value regardless of its position in the value and regardless of case.

You can select the values in the left bucket and move them to right bucket by using **Add >>**. You can click a single item or Ctrl + click for multiple separated items. Click Shift + click for a pick of sequential items. You can also use **Add All >>** to add all of the items at one time.

The **Remove** button can be used to remove items from the Selected Values list. When an item is removed, it may not make sense to return it to the Search Result list. (It may not be part of the current valid Search Results for the last search). You can also use **Remove All** to remove all of the Selected Values in one click.

You must click **Accept and Close** to save and confirm these values back in the parent form. Then, all selected values are added in the read-only select box on the parent form.

After the values are saved in the parent form, and at a later point, if you open this pop-up window again, the selected values show up in the right pane.

Element Properties tab

The Element Properties tab displays the properties of the currently selected element in the Form Editor.

This tab is displayed when you select a single element in the form.

The values that are displayed in this tab are read-only. To edit the values, click **Edit Custom Attribute** or **Edit Attribute Group**.

Form Properties tab

The Form Properties tab displays the properties that are related to the form.

Use this tab to view or edit the form properties. The tab contains the following information:

Property	Description
Form name	The name of the form. If the form is created automatically when a Campaign flowchart is published, then the Flowchart name, ID, type are displayed in read-only mode.
Form Description	Description for the form.
Form Layout	Radio button group that indicates whether the form has a one- or two-column layout.

Properties for forms associated with Campaign flowcharts

If the form was created through the publishing of a Campaign flowchart, it has several additional properties:

Property	Description
Flowchart Type	The flowchart type is either List or Campaign. On-demand Campaigns and Lists typically have two tabs, one for input and one for output. The input form should be designated as List, and the output form should be designated as Campaign.
Flowchart Name	The read-only name of the corresponding flowchart in Campaign.
Flowchart Version	The read-only version of the corresponding flowchart in Campaign.

Removing a custom attribute from a form

You cannot remove custom attributes from forms that were created automatically from a published Campaign flowchart.

1. In the Form Editor, select the element to delete.

2. Click the **Delete** icon ().

The element is deleted from the form.

3. Click **Save Changes** or **Save and Exit** to save the form with the deletion.

To cancel the deletion, click **Cancel**.

Chapter 8. Workflows

To help you complete different workflow-related efforts, the **Workflow** tab offers different view modes and an edit mode.

To record and track the tasks that need to be completed during a project, you add information to the project Workflow tab. Project managers add tasks, organize them into stages, and identify dependencies, personnel, and other related information. Project participants update task status and scheduling data, add attachments.

You can manage tasks that are associated with an Advanced List, On-demand Campaign, or Corporate Campaign. The Workflow tab provides a spreadsheet on which you can list all tasks. You can assign dates and team members to each task.

When a project manager creates a Corporate Campaign, On-demand Campaign, or Advanced List, the selected template can provide an initial workflow. The project manager can then use the Workflow tab to customize the workflow that is provided by the template to meet specific needs.

Team members that are assigned to a Corporate Campaign, On-demand Campaign, or Advanced List use the Workflow tab to track their work. Any team member that is involved in the Advanced List, On-demand Campaign, or Corporate Campaign (with the appropriate access permission) can edit any value on the Workflow tab.

Workflow concepts

Workflows organize the tasks, stages, and milestones for each project. Workflows measure the time that is spent on each part of the project and the people who are assigned to work on it.

Tasks

Tasks are steps in the workflow where a user or the system acts. The task is not complete until the action is complete.

Stages

You can group tasks together under headings called stages. Stages can help you with task organization. For example, you can create a stage that has all tasks your field marketers-specific users do. In spreadsheet view mode or edit mode, stages are the headings in bold that group the tasks together.

Milestones

You can identify workflow tasks as milestones for your project. Example milestones include Job Start, Meeting, and Event.

Dates

Workflows contain the following types of dates.

- **Forecast/Actual dates** begin as forecast dates: future dates when a task owner plans on starting and completing a task. These dates are specified while the task is still pending. When a team member starts and completes a task, the same dates can be used or different dates that are supplied as the actual dates.
Actual dates specify when tasks start and finish.
- **Target dates** are dates that are used to plan the project schedule. Typically, they are set at the beginning of the project.
- **Anchored dates** are fixed dates that cannot change, even if the dates of the tasks upon which they are dependent change.
- **Non-work time** represents dates when people do not work, so the system skips those dates when it calculates durations for tasks. Collaborate currently supports system-wide non-work time that applies to all tasks. It is up to the project manager, On-demand Campaign, or Corporate Campaign manager to determine whether overriding any of these dates is necessary. System administrators enter and maintain these dates.
- **Weekend dates** are dates that you use to specify work that occurs on a weekend on a per-task basis. You can schedule work on a weekend date by using the Schedule Through option for each task.

Duration

Duration is the actual number of days that are assigned to a task. When you assign start and end dates, the system automatically calculates the difference between the forecast or actual start date, and the forecast or actual end date for a task. The actual number of days between the start and end dates equals the duration of the task.

You can assign duration by using any non-negative number. For example, you can use 0.25 to assign a quarter of a day for the task duration.

Duration is the actual number of days that are assigned to a task. The duration control is in a `DD-HH-MM` format. You can enter up to 999 days value for the `DD` field, your applicable business hours that are based on the `beginningOfDay` and `numberOfHoursPerDay` configuration settings for the `HH` field, and a value in 30-minute intervals for the `MM` field.

Effort

The work effort in days (as opposed to duration) that it takes a user to complete a task. For example, a task takes three calendar days to complete, but the task owner spends only half a day on the task for each of the three days. In this case, the effort for the task is one and a half days even though the duration is three days.

Locked tasks

When you edit a task, the task is locked so no other user can edit it at the same time.

People and roles

You can assign tasks to individual team members or you can assign tasks to all team members in each role. When you assign a task to one or more team members, they are considered to be task owners. You assign roles to team members on the People tab of the List, On-demand Campaign, or Corporate Campaign.project.

Workflows use the following concepts to identify people in the workflow.

- **Task owners** are the people responsible for running or managing workflow tasks.
- **Roles** are used as a bridge between tasks and people. They are useful for assigning work on a generic basis. For example, each type of project you create can have its own

workflow template, and the template can contain standard roles for certain tasks. Then, when you create a project, some (or all) of the tasks have a default role that is already associated with them.

- **Roles** are used as a bridge between tasks and people. When a role is assigned to a task in a List, On-demand Campaign or Corporate Campaign, all users that are associated with that role are owners of the task. Templates can contain roles for certain tasks. Then, when you create a List, On-demand Campaign or Corporate Campaign, some (or all) of the tasks have a default role that is already associated with them.

 **Note:** Each workflow might contain users from different timezones. You choose whether Collaborate displays the timezone after the time stamps on the workflow and workflow columns.

System tasks

System tasks are workflow tasks that start automatically, based on a combination of start date and completion of tasks on which they are dependent.

You can create these types of system tasks:

- Subscription
- Flowchart Run
- Notify Field Marketers
- List Review
- Recurrence

 **Note:** When you pause a workflow, system tasks that are scheduled during the time the workflow is paused do not run until the workflow resumes.

Subscription system task

A Subscription system task allows you to have field marketers subscribe to, and participate in, a Corporate Campaign.

The Subscription system task is only used in Corporate Campaigns.

A Subscription system task starts and finished automatically, according to the target start and end date. You can also mark it complete manually.

Flowchart Run system task

A Flowchart Run system task allows you to specify a flowchart that should run at a particular place in the workflow.

When you create a Flowchart Run system task, you specify one of the following:

- For corporate marketers that are working with Corporate Campaigns, the name of the flowchart in the linked campaign (in Campaign) in the workflow.
- For field marketers that are working with On-demand Campaigns and Lists, the name of the tab that is associated with the flowchart in the On-demand Campaign or List that you want to use to gather data.

When Collaborate runs a Flowchart Run system task, flowchart run is started in Campaign.

Flowchart Run system tasks start and finish automatically when there is a matching flowchart in Campaign, when the target start date is reached and when all tasks it depends on are finished; you do not need to manually start or stop a Flowchart Run system task. The % **Complete** field completes automatically as the task proceeds.

Flowchart Run tasks with no assigned flowchart

The icon for the Flowchart Run system task displays red when no known flowchart is assigned to the task. After you assign a flowchart, the color of the icon changes to black.

Flowchart Run tasks and Corporate Campaigns

For Corporate Campaigns, for the Flowchart Run system task to run correctly, you must save and publish the flowchart of the linked campaign in Campaign.

Notify Field Marketers system task

The Notify Field Marketers system task allows you to include automatic notification to Field Marketers within the workflow.

This type of system task is used only with Corporate Campaigns.

When a Notify Field Marketers system task starts, Collaborate sends notification to Field Marketers, informing them that contact lists are ready for their review. Collaborate also adds all selected Field Marketers to the People tab of the Corporate Campaign.

The Notify Field Marketers system task starts and finishes automatically; you do not need to manually start or stop a Notify Field Marketers system task. The % **Complete** field completes automatically as the task proceeds.

 **Note:** A Notify Field Marketers system task must depend on a Run Flowchart system task.

List Review system task

The List Review system task allows you to identify time within the workflow during which Field Marketers review contact lists that result from a flowchart run.

Unlike any other Workflow Task, this task can be finished by a link present on Summary Tab of On-demand Campaign. Without going to workflow tab, you can finish this task directly from Summary Tab.

 **Note:** A List Review system task must depend on a Flowchart Run system task.

List Review system tasks start and finish automatically. You can manually finish a List Review system task when you are sure that all Field Marketers completed the review. After you manually finish the List Review task, the next dependent task (if any) in the workflow starts when its target start date is reached.

When the List Review is completed, manually or automatically, the List is locked to field marketers; field marketers can no longer change their portions of the List.

The two permissions, Update System Task status and Update all System Task, are applied to all Workflow System Tasks along with List Review Task. If these permissions are not granted, then a task cannot be completed from workflow along with List Review Task. List Review can be finished from the **Summary** tab of an On-demand Campaign by clicking **Finish List Review**, even if these security permissions are not granted in the Security Policy.

To specify the number of records to show, you can use the Limit List View option. In List Manager, only the number of records that are specified in the List Review Task are displayed.

If you use a third-party tool to create a list of IDs, you can import them by clicking **Import IDs**. From the **Import IDs** window, you can specify a **.csv** file that contains the customer IDs, the delimiter in the **.csv** file, and the audience level. The **.csv** file should include columns required to uniquely identify a customer based on an audience level. After you click **Import**, the List Manager data is updated with the new imported data to the newly added List. Data from the **.csv** that is a duplicate or is invalid is displayed.

The fields to limit additions are as follows:

- On list review pop-up for templates of On-demand Campaign, Corporate Campaign, and Advanced Lists.
- Corporate Campaign - it is displayed and editable for corporate marketers only. In the case of corporate campaigns, field marketers cannot access this pop-up that is based on security settings. Even if they are allowed access, they can view but cannot edit the settings.
- On-demand Campaigns and advanced lists - these fields are displayed but cannot be edited

If the value of Limit List View option is set to limit the number of records that can be viewed, then the field is automatically set to select the second radio button option with value set to "0." You get an explicit message that no records can be added when the list view is limited. If Unicode characters are present in the List code either by adding an ID prefix or entering manually, then you are not able to export a customer list from List Manager window.

 **Note:** User cannot set both number and percent. For example, to limit to 10% with a maximum of 100.

In the List Manager task, you can specify the available Display Formats. You can identify or filter by Audience Level. Only formats that are selected in the List Review Task are available.

List Review system tasks and recurring workflows

In recurring On-demand Campaigns or Corporate Campaigns, you can enable permanent updates so that any additions or removals that take place during List Review are applied automatically in all occurrences.

List Review system tasks and multi-offer campaigns

In multi-offer On-demand Campaigns or Corporate Campaigns, you can divide a list that is generated by a single Flowchart Run system task into several segments. The results of the Run Flowchart system task are presented as several Lists.

Recurrence system task

Recurrence starts when predecessors are complete. It then recalculates previous dependent tasks that target the start date when these previous tasks are set.

The available recurrence types are Monthly, Weekly, Daily, and Hourly. Date and time calculations must apply to working hours and business days.

On the **Recurrence** tab, you are given the option to choose the Campaign Workflow Type (Nonrecurring or Recurring). After selecting the workflow type, you are able to choose Frequency and Time between occurrences.

There can be only one recurrence task in a sequence of dependant tasks. A control is made when saving the workflow.

Hourly recurrence

For Template Run Flowchart Task Recurrence, you have the Ending option where you can choose No End or Total number of occurrences. You also choose Permissions to modify the recurrence in the instance (All options, No option, and All options but frequency). Run

Flowchart Task properties if the recurrence on task is chosen. You can also get a preview of the next occurrences.

 **Note:** All options allow you to turn from Not recurring to Recurring.

For Instances Run Flowchart Tasks, under the Recurrence tab, you have a start date to choose along with the Ending (no end, total number of occurrences, and end by).

Creating a flowchart run task

You create a flowchart run task through the workflow spreadsheet.

1. In the workflow spreadsheet, in Edit view, select the row after which you want the Flowchart Run task to appear.

2. Click the **Add a Row** icon ().

3. Select **Flowchart Run**.

A new task row is added to the flowchart.

4. In the **Flowchart Name** column, perform one of the following tasks:

- For Corporate Campaigns, enter the name of the flowchart from your linked campaign.
- For On Demand Campaigns and Lists, select the name of the tab that runs the Campaign flowchart.

5. Complete the **Schedule Through, Target Start, Target End, Duration, and Member Role** fields as desired.

You can also change the name of the task.

6. Click **Save and Finish**.

If the workflow is part of a Corporate Campaign, you must save and publish the associated flowchart in Campaign.

Creating a Notify Field Marketers system task

You can create a Notify Field Marketers system task through the workflow spreadsheet.

1. In the workflow spreadsheet, in Edit view, select the row after which you want the Flowchart Run task to appear.

2. Click the **Add a Row** icon ().

3. Select **Notify Field Marketers**.

A new task row is added to the flowchart.

4. Complete the **Schedule Through**, **Target Start**, **Target End**, **Duration**, and **Member Role** fields as desired.

You can also change the name of the task.

5. Make the new Notify Field Marketers system task dependent on a Run Flowchart system task.

6. Click **Save and Finish**.

Creating a List Review system task

You can create a List Review system task through the workflow spreadsheet.

1. In the workflow spreadsheet, in Edit view, select the row after which you want the Flowchart Run task to appear.

2. Click the **Add a Row** icon ().

3. Select **List Review**.

A new task row is added to the flowchart.

4. Complete the **Schedule Through**, **Target Start**, **Target End**, **Duration**, and **Member Role** fields as desired.

You can also change the name of the task.

5. Make the new List Review system task dependent on a Run Flowchart system task.

6. Click **Save and Finish**.

7. If you are working on a multi-offer campaign:

- a. Click the name of the List Review system task.

The Task properties screen opens.

- b. In the **Segment Code** field, enter the name of the segment as it appears in the flowchart in your linked campaign.

- c. Click **Save and Return**.

You can now enable permanent updates to a list.

Enabling permanent updates to a list

To enable permanent updates to a list, check the **Allow permanent updates** check box.

1. In the workflow spreadsheet, in Edit view, double-click the List Review system task that you want to change.

The Post Task dialog box opens.

2. Check the **Allow permanent updates** check box.

Creating a Subscription task

You can create a Subscription task through the workflow spreadsheet.

1. In the workflow spreadsheet, in Edit view, select the row after which you want the Flowchart Run task to appear.
2. Click the **Add a Row** icon ().
3. Select **Subscription**.
A new task row is added to the flowchart.
4. Complete the **Schedule Through, Target Start, Target End, Duration, and Member Role** fields as desired.
You can also change the name of the task.
5. Click **Save and Finish**.

You must now configure the Subscription task.

At least one flowchart run task must depend on the subscription task. You must add the flowchart run task with this dependency.

Configuring the Subscription task

When you configure the Subscription task, in addition to setting the target task dates, you set the subscription Selection Level, the List of Territories, and the Subscription Level.

Before you complete these instructions, you must create the Subscription task.

These settings determine which field marketers receive invitations to subscribe to the Corporate Campaign.

1. View the workflow spreadsheet, not in Edit mode.
2. Double-click the Subscription task.
The Post Task dialog box opens.
3. Enter the **Target Start** and **Target End** dates as needed.

4. Select a **Selection Level**.
5. Select one or more territories in the **List of Territories** field.
6. Select a **Subscription Level**.
7. Click **Save and Finish**.

Example of a Corporate Campaign workflow with system tasks

A typical workflow for a Corporate Campaign might include two flowcharts: one that initially selects a list of contacts, and another that fulfills the campaign after Field Marketers reviewed and approved the initial list.

Task 1: Subscription

Task 1 is a Subscription system task. You configure a subscription task to invite relevant field marketers to participate in the Corporate Campaign.

Task 2: Flowchart Run

Task 2 is a Flowchart Run system task. The Flowchart Name column identifies the name of the flowchart in the linked campaign (in Campaign) that should be run to complete this task. When task 2 runs, the flowchart Corporate Campaign Selection runs in the linked campaign in Campaign to create a list that Field Marketers should review. Task 2 starts and finishes automatically.

Task 3: Notify Field Marketers

Task 3 is a Notify Field Marketers system task. This task notifies Field Marketers that the flowchart run is complete and a list is ready for their review. This task starts automatically when Task 2 completes. Task 3 also finishes automatically.

Task 4: List Review

Task 4 is a List Review system task. This task identifies time within the workflow during which Field Marketers should be reviewing the list that is generated in Task 2. Task 4 starts automatically when Task 3 finishes and finishes automatically when its target end date is

reached; however, you can still manually finish the task when all Field Marketers complete their reviews.

Task 5: Flowchart Run

Task 5 is a Flowchart Run system task. The Flowchart Name column identifies the name of the flowchart in the linked campaign (in Campaign) that should be run to complete this task. When task 5 runs, the flowchart Corporate Campaign Fulfillment runs in the linked campaign in Campaign This fulfillment flowchart creates the final list of contacts by using the results of the Field Marketer review that occurred in Task 4. Task 5 starts and finishes automatically.

Task 6: Recurrence

Task 6 is a Recurrence system task. This task identifies how often a flowchart is run. Acceptable recurrences are hourly, daily, weekly, and monthly. By choosing All Options under Permissions, Field Marketers can turn recurrence from not recurring to recurring.

User tasks

User tasks are workflow tasks that you define and that must be started manually.

You can add a user task to the workflow to accommodate the time necessary to develop creative material for the campaign, followed by a user task to approve the creatives.

Users must manually update the status and progress for user tasks.

Editing workflow spreadsheets

When you create a Corporate Campaign, Advanced List, or On-demand Campaign, a wizard that is based on the template you selected collects information. After you complete the wizard pages, you can customize the default workflow that is provided by the project template.

Before you can edit a workflow, the Advanced List, On-demand Campaign, or Corporate Campaign must not be in the **In Progress** state. If it is, you must pause it.

In addition to project templates, which can include workflow tasks and values, your installation can maintain a set of workflow templates. Workflow templates are template components that are independent from project templates. While a project is in the Not Started status, you can assess whether the workflow supplied by the project template is adequate or if a different workflow template provides a better starting point. For more information about workflow templates, see the Collaborate Administrator's Guide.

The ability to customize template-supplied workflows is controlled by your user permissions. If toolbar icons are unavailable or if values are read-only, you do not have the appropriate permissions to edit the workflow.

1. Open the new Advanced List, Corporate Campaign, or On-demand Campaign and click the **Workflow** tab.

The workflow displays as supplied by the template.

2. Click **Edit** ().

The spreadsheet displays in edit mode. For information about the options in this mode, see [Edit mode toolbar \(on page 179\)](#).

3. To replace all spreadsheet rows and values with data from a previously defined workflow template (if the project is in Not Started status), click **Tools > Import and save workflow**.

A warning that this procedure deletes the current workflow displays. Click **OK**, then select a workflow template and click **Import**.

4. To change default task and stage names to reflect your specific tasks and stages, click in the cells in first column to make your edits. You can also change task dependencies. For more information about dependencies, see [Task dependencies \(on page 166\)](#).

5. To add rows to the spreadsheet, click **Add a Row** () and then select **User Task**, **one System Task**, or **Stage**.

For more information, see [Adding a stage or task \(on page 169\)](#).

6. To add a stage, click **Add a Row** icon () and then select **Stage**.
7. Enter target or forecast/actual dates for the tasks, depending on how you want to use the schedule.
 - You can enter a start date, end date, and duration for a task. If you enter any two of these values, the system calculates the third value automatically. For example, if you enter a target start and a target end date, the system calculates the duration.
 - While the Schedule Through column indicates work days for a task, you can enter any date as a start or end date. For example, for a task that is not scheduled to include weekends you can still pick a Sunday as the end date.
8. To specify that a task is a milestone, such as a drop date, click the **Milestone Type** column and select a milestone from the list.

Your administrator sets the milestones options in this list.
9. Select members or roles to assign the task to in the **Members** and **Member Roles** columns .

For more information, see [Adding roles and members to tasks \(on page 142\)](#).
10. Make other selections and entries in the spreadsheet to reflect the workflow for your Advanced List, Corporate Campaign, or On-demand Campaign.
11. Enter any instructions or notes about a task in the **Notes** column.
12. Click **Save** to save your changes.
 - Click **Save and Finish** to save your changes and return to spreadsheet view mode.
 - Click **Save and Resume** to change the status to **In Progress** and return to spreadsheet view mode.
 - Click **Cancel** to undo any changes and return to view mode.

Adding roles and members to tasks

When you create a Corporate Campaign, Advanced List, or On-demand Campaign, the workflow automatically includes member and reviewer roles for all tasks if the template you

selected provides this information. However, you can edit workflow tasks to assign different roles.

To add roles and members to tasks, complete the following steps.

1. Navigate to the **Workflow** tab of your Corporate Campaign, Advanced List, or On-demand Campaign.
2. Click **Edit** () .
3. To select or change the member roles, click in the **Member Role** cell for the task you want to change.
4. Click the turndown icon (▼) to view the list of available roles.
5. Click to select one role, or Ctrl+click to select more roles to assign to this task.
6. To select or change specific members, click in the **Member** cell for the task you want to change.
7. Click the turndown icon to view the list of available members.
8. Save your work.

If you have the "View people tab" and the "Edit team members and roles" permissions, you can select any users or roles, even if they were not included on the **People** tab. When you add a user to the project workflow, the system adds the user to the **People** tab automatically.

Filling data into a range of cells

To reduce data entry time, you can copy data that is entered for one or more tasks and supply it for another task or tasks by using **Tools** options.

For example, you have 10 consecutive tasks with the same values for target start, target end, target duration, and target effort. You enter the data for the first task. To copy the values that are in the first row into the remaining nine rows, Shift+click to select the cells in those four columns for all 10 tasks. Then, use the **Fill Down** option.

You can also copy the data in one or more adjacent cells and paste it into one or more adjacent cells. See [Workflow copy and paste \(on page 162\)](#).

 **Note:** The options for working with a range of cells apply to adjoining cells only: use Shift+click to select the cells.

1. Open the Advanced List, On-demand Campaign, or Corporate Campaign that has the task values to duplicate, and click the **Workflow** tab.
2. Click **Edit**.
3. Shift+click in the first cell to select it.
4. Move the cursor to the last cell you want to include, then Shift+click in this cell.

The range of cells you selected is highlighted.

 **Note:** You must select a continuous range of cells, rather than selecting multiple, disconnected cells.

5. Click **Tools** () and select one of the following options:

Option	Description
Fill Down	Copies the values in the top-most selected cell (or cells) to all the other selected cells, including the bottom-most.
Fill Up	Copies the values in the bottom-most selected cell (or cells) to all the other selected cells, including the top-most.

6. Click **Save**.

Printing the Workflow tab

You can either print all information found on your Advanced List, On-demand Campaign, or Corporate Campaign Workflow tab, or select certain columns of information to print.

1. From the Workflow tab, click **Print** ()

A dialog opens with a list of the spreadsheet columns. By default, all columns are selected.

2. Click to clear any columns you do not want to include when you print.
3. **Optional:** Clear the **Shrink to Fit Landscape Page Width** check box to print the columns at a size of 100%.

If you keep this option checked, all selected columns print on a single page. If you use this feature, change your printing preference (for this print job) to landscape.

4. Click **Print Selected Columns**. A preview dialog opens.
5. Click **Print**.
6. Select your printer and printer options. Choose landscape mode for best results.
7. Click **Print** to print the selected workflow columns.
8. In the preview dialog, click **Close** to close the print preview.

Adding an attachment to a task

To add attachments for a task, a project owner must enable adding attachments for the task. New attachments are added to the **Attachments** tab for the task.

The following users can add or remove task attachments.

- Task owners can add attachments only to their tasks.
- Task owners and users with the Delete Attachment security permission for projects can delete task attachments.

Adding attachments to tasks is similar to adding attachments to other objects. However, note the following behavior that is specific for adding attachments to tasks.

Note the following restrictions:

- There is no versioning for task attachments: uploading a new version overwrites the existing version of the attachment.
- It is possible to have multiple task attachments with the same name for the same task. This situation can occur if multiple owners of the task each upload a file with the same name. You can differentiate the files by the user who created the attachment.
- You can add and remove attachments no matter the state of the task. That is, even if a task is marked complete or skipped, you can still add and remove attachments.
- The Attachments tab for a Corporate Campaign, On-demand Campaign, or Advanced List is divided into two sections: one for files that are attached directly to the Corporate Campaign, On-demand Campaign, or Advanced List, and one for files that are attached to the tasks.
- If a task owner adds task attachments, and later the Corporate Campaign, On-demand Campaign, or Advanced List owner sets the **Enable Task Attachment** flag to false, attachments can no longer be added or removed from the **Post Task Update** dialog. However, task attachments for the Corporate Campaign, On-demand Campaign, or Advanced List can still be removed from the Attachments tab.

1. Navigate to the task to which you would like to add an attachment.

Click the task from a project workflow or from the Tasks list page.

The **Post Task Update** dialog box opens.

2. Click the **Attachments** tab.

The tab displays any attachments that exist for the task.

3. In the **File to Attach** field, select **From My Computer** or **URL**.

4. Complete one of the following actions:

- Click **Browse** to attach a file that is on your computer. When the dialog box appears, navigate to the file you want to attach and click **Open**.
- Enter the URL in the field provided.

5. Add any comments about the attachment.

6. After you add all your attachments, click **Save and Return** to close the dialog box.

Milestones

A milestone is a point in time within workflow at which all tasks until that time must be complete in order for work to continue.

Your system relies on the display order of the task to find out the prior tasks. All tasks that are displayed before the milestone task on the workflow screen are assumed to be a part of that milestone. If tasks before the milestone are not complete, then the milestone is not met and the next task cannot begin. If the prior tasks are not complete, your system shows the appropriate error message, saying all prior tasks in the milestone should be complete to mark the milestone as complete or active. In that case, the system stops you from updating the milestone task.

Why use milestones

By using milestones within a workflow, you can better enforce process for your lists and campaigns, so that tasks take place in the intended order. In addition, the specific milestones you select in a workflow aid in reporting.

How available milestones are defined

To add milestones, click **Collaborate Settings > List Definitions > Workflow Milestone Types**.

 **Note:** You must have administrative privileges to define milestones. Specific milestones are also available for selection as defined in a database table by your administrator.

A milestone cannot be removed if it is used in an instance (Corporate Campaign, On-demand campaign, or Advanced List).

Note: A milestone can be removed if it is used in template, but it cannot be removed if it is used in instance.

Disabled milestones are not shown while you create an instance or template. They are shown in instances or templates where they are already used, however.

Setting milestones in a workflow

You can set milestones for tasks within a workflow for an Advanced List, On-demand Campaign, and Corporate Campaign from the Milestone Type column.

When you set a milestone, the next task in the workflow cannot begin until the milestone is reached.

Example

Consider a scenario of three user tasks followed by flowchart run system task. A milestone is declared at 1.3 task.

If you try to update the status of the milestone task (1.3 in this case), your system performs a check to ensure that all prior tasks are complete.

When your system tries to start Task 1.4, it checks the status of the earlier milestone task. If milestone is complete, only then can task 1.4 begin. Otherwise, the appropriate error message would be shown to you and the task does not start.

By using a milestone at task 3, you can ensure that all creatives for the On-demand Campaign are approved by the necessary people before campaign fulfillment begins.

Defining a milestone for a task

You can set a milestone for a task to ensure that task is complete before the workflow proceeds.

Before you can define a milestone for a task:

- You must define milestones by going to **Collaborate Settings > List Definitions > Workflow Milestone Types**.

 **Note:** You must have administrative privileges to define milestones.

- The **Milestone Type** column must be present in the workflow layout. You can ensure that it is present by basing the Advanced List, On-demand Campaign, or Corporate Campaign on a template that uses milestones or by editing the workflow layout.

1. Open the Advanced List, On-demand Campaign, or Corporate Campaign, then open the Workflow tab.
2. If necessary, change the layout of the spreadsheet view to show the **Milestone Type** column.
3. Click **Edit** to make the workflow spreadsheet editable.
4. In the **Milestone Type** column, in the task row for which you want to set a milestone, select a milestone from the drop-down list.
5. Click **Save** or **Save and Finish** to save the milestone you set.

The milestone is now in effect for the Advanced List, On-demand Campaign, or Corporate Campaign.

Date dependency calculations

When you enter or change the date for a task, the system calculates other dates that are based on your entry. It uses an internal algorithm to bidirectionally calculate the dates of dependencies, starting with the cell where you entered the date.

When you initiate date dependency calculations for a workflow, note the following issues:

- In addition to factoring in non-work days and hours, date dependency calculations use two additional system-wide properties: start time of day and number of hours per day. Your system administrator configures these settings.
- If a task row is anchored, the date dependency calculation does not update its dates (even if the date columns are empty).
- Date dependency calculations do not affect active and finished tasks; only tasks with a status of Pending.
- Date dependency calculations observe the per-task options for non-work time. The calculation algorithm takes into account whether a task is scheduled to progress during non-work time, weekends, or both.
- Do not log forecast target times outside of business hours if you intend to do date dependency or other automatic calculations afterward. That information is overwritten by the automated process.

Calculating workflow dates automatically

When you enter or change the date of a task, the system calculates other dates that are based on your entry.

To calculate workflow dates automatically, complete the following steps.

1. Enter or change the date for a task in any of the date fields.
2. Select the date and click anywhere on the screen except for another date field.



The **Date Dependency Calculation** icon () is displayed next to the end date.

3. Click the **Date Dependency Calculation** icon.

Alternatively, you can select one of the toolbar icons for recalculating dependency dates.

The other dates in the workflow are updated, because of the new entry.

Calculating date dependencies above a locked task

If a workflow has a locked task, and you change the date of a task that is located above that task, you receive a warning when you calculate date dependencies.

To clarify this task, the procedure that follows assumes:

- Task 1.8 is locked.
- You need to change the duration of task 1.5 from five days to 10 days.
- All tasks depend on the previous task.

1. Open the workflow for editing, and change the duration on task 1.5 from five days to 10 days.

2. Click the **Date Dependency Calculation** icon () next to the end date of task 1.5.

The system displays a warning message, saying you cannot recalculate through the locked row.

3. Click the start date of task 1.8
4. Click the **Date Dependency Calculation** icon.

The system calculates the dates below the locked task.

Schedules

There are two options for scheduling in workflows: baseline and up-to-date.

Baseline scheduling

You use baseline scheduling when you want to compare actual dates to fixed target dates. With baseline scheduling, you never change the target dates, allowing them to serve as a baseline. Users who are assigned tasks receive reminders on completing the actual/forecast dates.

While you work with a baseline schedule, the owner of the Advanced List, On-demand Campaign, or Corporate Campaign sets the initial Target Start and End dates for each task. These dates stay fixed throughout the entire workflow. As the List, On-demand Campaign, or Corporate Campaign progresses, the owner can update the actual/forecast dates with real data based on status information received from team members.

Up-to-date scheduling

You use up-to-date scheduling when you want to use actual dates to update the official schedule (defined by the Target Start and End dates) regularly. This mode enables project managers to capture the most up-to-date, official schedule; however, it does not provide an easy way of viewing a baseline version of the schedule.

Using a baseline schedule

System administrators set up permissions and reminders for baseline schedules. Schedule owners set the dates for each task in the baseline schedule. Team members update the progress for their tasks in the baseline schedule.

Before you create your projectLists, On-demand Campaigns, or Corporate Campaigns, have the system administrator set up the following permissions and reminders:

- Set permissions so that only projectList, On-demand Campaign, or Corporate Campaign owners can update **Target** dates.
- Set reminders (alerts) that are based on the **Actual/ForecastActual** dates.

While you work with a baseline schedule, team members perform the following high-level steps.

1. The owner sets the **Target Start** and **End** dates for each task.

These dates stay fixed throughout the entire projectList, On-demand Campaign, or Corporate Campaign.

2. As the projectList, On-demand Campaign, or Corporate Campaign progresses, team members update the **Actual/ForecastActual** dates with real data.

Keeping an up-to-date schedule

System administrators set up permissions and reminders for schedules. Schedule owners set the dates for each task in the schedule. Team members update the progress for their tasks.

Before you create your projectLists, On-demand Campaigns, or Corporate Campaigns, have your system administrator set up permissions and reminders as follows.

- Set permissions so that only projectList, On-demand Campaign, or Corporate Campaign owners can update **Target** dates.

- Set reminders (Alerts) that are based on the **Target** dates.
- Set reminders to be sent only to the owner or owners.
- Optionally, set reminders on the **Actual/ForecastActual** dates to be sent to team members.

While you work with an up-to-date schedule, team members perform the following high-level steps.

1. The owner sets the initial **Target Start** and **End** dates for each task.
2. As the projectList or On-demand Campaign progresses, team members update the **Actual/ForecastActual** dates with real data.
3. If a task is delayed (the owner receives reminders that are based on **Target** dates), the owner assesses the situation and adjusts the **Target** dates and durations as necessary.

Design for multiple drops, lots, waves, and offers

With Collaborate, you can design Corporate Campaigns, On-demand Campaigns, and Lists that fulfill a number of business needs.

Multi-drop design

Multi-drop Corporate Campaigns, On-demand Campaigns, or Lists are recurring campaigns or lists that run at specified intervals (each month, for example) over a defined time.

Multi-drop campaigns and lists use a workflow or a workflow stage that is configured to repeat at specified intervals. Each drop, or stage, in the workflow is made up of the tasks necessary to fulfill one complete drop, or stage, of the campaign.

When to use a multi-drop design

Organizations use multi-drop campaigns or lists to manage campaigns that span time and require multiple contact points, usually at regular intervals. Examples of multi-drop campaigns are:

- **Newsletter campaign:** You might create a multi-drop Corporate or On-demand Campaign to manage distribution of newsletters at regular intervals on an ongoing basis.
- **Birthday campaign:** You might create a multi-drop Corporate or On-demand Campaign to manage a campaign where some offer and greeting are sent to contacts during the months of their birthdays.

Set up multi-drop Corporate Campaigns, On-demand Campaigns, and Lists

Multi-drop Corporate Campaigns, On-demand Campaigns, and Lists use recurring templates. In the multi-drop template, you must:

- Define the stage of your workflow that contains the tasks you want to recur (only one stage can be recurring)
- Define properties for recurrence by using the Recurrence tab

Multi-drop design is applied when you create a Corporate Campaign, On-demand Campaign, or List by using the recurring templates that you established.

Multi-lot design

Multi-lot Corporate Campaign and On-demand Campaigns are campaigns that distribute the effort of customer contact over time when you deal with a large list of targeted customers.

When to use a multi-lot design

Organizations use multi-lot features to manage customer lists that are too large to handle at one time. A multi-lot design allows Field Marketers to accept a subset of a list for contact in one "lot." Field Marketers can then accept more contacts for contact at subsequent lots, distributing the effort over time.

Set up multi-lot Corporate Campaigns and On-demand Campaigns

To achieve a multi-lot design, your Corporate Campaigns or On-demand Campaigns must use flowcharts in Campaign that are designed specifically for each lot. You can use a single flowchart for all lots or a separate flowchart for each lot. In either case:

- The list generation task for the initial lot selects from your Campaign database to create the first list for Field Marketer review.
- The list generation task for the second lot targets those contacts that were left in the Waiting state after the first list review, as well as any new contacts included from the latest list generation.

Multi-wave design

A multi-wave design for Corporate Campaigns and On-demand Campaigns allows you to distribute offers through several waves of contact. Multi-wave Corporate Campaigns and On-demand Campaigns are typically nonrecurring campaigns, with workflows made up of different stages, or waves.

Multi-wave campaigns take advantage of Campaign response tracking. You can design a "second wave" of offers to be sent to contacts who did not respond to the initial offer.

When to use a multi-wave design

Use a multi-wave design when you want to manage campaigns that present a series of offers to customers. For example, an organization may want to create a multi-wave Corporate Campaign to:

1. Send an offer to a list of contacts.
2. Send a second offer to contacts who did not respond to the initial offer.

For example, Field Marketers may use the same flowchart each month to identify prospects who have birthdays in the current month. In this case, the first wave of the campaign must complete, so that you can identify the non-responders. After this wave is complete, the second wave of the campaign can be used to distribute the second offers to the non-responders.

Understanding multi-wave Corporate Campaigns and On-demand Campaigns

To achieve a multi-wave design, your Corporate Campaigns and On-demand Campaigns must use flowcharts in Campaign that are designed to accommodate each wave of contact.

You can use a single flowchart for all waves, or create a separate flowchart for each individual wave. In either case:

- The list generation task for the initial wave selects from your Campaign database and creates the first list for Field Marketer review.
- The list generation task for all subsequent waves should select from only those contacts that are generated by the previous wave as input. For example, if you want to send an offer to contacts who did not respond to the first wave, the flowchart that is used for the second wave filters out the responders and select the non-responders from the first wave.

Multi-offer design

You use a multi-offer design for Corporate Campaigns, On-demand Campaigns, and Lists to create a campaign or List that sends different offers to different customers.

Multi-offer Corporate Campaigns, On-demand Campaigns, or Lists can be nonrecurring or recurring. These campaigns take advantage of the segmenting capabilities in Campaign to target different contact segments with different offers.

When to use a multi-offer Corporate Campaign, On-demand Campaign, or List

Organizations use multi-offer design to manage campaigns and Lists that target different segments of the customer population. Examples of multi-offer design include:

- Offers for responders and non-responders: You might create a multi-offer campaign to provide one offer to those who respond to a campaign, and another separate offer to those who do not respond.
- Offers for different audiences: You might create a multi-offer campaign to manage different offers for different audiences. For instance, a financial institution might send one offer to college students and another offer to individuals who are head-of-household.

Flowchart design in Campaign for multi-offer campaigns and Lists

Corporate Campaigns, On-demand Campaigns, and Lists must use Campaign flowcharts that divide contacts into Segments to achieve multi-offer design.

Each segment represents a different customer list; each customer list is paired with a different offer in Campaign.

You can use Collaborate to ensure that each customer list is reviewed by the right Field Marketers.

The List Review task matches the segment code in the task with the code written into the List Manager table; it can then filter the list by segment code.

 **Note:** The flowchart must be configured to write the Segment Code for a segment into the List Manager table

List Review task/segment association for multi-offer campaigns and Lists

For multi-offer campaign and Lists, you create a workflow that consists of user and system tasks, just as you would for any other Corporate Campaign, On-demand Campaign, or List.

With multi-offer campaigns and Lists, however, you must ensure that all customer lists created by the flowchart are reviewed. You do so by associating each List Review task in your workflow with each segment created by the flowchart in the campaign in Campaign

You use the **Segment Code** field that is displayed to identify the appropriate segment for the review.

 **Note:** The Segment Code that you enter must match the segment name as it is displayed in Campaign.

Creating a multi-offer Corporate Campaign

You can create a multi-offer Corporate Campaign by creating your linked campaign in Campaign and starting it in Collaborate.

1. Create a Corporate Campaign.

2. Modify the workflow.

Enter the flowchart names that are used for each Flowchart Run task. For each List Review system task:

a. Click the task name.

The task properties window is displayed.

b. Complete the task properties window as wanted.

In the **Segment Code** field, enter the appropriate segment name as it is displayed in the flowchart in your linked campaign (in Campaign).

3. Create the linked campaign in Campaign.

4. Create the flowcharts corresponding to one or more Flowchart Run tasks in the workflow.

Ensure the following:

- The flowcharts create different segments.
- The Segment Codes are written to the List Manager table.

5. Save and publish each flowchart.

6. Start the Corporate Campaign in Collaborate.

Creating a multi-offer On-demand Campaign or List

Field marketers can create multi-offer On-demand Campaigns and Lists by selecting a template in which a corporate marketer or administrator already set up the necessary segments, flowcharts, and workflows.

The instructions below describe the steps to take before the field marketer creates the On-demand Campaign or List to be performed by others that are working with Campaign and Collaborate templates.

1. Create flowcharts and forms for your On-demand Campaign or List.

Ensure the following:

- The flowcharts create different segments.
- The Segment Codes are written to the List Manager table.

2. Create an On-demand Campaign or List template and add forms as a custom tab.

3. Modify the workflow.

For each List Review system task:

a. Click the task name.

The task properties window is displayed.

b. Complete the task properties window as desired.

In the **Segment Code** field, enter the appropriate segment name as it is displayed in the flowchart that is used to create your forms/tabs.

4. Create an On-demand Campaign or List by using the template.

5. Start the On-demand Campaign or List.

Workflow task status

Each new workflow task has a status of Pending. As project managers and participants work on tasks, they update the status to indicate the current progress.

You can change the status of a task when you are working in spreadsheet view mode or timeline view mode by clicking the task name. For more information, see [Post Task Update dialog \(on page 163\)](#). You can also change the status of a task when you are in edit mode:

Click the **Status** column of the task, then choose the appropriate status from the drop-down list.

Table 25. Task status

Status	Description
Pending	Indicates that a task is not yet in progress. When you create a task, it defaults to the pending state. The pending state is symbolized by a blank status field.
Active	Indicates that a task is in progress. Symbolized by the  icon. You can also type A to place a task in the active state
Skipped	Indicates that a task was skipped. Symbolized by the  icon. Skipped tasks are tasks for which members no longer do work. Any dependencies of this task are also disregarded. You can also type S to place a task in the skipped state.
Finished	Indicates that a task is complete. Symbolized by the  icon. You can also type F to place a task in the finished state.

Note the following relationships between the task status and the % **Complete** for a task.

- If you enter 100 as the % **Complete** for a task, the status is updated to Finished.
- If you enter 0 as the % **Complete** for a task (if it was previously finished), the status is updated to Pending.
- If you enter any number from 1 to 99 as the % **Complete** for a task (if it was previously finished), the status is updated to Active.
- If you mark the status for a task as **Skipped**, all of the dates for the task are cleared. Until you click **Save** (or **Save and Finish**), you can retrieve the dates by canceling the editing session. However, after you save the spreadsheet with the dates cleared you cannot retrieve them.

Completing multiple tasks

If you are assigned tasks for one or more projects Advanced Lists, On-demand Campaigns, or Corporate Campaigns, you can set them to complete at the same time.

To complete multiple tasks at one time, complete the following steps.

1. Open the **Tasks** list page to view all of your assigned tasks.
2. Select the check box for each task you want to complete.
3. Click **Complete Selected**.
4. In the **Complete Selected Tasks** dialog box, select one of the following options:

Option	Description
Leave all dates as they are	The tasks are marked as complete, but no end dates are modified.
Set all actual end dates to now	Each selected task is marked complete, and its actual end date field is set to the current date and time.

5. Click **Continue** to complete the selected task or tasks or **Cancel** to return to the list page without saving your changes.

Any tasks that you selected are removed from the **Tasks** list page and their status is changed to complete. Additionally, their end dates are set, if you selected that option.

Skipping multiple tasks

You can skip tasks when you are assigned tasks for one or more projects Advanced Lists, Corporate Campaigns, or On-demand Campaigns.

1. Open the **Tasks** list page to view all of your assigned tasks.
2. Select the check box for each task to skip.
3. Click **Skip Selected**.
4. In the confirmation dialog box, click **OK** to skip the selected tasks, or **Cancel**.

Any tasks that you selected and skipped are removed from the **Tasks** list page, and their status is changed to Skipped.

Workflow copy and paste

For efficiency, you can copy and paste most kinds of tasks in the workflow.

When you are copying and pasting tasks, note the following behavior.

- To copy, you must select a continuous range of cells by using Shift+click. You cannot select multiple, disconnected tasks by using Ctrl+click.
- To select a single cell, you must use Shift+click.
- If you do not insert enough blank tasks to correspond to the ones you are copying, existing task values are overwritten.
- To paste rows at the insertion point, you can click **Paste** from the **Tools** menu or press Ctrl+V. To paste rows after the selected row, you must click **Paste Rows After** from the **Tools** menu.

Copying data in Internet Explorer

You can copy data from a continuous group of cells to another place in the same workflow, or into the workflow for another Advanced List, On-demand Campaign, or Corporate Campaign.

1. Open the Advanced List, On-demand Campaign, or Corporate Campaign that has the tasks to copy and click the **Workflow** tab.
2. Click **Edit**.
3. Shift+click to select the first source cell. If this value is the only one that you are copying, skip to step 5.
4. Point to the final source cell, then press Shift+click over this cell.
A range of cells you selected is highlighted.
5. From the workflow toolbar **Tools** menu, select **Copy** to copy the selected task or tasks.
If you are pasting the tasks into the same workflow, skip to step 7.

6. If you are copying the tasks to another project workflow, go to the destination Workflow tab, and open it for editing.
7. **Optional:** Insert enough blank rows below the destination to act as placeholders for the task values you are copying.

For example, if you copied data from six tasks, make sure that there are six consecutive task rows available. If you do not create the necessary rows, existing values for tasks below the insertion point are overwritten.
8. Shift+click the destination cells.
9. From the workflow toolbar, select **Paste** from the **Tools** menu item to paste the values.

The source data is placed in the workflow, starting from the selected destination task.

Post Task Update dialog

To provide a quick update for a workflow task when the **Workflow** tab is in spreadsheet view mode or timeline view mode, click the task name. The **Post Task Update** dialog opens. Use this dialog as a quick alternative to editing the entire workflow, when you need to update a single task only. From this dialog, you can update a subset of task values, add attachments, and add comments.

The **Post Task Update** dialog box contains the **Status** and **Attachments** tabs.

Task status tab

The **Status** tab contains the following fields.

Table 26. Fields on the Status tab

Field	Description
Owners	Display only. The task owner or owners. At the task level, Advanced List, On-demand Campaign, or Corporate Campaign members are identified as task owners.

Field	Description
	To change the task owners, you use workflow spreadsheet edit mode. In the Members column, add people to a task.
Target Dates Actual Dates	Display only. Calculated start and end dates and duration for the task. To update these values, change the values in the date and time fields.
Status	The status of the task. Select a value from the supplied list.
Enable attachments	Project owners and the administrators who design workflow templates can indicate whether members can add attachments for the task.
% Complete	<p>Progress for the task. Enter a whole number 0 - 100.</p> <p> Note: To change the state of a task marked as finished back to active, you must change the status to Pending and the % Complete to a number less than 100. If you do not change both values, the task remains marked as completed after you save.</p>
Actual Effort	The time that is spent on the task. Click the field to enter a value in days, hours, and minutes, for example, 03D-02H-00M.
Forecast / Actual Target date and time	<p>The begin and end dates and times for the task.</p> <p>Collaborate calculates these dates for your task based on the status if you do not enter a start date, end date, or both</p> <p>When you start a task (change the status from Pending or empty to Active), and save:</p> <ul style="list-style-type: none"> • If the start and end date are empty, then the start date is set to the current date and time. The end date is set to the current date time plus duration. • If the start date is set, but the end date is not set, the end date is set to the start date plus duration.

Field	Description
	<ul style="list-style-type: none"> • If the end date is set, but the start date is not set, the start date is set to the end date minus duration. <p>When you complete a task (change status from Pending or empty to Finish), and save:</p> <ul style="list-style-type: none"> • If the start and end date are empty, then the end date is set to current date and time. The start date is set to the end date minus duration. • If the start date is set, but the end date is not set: <ul style="list-style-type: none"> ◦ If the start date is set prior to the current date, then the end date is set to the current date and the duration is set to the end date minus the start date. ◦ If the start date is set later than the current date, then the end date is set to the current date and the start date is set to the end date minus duration. • If the end date is set, but the start date is not set, the start date is set to the end date minus duration. <p>When you change a task to pending, and save:</p> <ul style="list-style-type: none"> • If the start and end dates are empty, those dates are kept empty. • If the start date is set but the end date is not set, then the end date is set to the current time plus duration. • If the end date is set but the start date is not set, then the start date is set to the end date minus duration.
Comments for revision history	Enter notes to include in the revision history of the project and in any notifications that are sent about the task.
Workflow Notes	Enter notes to display with the task in spreadsheet view or edit mode.

Task attachments tab

The **Attachments** tab contains the following fields.

 **Note:** Only the owner of a task can add an attachment. You can identify member roles and members for tasks in edit mode.

Table 27. Fields on the Attachments tab

Item	Description
Attachments	<p>The top of the page lists current task attachments. The following information displays for each attachment:</p> <ul style="list-style-type: none"> • The attachment name, which is a link to the attachment. • The file type and size. • A description, including the date and time the attachment was added, the name of the person who added it, and any additional comments. • Links for removing attachments or for sending the attachment by email.
File to Attach	Select the source of the file to attach.
Browse	Click to browse your computer for the file to attach. Supported file formats include DOC, PPT, XLS, PDF, GIF, JPEG, PNG, and MPP.
Comments	Enter text to describe the attachment.
Save Attachment	Click to attach the selected file or URL.

Task dependencies

Collaborate offers different options for managing task dependencies as new rows are added to a workflow spreadsheet and existing rows are removed.

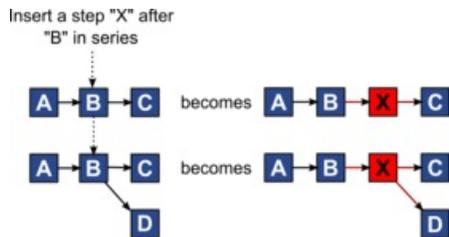
In spreadsheet edit mode, you click **In Series** and select one of the following options:

- **No Dependencies:** the system does not create dependencies for new rows automatically. If you need dependencies for the new tasks and stages, edit the task name to add them manually.
- **In Series:** the system inserts new rows into an existing chain of tasks.
- **In Parallel:** the system inserts new rows in a dependency branch that is parallel to an existing chain of tasks.

Inserting tasks in series

Inserting **In Series** makes a new task dependent on the task before it, and then makes all items that depended on that task dependent on the new task.

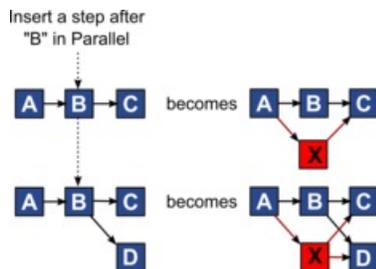
You insert a task in series when it can start only after the previous task is complete. For example, in this figure, if task X cannot be worked on until task B is complete, you insert task X in series.



Inserting tasks in parallel

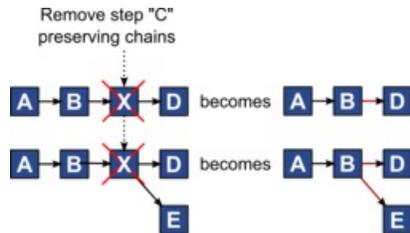
Inserting **In Parallel** makes the task dependent on the items (tasks or stages) that the task before it depended on. This action makes the items that are dependent on the previous task also dependent on the new task.

You insert a task in parallel when it can be worked on at the same time as another task. For example, in this figure, if task X can be worked on simultaneously with task B, you insert task X in parallel.



Deleting tasks

Deleting a task removes the selected task from the chain. Then, the system relinks the two remaining segments of the chain together so that it is one continuous chain again.



When a task is deleted, its dependent tasks are made dependent on its dependencies before the deletion takes place. This practice preserves all sequential chains of dependencies.

Default and "last used" modes

To make adding a task as simple and consistent as possible, Collaborate provides the following behavior.

- The default mode is **In Series**. When you begin an editing session, this mode is used as the insertion mode.
- The "last used mode" is remembered for each editing session. When you select a different dependency mode, it is used each time that you add a task until you change it again or end the editing session.
- For example, to add several tasks in parallel, you need to select **In Parallel** mode only one time. Then, every time you insert another task, the system inserts it in parallel unless you explicitly select another mode.

If needed, you can change the dependency that is assigned by the system manually. Click the task name, then edit the comma-separated list of task numbers that display in parentheses after the name.

Adding a stage or task

To add a task or stage to a workflow, you must have the appropriate permission for the related template.

If the **Add** option is missing from the toolbar, contact your administrator about obtaining the appropriate access rights.

Note the following information about stage and task rows.

- To differentiate stages from tasks, the rows for stages display in the spreadsheet with a shaded background.
- When you add a stage or task, you can indicate where in the spreadsheet to insert it: enter the stage number and the task number before the task name.

For example, if you enter 2.3 `Have team meeting` anywhere in the task list, the task is placed under the task that is labeled 2.2. Any subsequent tasks in that stage are automatically renumbered: the step that was previously labeled 2.3 is now 2.4.

- You can move a stage or task to a different part of the spreadsheet. Use the up and down options on the toolbar to move the stage or task to the appropriate place.
- There are several options for managing dependencies on tasks as new rows are added and existing rows are removed. For more information, see [Task dependencies \(on page 166\)](#).

Stage and task sequence

If you change the number for a task or stage, the task is inserted before the row that matches the new number.

For example, assume the following stage order:

1. Planning
2. Collateral Design
3. Lead Generation

4. Show Setup-to-Breakdown
5. Marketing Review

If you edit task 5, Marketing Review, changing its number to 3, the new order is as follows.

1. Planning
2. Collateral Design
3. Marketing Review
4. Lead Generation
5. Show Setup-to-Breakdown

Now suppose that you edit task 2, Collateral Design, changing its number to 4. The new order is as follows.

1. Planning
2. Marketing Review
3. Collateral Design
4. Lead Generation
5. Show Setup-to-Breakdown

To move a task or stage to the end, give it any number higher than the final task or stage. For example, to move stage 2, Marketing Review to the end, change its number to 6 or higher.

Adding rows to the workflow spreadsheet

Add rows to the workflow spreadsheet to add more tasks, System tasks, and stages.

Before you can add a row to the workflow spreadsheet, you open the workflow in edit mode. For more information, see [Edit mode toolbar \(on page 179\)](#).

1. Decide what dependency option you want the new task or stage to use: Click **In Series**



() and select **No Dependencies**, **In Series**, or **In Parallel**.

Your selection remains in effect until you change it again.

2. In the workflow spreadsheet, click the stage or task name that you want the new row to follow.
3. Add the stage, task, or system task: Click **Add a Row** () and then select **User Task**, a **system task**, or **Stage**.

Collaborate adds the new row to the spreadsheet. Stages display with a shaded background; tasks.

4. **Optional:** Change the dependency that is assigned by the system to the row. The numbers of the tasks that a task or stage depends on display in parentheses after the name. If a date for one task changes, the system changes the dates for all the dependent tasks.

For example, suppose that you add a task and its name is `2.5 Deliver draft to vendor (2.4)2.5 Generate List (2.4)`. To make this task dependent on task 1.3 instead of task 2.4, change the task name to `2.5 Deliver draft to vendor (1.3)2.5 Generate List (1.3)`. To make this task dependent on both task 1.3 and task 2.4, separate the task numbers with commas: change the task name to `2.5 Deliver draft to vendor (1.3, 2.4)2.5 Generate List (1.3, 2.4)`.

For more information, see [Task dependencies \(on page 166\)](#).

5. When you finish editing the workflow, save your changes.

The stage or task is added to the workflow after the insertion point.

Spreadsheet view mode

When you display the **Workflow** tab in spreadsheet view (the default), information about the stages and tasks in your workflow display in tabular format.

For information about the columns that display, see [Workflow spreadsheet columns \(on page 175\)](#).

In addition to viewing data for the workflow, you can update task status and scheduling information and add attachments. For more information, see [Post Task Update dialog \(on page 163\)](#).

To customize the spreadsheet view, click **Layout** () on the Workflow tab. You can select the columns to display and the width of the first (task name) column. For more information, see [Spreadsheet or timeline view customization \(on page 172\)](#).

Timeline view mode

When you view the workflow on a timeline, you can update the task status and scheduling information and add attachments.

The Workflow tab timeline view presents a view of the tasks for a projectList, On-demand Campaign, or Corporate Campaign over a period of weeks or months. To display tasks

on a timeline, click **View > View as a Timeline/Gantt chart Timeline View** . To replace, navigate to **Spreadsheet view** or **Weekly timeline**.

For more information, see [Post Task Update dialog \(on page 163\)](#).

To customize the timeline view, click **Layout** () on the **Workflow** tab. You can customize the timeline view in any of the following ways:

- Choose weeks or months as the time scale.
- Select the dates to plot: Actual/Forecast or Target.
- Select captions for timeline bars.

For more information, see [Spreadsheet or timeline view customization \(on page 172\)](#).

Spreadsheet or timeline view customization

When you view the **Workflow** tab in spreadsheet view mode or timeline view mode, you can make choices about the information that you want to see.

To customize the view, click **Layout** ()

Options on the Project Workflow Tab Layout dialog

The **Project Workflow Tab Layout** dialog displays the following options:

Table 28. Options on the Project Workflow Tab Layout dialog

Option	Description
Spreadsheet Layout	To hide the options in the Spreadsheet Layout section on this dialog, click the icon next to the section title. To view a hidden section, click again.
Columns to Display	<p>A list of check boxes that corresponds to the columns you can include in spreadsheet view mode. Click a link above the list to select a preset group of columns to display:</p> <ul style="list-style-type: none"> • all: default setting; all boxes checked (all columns display). • targets: hides Status, % Complete, and Actual date columns. • actuals: hides Target Dates/Effort and Member/Reviewer roles columns. • all dates: displays all columns that are related to target and actual dates. • responsibility: displays columns that are related to who is assigned to complete the tasks. <p>Alternatively, you can check individual columns to include them or clear columns to remove them.</p>
First Column Width	<p>Defines the width for the first column, which displays task names and dependencies. You can set a different first column width for spreadsheet view mode and for timeline view mode. Select:</p> <ul style="list-style-type: none"> • Remember Last Setting: When you view the workflow spreadsheet, you can adjust the first column width to see more or less of the task names. • Exactly: Select to enter a number that sets the column to an exact width in pixels.

Option	Description
Timeline Layout	To hide the options in the Timeline Layout section, click the icon next to the section title. To view a hidden section, click again.
Time Scale	The increment of time that is used for measurement. Select Weeks or Months . The default setting is Weeks.
Bars Represent	The bars in the timeline view indicate durations. You can choose to display Actual/Forecast dates, Target dates, or both. The default is to display both.
Bar Captions	By default, the bars do not have captions. Select an option to display task information as bar captions. For example, you can have task names or milestone types display as the captions.
First Column Width	<p>Defines the width for the first column, which displays task names and dependencies. You can set a different first column width for spreadsheet view mode and for timeline view mode. Select:</p> <ul style="list-style-type: none"> • Remember Last Setting: When you view the workflow spreadsheet, you can adjust the first column width to see more or less of the task names. • Exactly: Select to enter a number that sets the column to an exact width in pixels.
Make these the default settings for this project workflow tab	<p>Check this box to make your selections the default for the Workflow tab. This option ensures that your display settings for this tab do not change until you make another change and check this box.</p> <p> Note: Your settings become the defaults for all users for this workflow, until someone changes the defaults.</p>
Use these settings for current workflow only	<p>Check this box to apply your selections to the current workflow only. This option ensures that your display settings for this workflow do not change until you make another change and check this box.</p>

Option	Description
	Clear this box to make your selections the default for the Workflow tab. Your settings become the defaults for all users for this workflow until someone changes the defaults.

Workflow spreadsheet columns

When the workflow displays in spreadsheet view mode (the default view) or in edit mode, data is presented in a spreadsheet of columns and rows. You review and enter information in the spreadsheet cells for each column.

Table 29. Workflow spreadsheet columns

Column	Description
Tasks, Stages	<p>Lists the tasks and stages that make up the Advanced List, On-demand Campaign, or Corporate Campaign project.</p> <p>When in edit mode, click a stage or task to revise or change its sequence, name, or dependencies.</p> <p>When in view mode, click a task to update status and scheduling information. For more information, see Post Task Update dialog (on page 163).</p>
Status	<p>Displays an icon to indicate the status of the task. Tasks can have one of the following statuses.</p> <ul style="list-style-type: none"> • Pending • Active • Skipped • Finished
% Complete	The percentage value that represents how complete a task is.

Column	Description
	In edit mode, click the measuring bar for a task and enter a new % Complete number. The measuring bar expands to display a comparable level.
Forecast/Actual Start	<p>For tasks in the pending state, this field represents the Forecast Start date. Forecast Start dates display in italic font. After you change a task from Pending to Active, this field represents the Actual Start date. Actual Start dates are in regular font.</p> <p>In edit mode, click in the cell to use a calendar to select a date and time.</p>
Forecast/Actual End	<p>For tasks in the pending state, this field represents the Forecast End date. Forecast End dates display in italic font. After you change a task from Active to Finished, this field represents the Actual End date. Actual End dates are in regular font.</p> <p>In edit mode, click in the cell to use a calendar to select a date and time.</p>
Forecast/Actual Duration	<p>The duration of the task, in days, hours, and minutes.</p> <p>If you enter both start and end dates, the system automatically calculates a value for this field (the Forecast/Actual End date minus the Forecast/Actual Start date).</p>
Actual Effort	The actual effort that it took to complete the task, as opposed to calendar duration. Effort is measured in days, hours, and minutes.
Anchored Dates	<p>Indicates whether the task is anchored. If a lock icon displays, the dates for the task are anchored.</p> <p>To specify anchored dates for a task, click the column, then select Anchored from the menu. The task date cannot move even if the dates of the tasks it depends on change.</p>

Column	Description
	<p>If a dependency is not met, the dates in conflict appear with a different icon and in a different font.</p> <p>For example, suppose task 2.2 depends on task 2.1. If the target end date of task 2.1 is after the target start date of task 2.2, both the target end date of 2.1 and the target start date of 2.2 appear in red. This action occurs only if you anchored the date for task 2.2 by selecting the lock icon in the Anchored Dates column.</p>
Schedule Through	<p>Indicators for which dates to use when you determine task dates. The following options are available.</p> <ul style="list-style-type: none"> • Bus. - Business days only: include only standard, non-holiday, non-weekend dates in date calculations that are made for this task. This schedule is the default for all tasks. • Wkd. - Business days + Weekends: include weekends in date calculations that are made for this task. • Off. - Business days + Days off: include predefined system-wide non-work time in date calculations that are made for this task. • All - All calendar days: include all dates in date calculations that are made for this task. No dates are ignored when dates are calculated for this task.
Target Start	<p>The targeted start date of the task. In edit mode, use the calendar to select a date.</p> <p>You can add a custom milestone type to set a target and forecast dates for all tasks in a workflow in a project template. To do this, create a milestone with code <code>START</code>. Then, create a project template. In the workflow of this template, assign one task with this milestone type. When you create and save a project with a target start date that uses this template, the task with the new milestone type copies the project start date as its own target start date as well as its forecast start date.</p>

Column	Description
	<p>These target and forecast dates are then rippled to all dependent tasks in the project.</p> <p>The milestone type <code>START</code> can only be assigned to one task in a workflow.</p>
Target End	The targeted end date of the task. In edit mode, use the calendar to select a date.
Target Duration	The duration of the task, in days, hours, and minutes. The Target End minus the Target Start dates.
Target Effort	The targeted effort that is estimated to complete the task, as opposed to calendar duration.
Milestone Type	<p>A task milestone that you choose from a list. Example options might be Meeting, Event, and Job Start. System administrators set the milestone types that are on the list.</p> <p>For more information about setting up milestones, see the Collaborate Installation Guide and Collaborate Administrator's Guide.</p>
Member Roles	A role or roles that are associated with the task. These roles can be loaded automatically from the project template that is used to create the project, or the project owner can set them up manually.
Members	<p>The people that are associated with the task.</p> <p>If a workflow task has a role in its Member Role(s) column, when you assign people to roles, the workflow automatically adds a person in the corresponding Members column.</p> <p>You can also add people to the Members column manually while you edit the workflow.</p>
Enforce Dep.	If this task depends on other tasks, determines how strictly the system interprets dependencies. When this option is selected, the system

Column	Description
	restricts project members from updating this task until the tasks it depends on are finished.
Required	Indicates whether this task is required. Required tasks cannot be skipped or deleted and their names cannot be changed.
Task Code	A read-only code that identifies each task uniquely within a project. System integrators use this code to implement custom business logic for tasks.
Notes	Any comments about the task.

Edit mode toolbar

When you switch from a view mode to edit mode, you can change the workflow. You click the icons on the toolbar to add, move, and delete stages and tasks.

The following table describes the toolbar options.

Table 30. The edit toolbar for the Workflow tab

Icon	Description
	<p>Add Row. To add a row after an existing row in the workflow, select the row then click this icon to specify the type of row. You can add:</p> <ul style="list-style-type: none"> • Stage: stages organize tasks into groups • User Task • Flowchart Run • List Review • Notify Field Marketers (Corporate Campaigns) • Subscription (Corporate Campaigns) • Recurrence

Icon	Description
	Collaborate adds the task and renumbers the subsequent tasks.
	<p>In Series. By default, the system adds rows to the spreadsheet in series, so each task depends on the task that precedes it. To use a different dependency option, click this icon and make a selection before you add the next task to the workflow.</p> <p>Select a dependency option.</p> <ul style="list-style-type: none"> • No Dependencies: when you add a row, the system does not make it dependent on any other row • In Series: when you add a row, the system makes it dependent on the row above it • In Parallel: when you add a row, the system makes it dependent on the same task or tasks as the row above it <p>Each row that you add uses the same dependency option until you change your selection.</p> <p>You can also change dependencies manually; click the task or stage name and supply a comma-separated list of numbers in parentheses. For more information, see Task dependencies (on page 166).</p>
	<p>Add Stage Row. Adds a stage in the spreadsheet. Tasks are grouped in stages.</p>
	<p>Move row up. Click a task or stage name to select the row, then click this icon to move the selected row upward.</p> <p> Note:</p> <ul style="list-style-type: none"> • When you move a row, its task dependencies do not change. • When you move a stage, all of its associated tasks move with it.
	<p>Move row down. Click a task or stage name to select it, then click this icon to move the selected row downward.</p>

Icon	Description
	<p> Note:</p> <ul style="list-style-type: none"> • When you move a row, its task dependencies do not change. • When you move a stage, all of its associated tasks move with it.
	<p>Delete row. Click a task or stage name to select it, then click this icon to delete the component.</p> <p> Note:</p> <ul style="list-style-type: none"> • You cannot delete the first stage in a workflow spreadsheet. • When you delete a stage, its associated tasks are appended to the previous stage. The tasks are not deleted.
	<p>Recalculate Dates. Shift+click to select one or more adjacent cells in the spreadsheet, then click this icon to apply one of the following options:</p> <ul style="list-style-type: none"> • Preserving slack time between Tasks: recalculates all date dependencies that are based on your changes; any slack time between dependent tasks is not removed. • Removing slack time between Tasks: recalculates all date dependencies that are based on your changes; any slack time between dependent tasks is removed.
	<p>Tools. Offers options that affect the values in specific spreadsheet cells, or that affect a column or the entire spreadsheet.</p> <p>To apply any of the following options, you must first Shift+click to select one or more adjacent cells in the spreadsheet:</p> <ul style="list-style-type: none"> • Copy: copies the contents of the selected cells to the clipboard. • Paste: pastes the contents of the clipboard, beginning at the selected cell.

Icon	Description
	<ul style="list-style-type: none"> • Paste Rows After: pastes the contents of the clipboard below the selected row. • Mark as: changes the Status and % Complete values for the corresponding task or tasks. For example, Mark as Finished changes the Status to Finished and % Complete to 100%. You can mark tasks as Skipped, Finished, Active, or Pending. • Fill Down/Up: copies the value in the selected cell or group of cells to the cells below or above it. • Clear: erases all entries in the selected cell or group of cells. <p> Note: You must apply these options to cells that are adjacent; that is, Ctrl+click selections are not supported.</p> <p>The other options on the Tools menu function as follows:</p> <ul style="list-style-type: none"> • Import and save workflow: available if the project is in Not Started status only. Replaces the entire spreadsheet with the tasks and values in a previously defined workflow template. • Clear Column: click a single cell, then select this option to erase all entries in that column. For columns that have a default value, such as Schedule Through, every cell is set to the default. • Clear All: erases the entire spreadsheet.
	<p>Click to recalculate dependent dates while preserving slack time. Recalculates all date dependencies that are based on your changes; leaves any existing slack time between dependent tasks.</p> <p>Click to recalculate dependent dates while removing slack time. Recalculates all date dependencies that are based on your changes; removes any slack time between dependent tasks.</p>
	<p>Undo. Click to undo your last change.</p>

Icon	Description
	Redo. Click to reapply a change you undid with the Undo action.
	<p>Save. Click this icon to select one of the following options:</p> <ul style="list-style-type: none"> • Save: Interim save, the spreadsheet remains in edit mode. • Save and Finish: Saves your work and displays spreadsheet view mode. • Save and Return to List: Saves your work and displays the most recently selected list of projects.
	Cancel. Return to spreadsheet view mode without saving edits that are made since your last save.

Click one of the following options to complete your work:

- **Cancel.** Return to spreadsheet view mode without saving edits that are made since your last save.
- **Save:** Interim save, the spreadsheet remains in edit mode.
- **Save and Finish:** Saves your work and displays spreadsheet view mode.

Work in spreadsheet view mode

When you initially click the Workflow tab, it displays in spreadsheet view mode and offers the following user interface controls.

Table 31. Controls on the Workflow tab

Control	Description
Breadcrumb links	Breadcrumbs (links to the pages you visited before you arrive at the current page) are located above the projectList, On-demand Campaign, or Corporate Campaign name. Click any active link in the breadcrumb trail to go to that page.

Control	Description
	<p>Edit. Changes the display to edit mode so that you can add, remove, and change workflow stages and tasks and enter detailed information for the tasks. For more information, see Edit mode toolbar (on page 179).</p>
	<p>Save as Template. Saves the workflow definition as a reusable workflow template (if you have the permission to do so).</p> <p>A dialog opens for you to name the template. For more information about using template components, see the Collaborate Administrator's Guide.</p>
	<p>Spreadsheet View. Changes the display to spreadsheet view mode, which provides information about each task in tabular format.</p> <p>When you view the workflow as a spreadsheet, each task name is a link. Click a task to open a dialog where you can add and change information about the task. For more information, see Post Task Update dialog (on page 163).</p> <p>Weekly Timeline View. Changes the mode to present a graphic display of scheduling information for the tasks, including duration and status. For more information, see Timeline view mode (on page 172).</p> <p>When you view the workflow on a timeline, each task name is a link. Click a task to open a dialog where you can add and change information about the task. For more information, see Post Task Update dialog (on page 163).</p>
	<p>Layout. Opens a dialog where you can select the columns that you want to display in spreadsheet view mode, and choose the time scale and dates to include in timeline view mode. For more information, see Spreadsheet or timeline view customization (on page 172).</p>

Changing the layout of the workflow

You can change the layout of the spreadsheet and timeline views of the workflow to display the information that you need.

1. In the **Workflow tab**, click **Layout**.

The Instance Workflow Tab Layout dialog box opens.

2. In the **Spreadsheet Layout** section, select the check boxes of all columns you want to show in the workflow.

You can also use the links after **Columns to display**: to select subsets of available columns.

3. Set the first column width for the spreadsheet view.

4. In the **Timeline Layout** section, select values from the **Time Scale**, **Bars Represent**, and **Bar Captions** drop-down lists.

5. Set the first column width for the timeline view.

6. To have these settings apply only to the currently opened workflow, as opposed to all workflows you view, check **Use these settings for current workflow only**.

7. Click **Apply** or **Apply and Close** to save your selections.

The view of the workflow is updated to reflect your selections.

Setting the first column width

You can change the width of the first column in the workflow spreadsheet view and keep this setting for your entire session.

To set the first column width, complete the following steps.

1. Navigate to the **Workflow** tab of the project Advanced List, On-demand Campaign, or Corporate Campaign.
2. Use the column width control to resize the first column to your preferred width.
3. Click **Layout** in the upper right section of the screen.
4. In the **Instance Workflow Tab Layout** dialog, complete the following steps:
 - a. In the **First Column Width** section, select **Remember Last Setting**.
 - b. At the bottom of the dialog, check the **Make these the default settings for this project's workflow tab** box.
5. Click **Apply and Close** to save your changes and close the dialog.

The first column width is now set for this Advanced List, On-demand Campaign, or Corporate Campaign for the remainder of your session.

Chapter 9. Configuration properties in XML files

You perform these tasks on the server where Collaborate is installed. Additional Collaborate configuration properties also exist on the **Settings > Configuration** page in the HCL Unica user interface.

Configure the list display

To enable corporate marketers to share lists with field marketers, you must configure these lists to link to your customer data. As you configure your Collaborate database settings, you first need to create the list tables. Then, you configure the display format, search criteria, and table relationships.

Set up data filters for the list display

Data filters are available across the Platform, enabling you to limit what data HCL Unica users can see.

For example, you can create a data filter based on region so your regional field marketers can see only the customers in their region. The data filters apply to all data viewed in Collaborate, including when you create lists, when field marketers review lists and search for other contacts, and when working with forms.

Components affected by data level filtering for the list display

Configuring these data filters requires coordination between three components of the Platform:

- The data filters in the Platform as a whole
- Lists and forms in Collaborate
- Table mapping and flowcharts in Campaign

Example workflow for configuring data filters

The following example shows the steps involved were you to set up data level filtering for the list display bases on your customers' regions:

1. Create a **region_id** column in the list tables in Collaborate.
2. Create data filters in the Platform for each region, which is based on the **region_id** column of the list manager tables in your customer database.
3. Map the **region_id** column in the list tables to the **region_id** column in your customer database by using Campaign.
4. Create flowcharts in Campaign that populate the **region_id** column.
5. Configure the list display and the form templates in Collaborate to filter on the **region_id** column.

 **Note:** As shown in the previous example, data filtering requires planning and is an iterative process. You must coordinate your configuration across the Platform, Campaign, and Collaborate. You must ensure you use the same naming conventions across these components.

Create list tables in your customer database

To enable lists, you must create six tables in your customer database:

- `uacc_lists` - a list of contacts that are generated as a List.
- `uacc_ondemand_lists` - a list of contacts that are generated by On-demand Campaigns.
- `uacc_corporate_lists` - a list of contacts that are generated by a flowchart in a Corporate Campaign.
- `uacc_permanent` - a list of contacts to be permanently added to or deleted from Lists.
- `uacc_ondemand_permanent` - a list of contacts to be permanently added to or deleted from On-demand Campaigns.
- `uacc_corporate_permanent` - a list of contacts to be permanently added to or deleted from Corporate Campaigns.

 **Important:** These tables store the selected contacts ID of the list and must be created in the same database as the customer tables.

Creating the list tables

1. Add any additional columns for your audience levels in the `listmanager.sql` table creation script.

The `listmanager.sql` file is in the `tools\admin\db\db_type` directory under your Collaborate installation, where `db_type` is the database you are using, `sqlserver`, `oracle`, `db2`, `Netezza`, or `Teradata`.

2. Run the `listmanager.sql` script to create the required tables.

Note the following.

- The script creates the tables in the customer database.
- You can also add columns to the tables based on your particular requirements for data filtering. For example, you can add a column to filter by region.

Configure the View List and Search List pages

To enable field marketers to review the lists, you must format and configure the View List and Search List pages. The following guidelines describe the general changes that you must make to the View List and Search List configuration files.

 **Note:** If no search screen is configured for an audience level, users cannot add records when reviewing a list for this audience level; the **Add Records** link is disabled.

Configuring the database connection

Edit the `listmanager_tables.xml` file, in the `conf` directory under your Collaborate installation, as follows:

- Define the data source containing your customer tables.
- Define the tables that you want to access.

- Define the columns in the tables that you want to display on the **View List** page.

 **Note:** There is only one copy of `listmanager_tables.xml`, and it defines the columns that are used in view list and search list screens. Configure the `listmanager_tables.xml` appropriately for both the `listmanager_list.xml` and `listmanager_searchScreens.xml` files.

Configuring the View List page

Edit the `listmanager_list.xml` file, in the `conf` directory under your Collaborate installation, as follows:

- Define the type of data views with the List element.
- Define the data that appears in each view.
- Define the sort order of each view.
- Define an application to display customer details.

Configuring the List Search page

Edit the `listmanager_searchScreens.xml` file, in the `conf` directory under your Collaborate installation, as follows:

- Define the available search criteria.
- Define the way Collaborate displays the results.

Disable the List Manager list tables

If you do not want to use the List Manger, you need to set the `listManagerEnabled` parameter to `false` under **Platform > Configuration > Collaborate**.

List display configuration files

Collaborate controls the display of lists through three XML files:

- `listmanager_tables.xml`

- `listmanager_list.xml`
- `listmanager_searchScreens.xml`

These files are in `conf` directory under your Collaborate installation.

At installation, these XML files are populated with examples that work with the sample data provided.

Note the following:

- To add special characters to the listmanager XML files, use Unicode encoding. For example, `é` should be encoded as `U+00E9`.
- To use certain characters in the configuration files, you must use XML entities. For example, using `<` as a value will break the configuration file, as it is part of the XML syntax. You must use the entity for `<`, which is `<`.
- If you update the listmanager XML files (for example if you add new columns or a new list display), you must also update the corresponding properties files (`list_language.properties` and `searchscreen_language.properties`).

`listmanager_tables.xml`

You can use the `listmanager_tables.xml` file to declare the following:

- The audience level of the data model of your organization on which the list content is based
- The data source
- The tables that are used in the search and list screens

AudienceLevel

`AudienceLevel` defines the audience levels of your data model. It contains the following attributes:

- `Label` - A short description of the audience level.

- **Name** - The code for identifying the audience level. This must match the `AudienceLevel` attribute of the list element of the `listmanager_list.xml` file.
- **Table** - The name of the table that contains the audience level.
- **Datasource** - The name of the data source that is used to access the table from the customer database.

For example:

```
<AudienceLevel Label="Indiv" Name="Individual" Table="v_indiv_contact"
  Datasource="JNDI_Name_for_customer_DB">
```

Each `AudienceLevel` element contains a child element, `Column`:

```
<AudienceLevel ...>
  <Column... />
</AudienceLevel>
```

Column

The `Column` parameter specifies the ID column in the audience level table. `Column` contains a single attribute, `Name`, for the name of the ID columns in the Audience table. For example:

```
<Column Name="Indiv_ID" />
```

DataSource

The `Datasource` element defines the data source declared to access the tables. It contains the following attributes:

- **Name** - The JNDI name of the data source in the web application server.
- **Type** - The database type. The valid values are `SQLSERVER`, `DB2`, `ORACLE`, `NETEZZA`, or `TERADATA`.
- **DecimalSeparator** - The character that denotes the decimal place. The valid values are period (.) or comma (,).

For example:

```
<Datasource Name="ACC_DEMO" Type="SQLSERVER" DecimalSeparator="." />
```

Table

Table defines the tables on which the search screens and list screens are based. If you add columns for data filtering in the list tables, it must be reflected in the XML file by adding column definitions to the list table. The Table element contains the following attributes:

- **Name** - The name of the table.
- **DataSource** - The data source that is used to access the table.
- **Owner** - The owner or schema of the database (used to prefix the table name).

For example:

```
<Table Name="v_indiv_contact" DataSource="ACC_DEMO" Owner="dbo">
```

Each Table element contains a child element, Column, which can optionally include a **LinkedTo** parameter:

```
<Table ...>
  <Column...>
    <LinkedTo ... />
  </Column>
</Table>
```

Column

The Column parameter describes each column in the table that is defined by the parent Table element. The Column definition of additional columns in both a customer table and a list table must have the Filter parameter set to true. The Filter indicates that the column is part of a filter that is defined in Platform. If the column is used in a filter, set the value to true. If the column is not used in a filter, set the value to false. If you do not provide a filter value, you do not see any values in those additional columns when records are added from the Search and Add screen.

The Column parameter contains the following attributes:

- `Name` - The name of the column.
- `Type` - The type of data that is stored in the column. Valid values are `A` (alphanumeric), `N` (numerical), `D` (date stored as VARCHAR yyyyymmdd), `F` (date stored as DATE/DATETIME).
- `Length` - The length of the column.
- `DecimalLength` - The length of the decimal part for a numeric column.
- `CustomImport` - The value must be set to `true` if you want to use columns apart from the audience level columns as ID columns for importing records in the master customer table. The columns must identify a record uniquely in the master customer table. `CustomImport` is applicable for columns of the master customer table only. The columns that are marked as `CustomImport` must be part of the `uacc_*` tables (such as list tables) with the same name. Valid values are `true` and `false`.

For example:

```
<Column Name="Indiv_ID" Type="N" Length="10" />
```

The `LinkedTo` parameter specifies the relationship between a column and a table that defines references. For example, a table contains `userID` and `householdID` columns. These columns need to reference another table that relates `userID` to the Customer audience and `householdID` to the Household audience.

This element contains the following attributes:

- `Table` - The table where the reference is defined.
- `Column` - The key column of the table on which the reference is defined.

For example:

```
<LinkedTo Table="v_indiv_contact" Column="Indiv_ID"/>
```

listmanager_list.xml

You can use the `listmanager_list.xml` file to configure the view list screens.

List

The `List` element describes the list display format. You can define several display formats if the code is unique. You can choose the format to apply when opening the list screen. For example, you can create a contact format that displays only the name, address, and phone number of the contact and create a demographic format to display the income, age, and gender of the contact.

This element contains the following attributes:

- `Name` - The name of the list display format.
- `Code` - The code of the list display format. It must be unique.
- `AudienceLevel` - The audience level the list display format is based on. This audience level is defined in the `listmanager_tables.xml` file.
- `Multiple` - If set to `true`, you can select more than one member of the list. If set to `false`, you can select only one member of the list.
- `Datasource` - The name of the data source that is used to access the table from the customer database.

For example:

```
<List Name="Contact" Code="CONTACT" AudienceLevel="Individual"
  Datasource="JNDI_Name_for_customer_DB">
```

Each `List` element can contain `Select`, `Order`, and `Link` child elements:

```
<List ... >
  <Select ... />
  <Order ... />
  <Link . . . />
</List>
```

Select

The `Select` element describes the table and columns to display in the list content. Collaborate displays the columns in the same order as they appear in this file.

This element contains the following attributes:

- **Table** - The name of the table to display. It must also be defined in the `listmanager_tables.xml` file.
- **Column** - The name of the column to display from the related table. It must also be defined in the `listmanager_tables.xml` file.
- **Label** - The label of the column header. It is a tag that is replaced by a localized descriptor contained in each `list_language.properties` resource bundle file.
- **Filtering** - The attribute that allows you to filter the list content. The possible values are `true` or `false`.
- **Format** - The attribute for formatting does not apply to values of a column if it is `false`. If it is not mentioned, the system considers it as `true`. It is applied to column with a number or integer data type. (It is different from `Format` in `listmanager_searchscreen.xml`). For example, if the `Column` attribute has value of `1234` and this parameter is not mentioned or is set to `true`, then the value is displayed as `1,234`. If this parameter is set to `false`, then the value is displayed as `1234`.
- **FilteringUsingDropdown** - This attribute allows you to filter by using a drop-down list, only if `Filtering = true`.

For example:

```
<Select Table="v_indiv_contact" Column="indiv_id" Label="indiv_id"/>
```

Order

The `Order` element describes the default sorting columns. It contains the following attributes:

- **Table** - The name of the table that contains the sorting column(s). It must also be defined in the `listmanager_tables.xml` file.
- **Column** - The column on which the sorting is based. It must also be defined in the `listmanager_tables.xml` file.
- **Label** - The order type. The valid values are `ASC` for ascendant sorting or `DESC` for descendant sorting.

For example:

```
<Order Table="v_indiv_contact" Column="last_name" Type="ASC" />
```

Link

The `Link` element describes the URL for the external application that contains customer details. The `Link` element is optional. It contains the following attributes:

- `URL` - The base URL of the application, without any parameters.
- `Label` - The link label or icon tooltip.
- `Logo` - The name of a file as use as the icon. (optional)
- `LogoHeight` - The height of the icon. (Use only with the `Logo` attribute.)
- `LogoWidth` - The width of the icon. (Use only with the `Logo` attribute.)
- `NavName` - The browser name.

Each `Link` element can contain multiple `Param` child elements.

For example:

```
<Link Url="http://localhost:7073/LeadsContact/callLeads.jsp"
Label="last_name" Logo="contact.gif">
  <Param Name="affiniumUserName" Type="user" Value="userlogin"/>
  <ParamName="LeadsRmcTbid" Type="column"
Value="v_customer_contact.customer_id"/>
</Link>
```

Param

The `Param` element describes a parameter to add to the base URL. It contains the following attributes:

- `Name` - The http parameter name.
- `Type` - The type of information to send. The valid values are `user` to send the current logged user information and `column` to send the value of a specified column.
- `Value` - The specific information to send. If the `Type` attribute value is `user`, the valid values of the `Value` attribute are `userlogin` and `userid`. If the `Type` attribute value is

column, the valid value of the `Value` attribute is the column whose value should be appended to the base URL, specified as `Table.column`.

- `DateFormat` - The format for sent dates. Used only for a date column (type D or F).

For example:

```
<Param Name="affiniumUserName" Type="user" Value="userlogin"/>
<ParamName="LeadsRmcTbid" Type="column"
Value="v_customer_contact.customer_id"/>
```

listmanager_searchScreens.xml

You can use the `listmanager_searchScreens.xml` file to customize list search screens based on audience level and other criteria.

This file defines:

- The criteria fields
- The displayed result fields

You can define several search screens that are based on different audiences, different criteria, and searching results to be used in Collaborate When the field marketers use search, the screen appearance is based on the audience levels configured the `listmanager_tables.xml` file. If the various screens are based on the same audience level, the field marketer can choose from the various pre-defined searches. For example, you can create a basic search that only contains name and address, then an advanced search that contains name, address, income, and account activity.

You can choose not to define a search screen for a given audience level in order to prevent adding people to the List Manager for a given campaign or List. The field marketers would not be able to add a contact that is based on that audience level because no search screen had been defined.

Following are descriptions of each element and subelement as well as their related attributes.

Listmanager_searchScreen.xml contains several SearchScreen elements. Each of these sets up a multi-criteria search screen criteria and result set. This element contains the following attributes:

- Name - The name of the screen.
- AudienceLevel - The audience level the search screens are based on. The AudienceLevel is defined in the listmanager_tables.xml file.
- Label - The label of the column header.
- MultiSelect - If set to true, you can select more than one element in the final list. If set to false, you can select only one element in the final list.
- Datasource - The name of the data source used that is used to access the table from the customer database.

For example:

```
<SearchScreen Name="default_indiv_search" AudienceLevel="Individual"
  Label="default_indiv_search" MultiSelect="true"
  Datasource="JNDI_Name_for_customer_DB">
```

Each SearchScreen tag has the following structure:

```
<SearchScreen ... >
  <Criteria ... >
    <Field ... >
      <Lookup ... />
    <Field ... />
  </Criteria>
  <Result ... >
    <Field ... />
    <Order ... />
  </Result>
</SearchScreen>
```

Criteria

The `Criteria` element specifies the search criteria. It contains the `Field` element, which describes the search criteria fields.

Field

The `Field` element contains the following attributes:

- `Table` - The table on which the search is based.
- `Column` - The column on which the search is based.
- `Label` - The descriptor that appears on the screen for the criteria. It is a tag that will be replaced by localized descriptor contained in each `searchScreen_language.properties` resource bundle file.
- `Operator` - The type of operation. The valid values are `=`, `like`, `<`, `>`, `<=`, `>=`, `<>`.
- `Default` - The optional default value. It can be set to `@userlogin`, which will be substituted with the actual user login ID when the search screen is executed.
- `Order` - The display order of the criteria on the screen.
- `Long` - (Optional) The length of the criteria value. If this is not specified, the criteria takes the value defined in the attribute `length` of the table's column in the `listmanager_tables.xml` file.
- `Minimallength` - (Optional) The minimal number of characters of the criteria value.
- `Case` - (Optional) The case of the criteria value. The valid values are `Lower` or `Upper`.
- `Displayed` - (Optional) Whether the criteria is displayed or hidden. The valid values are `true` or `false`.

For example:

```
<Field Table="v_indiv_contact" Column="username" Label="username"
Operator="" Displayed="false" Default="@userlogin" Order="5"/>
```

A `Field` element can contain a `Lookup` element. The `Lookup` element specifies how to populate a list box criteria. The `Lookup` element contains the following attributes:

- `Table` - The table containing the data of the list.
- `Id` - The ID column containing the data of the list.

- `Desc` - A description of the list.
- `Where` - (Optional) Enables you to filter the values according to a Where clause.
- `Display` - (Optional) Specifies what is displayed in the list box: the code and the description. The values can be: `id`, `desc`, `id - desc`, or `desc - id`.

For example:

```
<Lookup Table="lkp_region" Id="Region_id" Desc="Region"
Where=" " Display="desc"/>
```

Result

The `Result` element specifies the searching results set. It contains `Field` and `Order` elements. If you added additional columns in a `uacc` table and updated `listmanger_tables.xml`, the `Result` element of that particular audience level must have the `Field` definition of those column.

Field

The `Field` element specifies the displayed result fields. `Field` contains the following attributes:

- `Table` - The table containing the searching results.
- `Column` - The column containing the searching results.
- `Label` - The descriptor that appears on the header of the result list.
- `Format` - The format (such as code and description) to display in the list box criteria in the case of a column that has a relationship with a lookup table. The value can be `code`, `label`, `code - label`, or `label - code`.

For example:

```
<Field Table="v_indiv_contact" Column="Indiv_ID" Label="indiv_id"/>
```

Order

The `Order` element specifies the displayed sorting column for the result records. `Order` contains the following attributes:

- **Table** - The table of the column on which the records are sorted.
- **Column** - The columns on which the records are sorted.
- **Type** - The sorting order. The valid values are `ASC` or `DESC`.

For example:

```
<Order Table="v_indiv_contact" Column="Last_Name" Type="ASC" />
```

Map Collaborate tables in Campaign

You must map the following tables in the Collaborate system database in Campaign:

- `uacc_lists`
- `uacc_ondemand_lists`
- `uacc_corporate_lists`

For information on mapping tables, see the Campaign Administrator's Guide.

Configure territories for subscriptions

To use the Subscriptions feature in Collaborate, you must define territories and assign users to territories in an xml file and then load the territory information into your Collaborate database.

 **Note:** You must set up Collaborate users in the Platform before you load the territory information.

You can view sample territory data in the `TerritoriesSampleData.xml` file, in the `Platform-home\Collaborate\tools\admin\sample_templates\xml` directory.

Loading territory data into the Collaborate database

All files that are referenced in this task are in the `Platform-home\Collaborate\tools\admin\loadTerritories` directory.

1. Create the xml file that contains the territory definitions and user assignments.
2. Specify the database properties in the `loadTerritories.properties` file.
3. Edit the `loadTerritories.bat` (on Windows™) or `loadTerritories.sh` (on UNIX™) file:
 - a. Set the value of the **DB_JAR_CLASSPATH** parameter to the full path to the JDBC driver libraries.
 - b. Change the Java class path value in the `GOOD_TO_TO` section to specify the full path for the JDK installation.

For example, change:

```
java -cp .;loadTerritories.jar;%DB_JAR_CLASSPATH%;log4j.jar;
com.unicacorp.uap.subscription.loadTerritories.LoadTerritories %*
```

to

```
c:\bea\java\jdk\java -cp .;loadTerritories.jar;
  %DB_JAR_CLASSPATH%;log4j.jar;
com.unicacorp.uap.subscription.loadTerritories.LoadTerritories %*
```

4. Run the load file for your system by using the following syntax:

```
loadTerritories [path]file
```

If the territory definitions file is not in the `Platform-home\Collaborate\tools\admin\loadTerritories` directory, provide the full path, which is enclosed in quotation marks.

For example:

```
loadTerritories":\HCL\xml\salesTerritories.xml"
```

When the script completes, a message indicates whether the import ended with or without errors. Errors are recorded in the file `loadterritories.log`. If any errors are reported, correct the errors and run the script again.

System log file

The Collaborate system log file is named `system.log`, and is in the `Platform-home\Collaborate\logs` directory.

Changing the system log file location

To change the name or location of the system log file, you change the value of the **-Dcollaborate.system.logfile** parameter in your web application server.

For example, the following line specifies that the location of the Collaborate system log is called `HCL_Collaborate_system.log` and in `C:\logs`:

```
-Dcollaborate.system.logfile=C:\logs\Unica_Collaborate_system.log
```

If you are using WebLogic, you add this option to the `startWeblogic.cmd` file. For details, see your WebLogic documentation.

If you are using WebSphere®, you add the option in the Generic JVM Arguments section in the administrative console. For details, see your WebSphere documentation.

Chapter 10. Collaborate configuration properties

This section describes the Collaborate configuration properties on the configuration page. Additional configuration properties exist in XML files that are located under the Collaborate installation directory.

Collaborate | navigation

These configuration properties are for navigation settings.

welcomePageURI

Description

The Uniform Resource Identifier of the Collaborate index page. You should not change this value.

Default Value

```
affiniumcollaborate.jsp?cat=home
```

projectDetailpageURI

Description

The Uniform Resource Identifier of the Collaborate detail page. You should not change this value.

Default Value

```
uaprojectervlet?cat=projectabs&projecttype=CORPORATE&projectid=
```

seedName

Description

Used internally by the Collaborate applications. You should not change this value.

Default Value

Collaborate

type

Description

Used internally by the Collaborate applications. Do not change this value.

Default Value

Collaborate

httpPort

Description

The port number that is used by the application server for connections to the Collaborate application.

Default Value

7001

httpsPort

Description

The port number that is used by the application server for secure connections to the Collaborate application.

Default Value

7001

serverURL

Description

The URL of the Collaborate installation.

If users access Collaborate with the Chrome browser, use the fully qualified domain name (FQDN) in the URL. If the FQDN is not used, the Chrome browser cannot access the product URLs.

Default Value

`http://localhost:7001/collaborate`

displayName**Description**

Used internally.

Default Value

`Collaborate`

timeout_redirection**Description**

Timeout URL displays. The Collaborate logout page is displayed if empty.

Default Value

No default value is defined.

Collaborate | UDM Configuration Settings

These configuration properties are for Configuration settings.

serverType**Description**

The type of web application server you are using. The valid values are

`WEBLOGIC` OR `WEBSHERE`.

Default value**userManagerSyncTime****Description**

Time in Milliseconds to sync with Platform. The default value is equivalent to 3 hours.

Default value

10800000

showServerLiveClock**Description**

This configuration parameter shows the server's clock and time zone information. If the value for this parameter is set to `True`, a message that contains the server time zone and a live clock that shows the server time is displayed on the Summary and Workflow tabs (in both view and edit modes), the Scheduler pop-up, and post-task pop-up pages of Lists, On-demand Campaigns, and Corporate Campaigns.

Default value

False

Valid value

TRUE | FALSE

firstMonthInFiscalYear**Description**

The first month in the fiscal year. The default is 0 for January.

Default value

0

systemUserLoginName**Description**

The login name of a Platform user to be used for system tasks (for example, the system task monitor or the scheduler). HCL strongly recommends that the system user is not a normal Collaborate user.

Default value

[CHANGE-ME]

searchModifiedTasksForSummaryFrequencyInSeconds

Description

How often, in seconds, to search for changes in task runs to refresh the Summary tab.

Default value

10

collaborateFlowchartStatusPeriod

Description

The period in milliseconds between two flowchart status checks.

Default value

100000

collaborateFlowchartStatusPeriodRunning

Description

The period in milliseconds between two flowchart status checks when the flowchart is running.

Default value

2000

enableEditProjectCode

Description

If set to `true`, you can edit the List Code when on the **Summary** page of the New List wizard. If set to `false`, you cannot edit the List Code.

Default value

TRUE

Valid value

TRUE | FALSE

minimumDelayForExecutionMonitoring

Description

Optional. Defines the minimum delay, in seconds, for an execution before it appears on the **Flowchart Runs Monitoring** page.

Default value

10800

validateAllWizardSteps

Description

Determines whether Collaborate checks required fields on non-visited wizard steps. Use this parameter to change behavior that occurs after you click Finish in the project wizard:

- `true`: Collaborate checks all required fields on all non-visited wizard steps (except workflow, tracking, attachments) when creating a project by using the wizard. If there are any required fields blank, the wizard jumps to that page and displays an error message.
- `false`: Collaborate does not check required fields on non-visited wizard steps.

 **Note:** Collaborate automatically checks the current page for blank requirement fields. This parameter controls whether Collaborate checks all pages for blank required fields after you click Finish.

Default value

True

Valid value

TRUE | FALSE

Collaborate | UDM Configuration Settings | Attachment

These configuration properties are for Attachment settings.

collaborateModeForAttachments

Description

Collaborate can get the attachments generated by flowchart execution from the Campaign server through the following modes:

- Directory (the default)
- HTTP
- FTP
- TFTP
- SFTP

Default value

True

Valid value

True | False

collaborateAttachmentsDIRECTORY_directory

Description

Indicates the address in the Campaign server where Collaborate takes the attachments if the mode is set to `Directory`, the default.

Default value

`\Affinium\Campaign\partitions\partition1`

collaborateAttachmentsDIRECTORY_deletefile

Description

The value `True` indicates that the original files will be deleted after copy. The default is `false` if the mode is set to `Directory`.

Default value

`False`

Valid value

`True` | `False`

collaborateAttachmentsFTP_server

Description

Indicates the server where Collaborate takes the attachments if the mode is set to `FTP`.

Default value

No default value defined.

collaborateAttachmentsFTP_username

Description

Optional. Indicates the user name to log in on FTP server where Collaborate takes the attachments if the parameter `collaborateModeForAttachments` is `FTP`.

Default value

No default value defined.

collaborateAttachmentsFTP_password

Description

Optional. Indicates the password to log in on FTP server where Collaborate takes the attachments if the parameter `collaborateModeForAttachments` is `FTP`.

Default value

No default value defined.

collaborateAttachmentsFTP_account

Description

Optional. Indicates the account to log in on FTP server where Collaborate takes the attachments if the parameter `collaborateModeForAttachments` is `FTP`.

Default value

No default value defined.

collaborateAttachmentsFTP_directory

Description

Optional. Indicates the directory on the FTP server from where Collaborate takes the attachments if the parameter `collaborateModeForAttachments` is `FTP`. Accepts the relative path of the directory regarding the FTP default directory from where Collaborate can get the attachments for the Windows operating system.

Default value

No default value defined.

collaborateAttachmentsFTP_transfertype

Description

Optional. Indicates the file transfer type on the FTP server that is used by Collaborate to get the attachments if the parameter `collaborateModeForAttachments` is `FTP`. The value can be `ASCII` or `BINARY`. The default is `ASCII`.

Default value

No default value defined.

collaborateAttachmentsFTP_deletefile

Description

Optional. The value `True` indicates that the original files will be deleted after copy. The default is `false` if the parameter `collaborateModeForAttachments` is `HTTP`.

Default value

No default value defined.

collaborateAttachmentsHTTP_url

Description

Indicates the HTTP URL where Collaborate takes the attachments if the parameter `collaborateModeForAttachments` is `HTTP`.

Default value

No default value defined.

collaborateAttachmentsHTTP_deletefile

Description

Optional. The value `True` indicates that the original files will be deleted after copy. The default is `false` if the parameter `collaborateModeForAttachments` is `HTTP`.

Default value

No default value defined.

collaborateAttachmentsTFTP_server

Description

Indicates the server where Collaborate takes the attachments if the parameter `collaborateModeForAttachments` is `TFTP`.

Default value

No default value defined.

collaborateAttachmentsTFTP_port

Description

Optional. Indicates the port where Collaborate takes the attachments if the parameter `collaborateModeForAttachments` is `TFTP`.

Default value

69

collaborateAttachmentsTFTP_transfertype

Description

Optional. Indicates the file transfer type on the server that is used by Collaborate to get the attachments if the parameter `collaborateModeForAttachments` is `TFTP`. The valid values are `ASCII` or `BINARY`. The default is `ASCII`.

Default value

No default value defined.

collaborateAttachmentsSFTP_server

Description

SFTP server name (or IP).

Default value

No default value defined.

collaborateAttachmentsSFTP_port

Description

Optional. FTP server port.

Default value

22

collaborateAttachmentsSFTP_username

Description

User name to log in to the SFTP server.

Default value

No default value defined.

collaborateAttachmentsSFTP_password

Description

Optional. The SFTP password to log in to the SFTP server. It is used if it is needed by the server, and if `usepassword=true`.

Default value

No default value defined.

collaborateAttachmentsSFTP_usekey

Description

Optional. Use private key file for authenticate user.

Default value

False

Valid values

True | False

collaborateAttachmentsSFTP_keyfile

Description

Optional. SFTP key file name (used if it is needed by the server, and if `usekey=true`) to log in on SFTP server.

Default value

No default value defined.

collaborateAttachmentsSFTP_keypassphrase

Description

SFTP passphrase to log in on SFTP server. It is used if it is needed by the server, and if `usekey=true`.

Default value

No default value defined.

collaborateAttachmentsSFTP_knownhosts

Description

Optional. File name for known hosts (used if it is needed by server).

Default value

No default value defined.

collaborateAttachmentsSFTP_directory

Description

Optional. Accepts the relative path of the directory regarding the FTP default directory from where Collaborate can get the attachments for the Windows operating system.

Default value

No default value defined.

collaborateAttachmentsSFTP_deletefile

Description

Optional. Deletes original file after copy, if possible.

Default value

False

Valid values

True | False

mergeEnabled

Description

Determines whether the merge of documents will be enabled:

- true: the merge is enabled (default).
- false: the merge is disabled.

Default value

True

Valid values

True | False

mergeFullWritePath

Description

When the merge feature is enabled, this parameter specifies the full path to the merged data file on the local machine.

Default value

c:/temp

mergeDataLimitSize

Description

Indicates the upper limit for the size of the data to merge in Microsoft™ Word. The size is specified in rows (for example, a value of 100 indicates that the merged file cannot contain more than 100 rows). That is, if the number of rows in the file is greater than the value of this parameter, merge is not enabled for this file.

Default value

1000

validateFileUpload

Description

The `validateFileUpload` property is used to check whether your system validates the file types that are to be uploaded.

Default value

`False`

Valid values

`True` | `False`

upload_allowedFileTypes

Description

Indicates the types of files that can be uploaded in Collaborate.

Default value

`doc ppt xls pdf gif jpeg png mpp`

upload_fileMaxSize

Description

Indicates the limit on the maximum size of the file that can be uploaded.

Default value

`5000000`

Collaborate | UDM Configuration Settings | Attachment Folders

These configuration properties are for Attachment Folders settings.

uploadDir

Description

The full path to the Collaborate upload directories. Edit this path to include the full path to the Collaborate upload directories. For example, `c :`

`\Collaborate\projectattachments`. If you are using UNIX, confirm that Collaborate users have permission to read, write, and run files in this directory.

Default value

`projectattachments`

taskUploadDir

Description

The full path to the Collaborate task upload directories. Edit this path to include the full path to the Collaborate upload directories. For example, `c:\Collaborate\taskattachments`. If you are using UNIX, confirm that Collaborate users have permission to read, write, and run files in this directory.

Default value

`taskattachments`

Collaborate | UDM Configuration Settings | Campaign Integration

These configuration properties are for Campaign Integration settings.

defaultCampaignPartition

Description

The default Campaign partition. Collaborate uses this parameter if you do not define the <campaign-partition-id> tag in a project template file.

Default value

`partition1`

defaultCampaignFolderId

Description

The default Campaign folder ID. Collaborate uses this parameter if you do not define the <campaign-partition-id> tag in a project template file.

Default value

2

Collaborate | UDM Configuration Settings | Datasource

These configuration properties are for data source settings.

jndiName

Description

Data source name for Collaborate database.

Default value

`collaborateds`

asmJndiName

Description

Data source name for Platform database, and is used only to synchronize users.

Default value

`UnicaPlatformDS`

Collaborate | UDM Configuration Settings | Flowchart

These configuration properties are for flowchart settings.

enableFlowchartPublishEvent

Description

Specifies whether Collaborate receives events that are sent by Campaign when a flowchart is published.

Default value

`True`

flowchartRepublishOverwriteUserVarPrompt

Description

Specifies whether the User Variable prompt is overwritten when a flowchart is republished.

Default value

False

flowchartRepublishOverwriteProcParamPrompt

Description

Specifies whether the Process Parameter prompt is overwritten when a flowchart is republished.

Default value

False

flowchartServiceCampaignServicesURL

Description

The URL to the CampaignServices web service that should be used to run flowcharts, get flowchart data, and so on.

Default value

```
http://[server-name]:[server-port]/Campaign/services/  
CampaignServices30Service
```

flowchartServiceCampaignServicesTimeout

Description

The number of milliseconds Collaborate waits for communications with the Campaign services before it issues a timeout error.

Default value

600000

flowchartServiceNotificationServiceURL

Description

The URL to Collaborate's notification service that receives notifications from Campaign. You must set this parameter for Collaborate to work.

 **Note:** If you use a nonstandard context root, you must specify this parameter.

Default value

```
http://[server-name]:[server-port]/collaborate/  
flowchartRunNotifyServlet
```

flowchartServiceCampaignServicesAuthorizationLoginName

Description

A Campaign user with administrative permissions, including access to all data sources, for example, asm_admin.

Default value

```
[CHANGE-ME]
```

flowchartServiceScheduleServices10Timeout

Description

The number of milliseconds Collaborate waits for communications with the Platform scheduler before it issues a timeout error.

Default value

```
600000
```

flowchartServiceScheduleServices10MaxRetries

Description

The number of times Collaborate attempts to connect with the Platform scheduler before it issues an error.

Default value

3

flowchartServiceScheduleServices10RetryPollPeriod

Description

The number of seconds Collaborate waits before it attempts to communicate with the Platform scheduler again.

Default value

60

flowchartServiceScheduleServices10ThrottleType

Description

The types of throttling for scheduled flowchart runs. The valid values are:

- 0: no throttling (throttle value is ignored)
- 1: throttle per flowchart instance
- 2: throttle all flowcharts (default)

Default value

2

flowchartServiceScheduleServices10ThrottleValue

Description

The maximum number of scheduled flowcharts or flowchart instances that can be run at one time.

Default value

10

flowchartServiceSchedulerMonitorPollPeriod

Description

Optional. Defines the approximate time, in seconds, for the scheduler monitor to sleep between polls.

Default value

10

flowchartServiceSchedulerMonitorRemoveSize**Description**

Optional. Sets the number of jobs to try to remove from the queue in one shot. The scheduler monitor continues removing events from the event queue in increments that are specified by this value until none are left.

Default value

10

flowchartServiceIsAliveMonitorTimeout**Description**

The duration, in seconds, to wait between the start of the flowchart execution and the periodic queries to Campaign of the isAlive monitor.

Default value

900

flowchartServiceIsAliveMonitorMaxRetries**Description**

The maximum number of queries that are sent to Campaign by the isAlive monitor before it throws a flowchart run error.

Default value

10

flowchartServiceIsAliveMonitorPollPeriod**Description**

The time, in seconds, to wait between queries that are made by the isAlive monitor to Campaign.

Default value

600

Collaborate | UDM Configuration Settings | History

These configuration properties are for history settings.

enableRevisionHistoryPrompt

Description

Ensures that users are prompted to add change comments when they save a project.

Default value

False

Valid values

TRUE | FALSE

runHistoryKeep_LIST

Description

Number of run history records to keep for a LIST project. If the value is ≤ 0 , Collaborate keeps all run history records.

Default value

-1

runHistoryKeep_LOCAL

Description

Number of run history records (for a List or Campaign flowchart) to keep a local project. If the value is ≤ 0 , Collaborate keeps all run history records.

Default value

-1

runHistoryKeep_CORPORATE**Description**

Number of run history records (for each run flowchart task) to keep for a corporate project. If the value is ≤ 0 , Collaborate keeps all run history records.

Default value

-1

Collaborate | UDM Configuration Settings | Integration Services

These configuration properties are for the integrated services settings.

enableIntegrationServices**Description**

This configuration property either enables or disables custom form validation.

Default value**integrationProcedureDefintionPath****Description**

This configuration property specifies the location of the `procedure-plugins.xml`.

Default value

```
[udm-home]/devkits/integration/examples/src/procedure/procedure-plugins.xml
```

integrationProcedureClasspathURL**Description**

This configuration property specifies the location of the compiled binary files of the custom validation classes that are defined in the `procedure-plugins.xml` file.

Default value

```
file://[udm-home]/devkits/integration/examples/classes/
```

Collaborate | UDM Configuration Settings | Listing Pages

These configuration properties are for list pages settings.

listItemsPerPage

Description

Specifies how many items (rows) to be displayed in one list page. This value should be greater than 0.

Default value

```
10
```

listPageGroupSize

Description

Specifies the size of visible page numbers in the list navigator in the list page. For example, pages 1-5 is a page group. This value should be greater than 0.

Default value

```
5
```

maximumItemsToBeDisplayedInCalendar

Description

The maximum number of objects the system displays on calendars. Use this parameter to restrict users' view of calendars to a specific number of objects. The setting of 0, the default, indicates that there is no restriction.

Default value

0

Collaborate | UDM Configuration Settings | List Manager

These configuration properties are for list manager settings.

listManagerEnabled

Description

Optional. Determines whether marketers can view the List Manager section on the Summary tab:

- true: the List Manager section displays (default)
- false: hides the List Manager section

If you disable the List Manager, you do not need to configure the List Manager configuration files.

 **Note:** The data source to the List Manager table must be active to update the list size after generation.

Default value

True

Valid values

TRUE | FALSE

listManagerSearchscreenMaxrow

Description

Indicates the maximum number or rows that are returned on the search screen.

Default value

1000

listManagerListPageSize

Description

The number of rows that are displayed on a page in the List Manager.

Default value

20

listManagerListsMaxrow

Description

The maximum number of rows that are displayed in a list.

Default value

No default value defined.

listManagerResetToValidatelsAllowed_list

Description

By default, when this property is set to `false`, you have the following actions when validating proposed contacts from a List:

- To Validate > Approved
- To Validate > Removed
- Added > Removed
- Approved > Removed
- Removed > Approved

If you set this property to `true`, you can also reset a selection if you made an error with the addition of the following actions:

- Removed > To Validate
- Approved > To Validate

Default value

False

Valid values

TRUE | FALSE

listManagerResetToValidatelsAllowed_local**Description**

By default, when this property is set to `false`, you have the following actions when validating proposed contacts from an On-demand Campaign.

- To Validate > Approved
- To Validate > Removed
- Added > Removed
- Approved > Removed
- Removed > Approved

If you set this property to `true`, you can also reset a selection if you made an error with the addition of the following actions:

- Removed > To Validate
- Approved > To Validate

Default value

False

Valid values

TRUE | FALSE

listManagerResetToValidatelsAllowed_corporate**Description**

By default, when this property is set to `false`, you have the following actions when validating proposed contacts from a Corporate Campaign list:

- To Validate > Approved
- To Validate > Removed

- Added > Removed
- Approved > Removed
- Removed > Approved

If you set this property to `true`, you can also reset a selection if you made an error with the addition of the following actions:

- Removed > To Validate
- Approved > To Validate

Default value

`False`

Valid values

`TRUE` | `FALSE`

Collaborate | UDM Configuration Settings | Lookup Cleanup

These configuration properties are for the lookup cleanup settings.

lookupCleanupMonitorStartDay

Description

Indicates the day when the unused lookup tables or views are automatically cleaned up. The parameter takes weekdays in terms of counts, such as Sunday = 1, Monday = 2. The frequency is weekly.

Default value

`2`

lookupCleanupMonitorStartTime

Description

Indicates the time when the unused lookup tables or views are automatically cleaned up. The frequency is weekly.

Default value

09:30 am

enableLookupCleanup**Description**

When enabled, the lookup monitor runs according to the schedule specified in configuration.

Default value

Disabled

Collaborate | UDM Configuration Settings | Notifications

These configuration properties are for notification settings.

notifyCollaborateBaseURL**Description**

The URL for Collaborate. Edit this URL by entering the computer name where you installed Collaborate and the port number you want to use.

Default value

```
http://[server-name]:[server-port]/collaborate/  
affiniumcollaborate.jsp
```

notifyDelegateClassName**Description**

Optional. Specifies the fully qualified Java class name of the delegate implementation to be installed by the service.

Default value

No default value defined.

notifyIsDelegateComplete

Description

Indicates that the delegate implementation is complete.

Default value

true

Valid values

TRUE | FALSE

notifyEventMonitorStartTime

Description

Optional. Time to start the event monitor formatted according to the `java.text.DateFormat` class for the current locale, SHORT version. For example, in US English, the valid string is HH:MM A/PM. The default is set to start immediately after the monitor is created.

Default value

No default value defined.

notifyEventMonitorPollPeriod

Description

Optional. Defines the approximate time, in seconds, for the event monitor to sleep between polls.

Default value

33

notifyEventMonitorRemoveSize

Description

Optional. Defines the number of events to try to remove from queue in one shot.

Default value

10

Collaborate | UDM Configuration Settings | Notifications | Email

These configuration properties are for email settings.

notifyEmailMonitorJavaMailSession**Description**

Optional. Specifies the JNDI name of an existing initialized JavaMail™ Session to use for email notifications.

Default value

No default value defined.

notifyEmailMonitorJavaMailHost**Description**

The machine name or IP address of your organization's SMTP server.

Default value

[none]

notifyEmailMonitorJavaMailProtocol**Description**

Optional. Mail server transport protocol to use for email notifications.

Default value

smtp

notifyDefaultSenderEmailAddress**Description**

A valid email address for Collaborate to use to send emails when there is otherwise no valid email address available to send notification emails.

Default value

[CHANGE-ME]

notifySenderAddressOverride

Description

Optional. Email address to use for the REPLY-TO and FROM email addresses for notifications. By default, the event number owner's email address is used. If this parameter is not declared or an empty email address is provided, the default addresses are used.

notifyEmailMonitorStartTime

Description

Optional. The time to start the email monitor formatted according to the `java.text.DateFormat` class for the current locale, SHORT version. For example, in US English, the valid string is HH:MM A/PM. The default is set to start immediately after monitor is created.

Default value

No default value defined.

notifyEmailMonitorPollPeriod

Description

Optional. Defines the approximate time, in seconds, for the email monitor to sleep between polls.

Default value

60

notifyEmailMonitorRemoveSize

Description

Optional. Defines the number of events to try to remove from queue in one shot.

Default value

10

notifyEmailMonitorMaximumResends**Description**

Optional. Maximum number of times to try to resend an email after send problems are detected.

Default value

1440

emailMaximumSize**Description**

Maximum size, in bytes, of an email.

Default value

2000000

Collaborate | UDM Configuration Settings | Notifications | Project

These configuration properties are for project settings.

notifyProjectAlarmMonitorStartTime**Description**

Optional. Time to start the project alarm monitor. If not set, it will start immediately after the monitor is created.

Default value

10:00 pm

notifyProjectAlarmMonitorPollPeriod**Description**

Optional. Defines approximate time, in seconds, for the project alarm monitor to sleep between polls.

Default value

86400

notifyProjectAlarmMonitorScheduleStartCondition**Description**

Optional. The number of days before a project's start date when Collaborate should start sending start notifications to users. If a project is pending and its start date is within the condition number of days in the future, a PROJECT_SCHEDULED_START notification will be sent out to the appropriate users. If the value is -1, then this condition is not checked for.

Default value

1

notifyProjectAlarmMonitorScheduleEndCondition**Description**

Optional. The number of days before a project's end date when Collaborate should start sending notifications to users. If a project is active and its end date is within the condition number of days in the future, a PROJECT_SCHEDULED_END notification will be sent out to the appropriate users. If the value is -1, then this condition is not checked for.

Default value

3

notifyProjectAlarmMonitorScheduleCutoffCondition**Description**

Optional. The number of days to start notifying users that a project is scheduled to be closed. If a project is active and its cutoff date is within the condition number of days in the future, a

CORPORATE_CAMPAIGN_TO_REVIEW notification will be sent out to the appropriate users. If the value is `-1`, then this condition is not checked for.

Default value

3

notifyProjectAlarmMonitorTaskScheduledStartCondition**Description**

Optional. The number of days before a task's start date when Collaborate should start sending notifications to users. If a task is pending and its start date is within the condition number of days in the future, a `TASK_SCHEDULED_START` notification will be sent out to the appropriate users. If the value is `-1`, then this condition is not checked for.

Default value

1

notifyProjectAlarmMonitorTaskScheduledEndCondition**Description**

Optional. The number of days before a task's start date when Collaborate should start sending notifications to users that a task did not start. If a task is active and its end date is within the condition number of days in the future, a `TASK_SCHEDULED_END` notification will be sent out to the appropriate users. If the value is `-1`, then this condition is not checked for.

Default value

3

notifyProjectAlarmMonitorTaskLateCondition**Description**

Optional. The number of days after a task's start date when Collaborate should start sending notifications to users that a task did not start. If a task is pending and its scheduled start date is within the condition number of days in

the past, a TASK_LATE notification is sent out to the appropriate users. If the value is `-1`, then this condition is not checked for.

Default value

3

notifyProjectAlarmMonitorTaskOverdueCondition

Description

Optional. The number of days after a task's end date when Collaborate should be notifying users that a task did not finish. If a task is active and its scheduled end date is within the condition number of days in the past, a TASK_OVERDUE notification is sent out to the appropriate users. If the value is `-1`, then this condition is not checked for.

Default value

3

notifyProjectAlarmMonitorTaskScheduledMilestoneCondition

Description

Optional. The number of days before a task milestone's start date when Collaborate should start sending notifications to users. If a milestone task is active and its scheduled end date is within the condition number of days in the future, a TASK_SCHEDULED_MILESTONE notification will be sent out to the appropriate users. If the value is `-1`, then this condition is not checked for.

Default value

1

Collaborate | UDM Configuration Settings | Notifications | System Task

These configuration properties are for system task settings.

systemTaskMonitorStartTime

Description

Optional. The time to start the system task monitor.

- If this parameter contains a value (for example, 11:00 pm), this is the start time for the task monitor to start.
- If this parameter is undefined, the monitor starts immediately after it is created.

Default value

3

systemTaskMonitorPollPeriod

Description

Optional. The duration, in seconds, for the system task monitor to sleep between polls.

Default value

3600

Collaborate | UDM Configuration Settings | Performance

These configuration properties are for performance settings.

commonDataAccessLayerFetchSize

Description

This parameter is a performance optimization that sets the batch size of some performance-sensitive queries. The fetch size is used to determine how many records in the result set are returned to the application at one time.

Default value

500

commonDataAccessLayerMaxResultSetSize

Description

This parameter crops all list page results that are longer than the specified value.

Default value

1000

ssdorSearchResultLimit

Description

The maximum number of rows that are returned by the SSDOR search screen. Increasing this number to a high value may degrade performance.

Default value

500

Collaborate | UDM Configuration Settings | Read Only Lookup Tables

These configuration properties are for lookup table settings.

lookupTableName

Description

Optional. A read-only lookup table name. The lookup table name can include a wildcard, an asterisk (*), at the end of the name. The lookup table is not updated in the Form Editor when a flowchart is republished.

Default value

No default value defined.

New category name

Description

Optional. A template for adding a list of lookup tables to not update during a form merge. When you republish a flowchart, if any attributes in the form are associated with the lookup table, the lookup table and its contents are not updated.

Default value

No default value defined.

Collaborate | UDM Configuration Settings | Reports

These configuration properties are for reports settings.

reportsAnalysisSectionHome

Description

Indicates the home directory for the Analysis Section reports.

Default value

```
/content/folder[@name='Affinium Collaborate']
```

reportsAnalysisTabHome

Description

Indicates the home directory for the object (Corporate Campaign, List, or On-demand Campaign) Analysis Tab reports.

Default value

```
/content/folder[@name='Affinium Collaborate - Object Specific  
Reports']
```

reportsAnalysisCorporateSectionHome

Description

Indicates the home directory for the corporate marketer Analysis Section reports.

Default value

```
/content/folder[@name='Affinium Collaborate']
```

reportsAnalysisCorporateTabHome

Description

Indicates the home directory for corporate marketer object (Corporate Campaign, List, or On-Demand Campaign) Analysis Tab reports.

Default value

```
/content/folder[@name='Affinium Collaborate - Object Specific Reports']/folder[@name='Corporate Marketer']
```

reportsAnalysisFieldMarketerSectionHome

Description

Indicates the home directory for the field marketers Analysis Section reports.

Default value

```
/content/folder[@name='Affinium Collaborate']/folder[@name='Field Marketer']
```

reportsAnalysisFieldTabHome

Description

Indicates the home directory for the field marketer object (Corporate Campaign, List, or On-Demand Campaign) Analysis tab reports.

Default value

```
/content/folder[@name='Affinium Collaborate - Object Specific Reports']/folder[@name='Field Marketer']
```

Collaborate | UDM Configuration Settings | Siblings

These configuration properties are for sibling settings.

siblingService

Description

Optional. Used to build links to other Collaborate instances to propagate events.

Default value

```
http://[server-name]:[server-port]/collaborate/services/  
CollaborateIntegrationServices/1.0
```

New category name

Description

Optional. A template for giving the URLs specification for the sibling URLs service for the current base instance of Collaborate. Used to build links to other Collaborate instances to propagate events. For example, `http://collaborateserver:7001/collaborate/services/CollaborateIntegrationServices/1.0`. Do not specify sibling URLs if this configuration file is not the file of the Collaborate base instance.

Default value

No default value defined.

Collaborate | UDM Configuration Settings | Templates

These configuration properties are for template settings.

templatesDir

Description

The directory that contains all your templates. As a best practice, set this to the full path to `HCL-Home\Collaborate\templates`.

Default value

```
templates
```

projectTemplatesFile

Description

The specified file describes the various projects: List, On-demand Campaign, and Corporate Campaign.

Default value

`project_templates.xml`

templateAutoGenerateNameEnabled

Description

Indicates whether the template name for a new template must be generated or not.

Default value

`True`

Valid values

`True | False`

defaultListTableDSName

Description

Used to assign the data source name for templates while importing template if the data source name is not defined.

Default value

`ACC_DEMO`

templateAdminGroup_Name

Description

Specifies multiple groups. Users belonging to these groups have access to template configuration links in Collaborate. Groups with the same name must exist in the Platform. Multiple groups should be separated by commas.

Default value

Template Administrators

Collaborate | UDM Configuration Settings | Workflow

These configuration properties are for workflow settings.

daysInPastRecentTask**Description**

How many days in the past Collaborate looks for recent tasks.

Default value

14

daysInFutureUpcomingTasks**Description**

How many days in the future Collaborate looks for recent tasks.

Default value

14

beginningOfDay**Description**

Indicates the beginning hour of the working day with the valid values representing midnight to noon. This setting is used as the denominator when calculating a percentage of task completion in workflows.

Default value

9

Valid values

0 - 12

numberOfHoursPerDay

Description

Indicates the number of hours per day. The default indicates a standard, eight-hour work day. This setting is used as the denominator when calculating a percentage of task completion in workflows.

Default value

8

Valid values

0 - 24

automaticallyRestartFailedRecurrentTasks

Description

Decides whether to automatically restart the failed recurrent tasks. If the value of parameter is set to false, users must manually update the failed task status to Pending either from workflow or from post-task update pop. The schedule picks up only those tasks for runs that are in pending state.

If the value is set to `True`, no manual intervention is required to restart this task.

Default value

`True`

Valid values

`True` | `False`

projectWorkflowRefreshPeriodInSeconds

Description

System-wide workflow refresh period, in seconds.

Default value

180

Chapter 11. Custom validation Java procedure

Custom validation procedures provide a way for you to extend Collaborate in-built validation.

A procedure is a custom or standard Java class hosted by Collaborate that custom validates forms that are used in projects or instances of an On-demand Campaign or a List template. Procedures must be written in Java, and follow a simple programming model by using a well-defined API to validate On-demand and List components that are managed by Collaborate. They are discovered through a simple lookup mechanism and XML-based definition file. Collaborate runs the procedures, in wizard mode, while it creates or edits an On-demand campaign or List. Procedures run synchronously regarding their client; results are made available directly to the client and through a persisted auditing mechanism.

The following assumptions concern procedures.

- The procedure implementation classes are packaged into a separate classes tree or JAR file and are made available to Collaborate through a URL path. The procedure execution manager uses an independent class loader to load these classes as needed. By default, Collaborate looks in the following directory:

`<Collaborate_Home>devkits/integration/examples/classes/.`

To change this default, set the **integrationProcedureClasspathURL** parameter under **Settings > Configuration > Collaborate > UDM Configuration Settings > Integration Services**.

- The procedure implementation class name follows the accepted Java naming conventions to avoid package collisions with Unica and classes from other vendors. In particular, you must not place procedures under the `com.unica` or `com.unicacorp` package tree.
- The procedure implementation is coded to the Java runtime version used by Collaborate on the application server (at least JRE 1.5).
- Collaborate provides a number of open source and third-party libraries. The application servers also use different versions of these libraries. Generally, this list changes from release to release.

 **Note:** To avoid possible compatibility problems, procedures should not use any open source, third-party, or application server-specific libraries. However, if such packages are used by a procedure, or by the secondary classes that are imported by the procedure, their use must agree exactly with the packages provided by Collaborate and the application server. In this case, you might have to rework your procedure code, if a later version of Collaborate upgrades or abandons a library.

- The procedure implementation class is loaded by the class loading policy that is normally used by Collaborate (typically parent-last). The application server might provide development tools and options to reload classes that would apply to Collaborate procedures, but that is not required.
- The procedure must be thread-safe regarding its own state; that is, its run method cannot depend on internal state changes from call to call.
- A procedure cannot create threads on its own.

The design must focus on validating the form data that is submitted by the user while they create or edit an On-demand Campaign or List. The procedure implementation class uses an implementation of `IExecutionContext`, which provides vital information, such as user ID, locale, connection of the system data source, campaign ID of the campaign that is validated, and the current form name that is submitted. The implementation class is provided a map of `FormName.AttributeName` as a key and an object of `IAttribute` as value.

 **Note:** The implementation procedure should be using the parameters that are provided in the run method only to validate the submitted data. The map contains all the attributes with their user-filled values or default values, if any, including summary tab attributes. After coded and compiled, the procedure implementation classes must be made available to Collaborate. The build scripts that are supplied with the Collaborate Integration Services place the compiled procedures in the default location. The final development step is to update the custom procedure plug-in definition file that is used by Collaborate to discover the custom procedures. The procedure must implement the `com.unica.publicapi.collaborate.plugin.procedure` interface and have a parameter-less constructor (JavaBeans model). Coding and compilation of each procedure is done in a Java IDE of your choice, such as Eclipse, Borland JBuilder, Idea. Sample code is provided

with Collaborate in the developer toolkit, which is found in: `<Collaborate_Home>/devkits/integration/examples/src/procedure.`

Use the parameters under **Settings > Configuration > Collaborate > UDM Configuration Settings > Integration Services** to configure the Collaborate Integration Module as shown.

- **enableIntegrationServices:** Enables/disables the custom form validation feature.
- **integrationProcedureDefintionPath:** Specifies the location of the `procedure-plugins.xml`.

Default Value: `[udm-home]/devkits/integration/examples/src/procedure/procedure-plugins.xml`

Update the location according to your preference.

- **integrationProcedureClasspathURL:** Specifies the location of the compiled binary files of the custom validation classes that are defined in the `procedure-plugins.xml`.

Default Value: `file://[udm-home]/devkits/integration/examples/classes/`

Update the location according to your preference.

 **Note:** The forward slash at the end of this path is mandatory.

The runtime lifecycle of a procedure:

1. Discovery and initialization
2. Selection (optional)
3. Execution

Collaborate must be made aware of all standard and custom procedures available for a particular installation instance. This process is called discovery. Custom procedures are defined in the procedure plug-in definition file. The Collaborate plug-in manager reads this file during initialization. For each procedure found, the plug-in manager does the following action.

1. Instantiate the procedure; transition its state to instantiated.

2. Create a procedure audit record.
3. If the procedure could be instantiated, its `initialize()` method is called with any initialization parameters found in its plug-in description file. If this method throws an exception, the status is logged and the procedure is abandoned. Otherwise, the procedure changes to the instantiated state. It is ready to execute.
4. Create a procedure audit record.
5. If the procedure could be initialized, its `getKey()` method is called to determine the key that is used by clients to reference the procedure. This key is associated with the instance and saved for later lookup.

Collaborate might need to present a list of available procedures to you while it creates On-demand Campaign and List templates to associate the custom validation procedure with it. This is done only after the procedure is initialized. The procedure's `getDisplayName()` method are used for this purpose.

While it creates or edits On-demand Campaigns or Lists, and after the procedure is initialized, Collaborate receives a request to run the procedure. This happens when the template that is used to create the campaigns is associated with a custom validation class. This might happen concurrently with other procedures, or the same procedure, running on other threads.

At execution time, the procedure execution manager does the following.

1. Start a database transaction
2. Set the procedure state to running.
3. Create a procedure audit record.
4. Call the procedure's `execute()` method with an execution context and any execute parameters that are provided by the client. This method uses the `IExecutionContext` and map of attributes in all forms of the On-demand Campaign or List (including summary tab attributes) to validate the data that is submitted by Collaborate users. If the `execute` method throws an exception, the execution manager marks the transaction for rollback. If the `execute` method is successful it returns the result back to Collaborate application. If the validation is successful user is allowed to continue with the operations or errors are shown on the top and the user is asked to rectify the values.

5. Commit or rollback the transaction according to the execution results; set procedure state to executed.
6. Create a procedure audit record.

 **Note:** The `execute()` method should not alter the procedure instance data.

The procedure execution manager automatically wraps execution of the procedure with a database transaction, committing or rolling it back as appropriate based on the outcome of the procedure execution. This guarantees that updates to the Collaborate database are not visible to other users until committed and that the updates are atomic. The procedure writer still must acquire the necessary edit locks to ensure that other users cannot write changes to the database before the procedure execution completes.

 **Note:** The connection that is provided as part of the `IExecutionContext` is for reading data from the system database of Collaborate. Although, we do not restrict edits by using this connection, it is not recommended to use the connection to edit data in Collaborate system tables.

The `execute()` method of a procedure returns an integer status code (error status code is -1) and zero or more messages, which are logged and persisted to the Collaborate procedure audit table. The client must use the error status code as -1. You must create an object of `ProcedureResult` with status code and an array of `ProcedureMessage`. The error messages must follow this convention: `<FormName>.<AttributeName><Separator><Error Message>`. You may choose to set the separator by using the `setSeparator()` method of the class `ProcedureResult`. The default separator is "|".

The error messages are shown as they are on the user interface. For more information, see the section on the procedure example, which explains the setting of error messages, by using an example.

Collaborate uses a system log for procedures as well: `<Collaborate_home>\logs\system.log`. Implementation classes of `IProcedure` must make sure that they create an object of the class `UALogger`. This class is available in the `affinium_collaborate.jar`, which is present in the `<Collaborate_Home>\devkits\integration\examples\lib` directory. For more information, see the procedure example to understand the usage.

The procedure execution manager logs the lifecycle of each procedure and creates audit records.

1. `logInfo()`: write an informational message to the procedure log
2. `logWarning()`: write a warning message to the procedure log
3. `logError()`: write an error message to the procedure log
4. `logException()`: dump the stack trace for the exception to the procedure log

The supplied integration development kit contains a set of Javadoc for the public Collaborate API and supporting classes. For more information, see the Collaborate Public API Specification sections 3.2.11 and 3.2.12 for the classes, which have attribute names, values, and metadata that is submitted by users. These classes are not documented in the Javadoc mentioned.

`IProcedure` (`com.unica.publicapi.collaborate.plugin.procedure`) is an interface that all procedures must implement. Procedures go through a well-defined lifecycle and implement the following method that is mentioned.

```
/**
 * Procedure's execute method.
 * <p>
 * If called from webservice, it is the responsibility of the caller to
 * convert.
 * NameValue parameters to their non-sequence map form, i.e.,
 * <pre>
 * "Form1.Attribute1", IAttribute1
 * "Form1.Attribute2", IAttribute2
 * ==>
 * one map entry:
 * entry.key = "Form1.Attribute1"
 * entry.value = IAttribute1
 * </pre>
 * </p>
 * This work is done automatically by the ProcedureManager. *
```

```

* @param context caller's execution context
* @param parameters a map of procedure parameters.
* @return result of procedure execution
* @throws ProcedureExecutionException
*/ ProcedureResult execute(IExecutionContext context, Map parameters)
    throws ProcedureExecutionException;

```

`IExecutionContext` (`com.unica.collaborate.common.api`): interface of opaque context object that is handed to the procedure by the execution manager. Implementors of `IProcedure` must cast this object to `CustomValidationExecutionContext`, as shown in the procedure example, which provides vital information like user ID, locale, connection of the system data source, campaign ID of the campaign that is validated and the current form name that is submitted. Fields of this class are as below:

- `runAsLocale`: locale of the logged in user.
- `runAsUser`: User object of the logged in user.
- `connection`: Connection to the System database.
- `projectId`: Id of the On-demand or List Campaign being validated.
- `currentFormName`: Tab that is being validated and submitted.

The following is an example of the Collaborate procedure that attempts to validate data across two forms: Selection Form and Offer Assignment.

Following validations are carried out:

1. Validates two text attributes against given date formats.
2. Validates the total of two number attributes across both the forms.

 **Note:** This class is not shipped with the product, as it requires the forms and attributes with exact names.

This is a sample procedure and can be used by creating forms and attributes with names specified in the class constants.

```
package procedure;
```

```
import java.text.ParseException;
import java.text.SimpleDateFormat;
import java.util.ArrayList;
import java.util.Iterator;
import java.util.List;
import java.util.Locale;
import java.util.Map;

import org.apache.commons.lang.StringUtils;

import com.unica.afc.logger.UALogger;
import com.unica.collaborate.common.api.CustomValidationExecutionContext;
import com.unica.collaborate.common.api.IExecutionContext;
import com.unica.collaborate.common.component.attribute.IAttribute;
import com.unica.collaborate.common.component.attribute.IntegerAttribute;
import com.unica.collaborate.common.component.attribute.TextAttribute;
import com.unica.publicapi.collaborate.plugin.PluginVersion;
import com.unica.publicapi.collaborate.plugin.procedure.IProcedure;
import com.unica.publicapi.collaborate.plugin.procedure.
ProcedureInitializationException;
import com.unica.publicapi.collaborate.plugin.procedure.ProcedureMessage;
import
    com.unica.publicapi.collaborate.plugin.procedure.ProcedureMessageTypeEnum;
import com.unica.publicapi.collaborate.plugin.procedure.ProcedureResult;

/**
 * ValidateAttributesForCustomValidationExampleTemplate is an example of
 * Collaborate procedure that attempts to validated data across 2 forms:
 * Selection Form and Offer Assignment. Following validations are carried
 * out:
 * 1. Validates 2 text attributes against given date formats.
```

```

* 2. Validates the total of 2 number attributes across both the forms.
*
* <p>
* Expects the following initialization parameters:
* <ul>
* <li>debug: Boolean object, true or false, indicating if
* debug tracing is enabled or not</li>
* </ul>
*
* <p>
* Expects the following execute parameters:
* <ul>
* <li>parameters: Map of summary and custom tab attributes identified by
* '<FormName>.<Attribute Name>' as key and object of IAttribute as value</
* li>
* </ul>
*
*/

public final class ValidateAttributesForCustomValidationExampleTemplate
    implements IProcedure {

    // Logger object for audit logging.
    private static UALogger _logger = (UALogger) UALogger
        .getLogger(ValidateAttributesForCustomValidationExampleTemplate.class);

    // our status codes
    private final static int STATUS_SUCCESS = 0;
    private final static int STATUS_FAILED = -1;

    // initialization parameters
    private final static String DEBUG_INITPARAMETER_NAME = "debug";

    // Date format to be validated against

```

```
public static final String DATE_FORMAT = "MM/dd/yyyy";
// Total of multiple fields across forms
public static final String OFFER_Percentage = "ct_offer_percentage";

// Form Name and attribute constants for Selection Form
private static final String Selection_Form = "Selection Form";
/**Text attributes in New Group 14 which are to be treated as dates
 * and hence to be validated against the format specified above.
 */
public static final String New_GROUP_14_From = "inexp_from_date";
public static final String New_GROUP_14_To = "inexp_end_date";

// Form Name and attribute constants for Offer Assignment Form
private static final String Offer_Assignment_Form = "Offer Assignment
Form";
public static final String TIER_3_OFFER_Percentage =
"offer_assignment_percentage";
// Total of multiple attributes to be validated against.
public static final int TOTAL_OF_OFFER_PERCENTS = 100;

private boolean _debug = false;

private boolean isDebug() {
    return _debug;
}

// simple name is unqualified class name
public String getName() {
    return "ValidateAttributesForCustomValidationExampleTemplate";
}

// display name is always name
```

```

public String getDisplayName(Locale locale) {
    return getName();
}

// description always in english
public String getDescription(Locale locale) {
    // only do EN for now
    return "Example of Custom Validation Class for new "
        + "feature introduced in UDM 8.6.0.3.";
}

// version we're coded to; must be 1.0.0 for now
public PluginVersion getVersion() {
    return new PluginVersion(1, 0, 0);
}

// initialize instance from init parameters
public void initialize(Map initParameters)
    throws ProcedureInitializationException {
    // the only init parameter we have is: debug, Boolean
    if (initParameters.containsKey(DEBUG_INITPARAMETER_NAME)) {
        try {
            _debug = ((Boolean) initParameters
                .get(DEBUG_INITPARAMETER_NAME)).booleanValue();
        } catch (Exception exception) {
            throw new ProcedureInitializationException("Problem using "
+ DEBUG_INITPARAMETER_NAME + " init parameter: "
            + exception.getMessage());
        }
    }
}

```

```

/**
 * Custom Validation Class's execute method.
 *
 * This method is called for custom validation of the project forms.
 *
 * @param context
 *         caller's execution context
 * @param parameters
 *         a map of project parameters.
 * @return result of procedure execution
 */
public ProcedureResult execute(IExecutionContext context, Map parameters)
{
    /**
     * CustomValidationExecutionContext class provides the following
     information
     * required to validate the attributes:
     * 1. runAsLocale: locale of the logged in user.
     * 2. runAsUser: User object of the logged in user.
     * 3. connection: Connection to the System database.
     * 4. projectId: Id of the On-Demand or List Campaign being validated.
     * 5. currentFormName: Tab which is being validated and submitted.
     */

    CustomValidationExecutionContext customValidationContext
        = (CustomValidationExecutionContext) context;
    List<Procedure> errorMessages = new ArrayList<ProcedureMessage>();
    ProcedureResult result = null;

    if (Selection_Form.equalsIgnoreCase(customValidationContext
        .getCurrentFormName())) {
        if(isDebug()){

```

```

_logger.debug(getName() + "::Validating Selection Form.");
}
//Get the text attributes to be validated as dates
IAttribute dateFromAttr = (IAttribute) parameters
    .get(Selection_Form + "." + New_GROUP_14_From);

IAttribute dateToAttr = (IAttribute) parameters.get(Selection_Form
    + "." + New_GROUP_14_To);

//Validate the text attributes for date format.
errorMessages.addAll(validateDateForGivenFormat(Selection_Form,
    dateFromAttr, DATE_FORMAT));

errorMessages.addAll(validateDateForGivenFormat(Selection_Form,
    dateToAttr, DATE_FORMAT));

if (errorMessages.size() == 0)
    // Procedure result with 1 status shows successful validation of
    // the form/project.
    result = new ProcedureResult(STATUS_SUCCESS,
        new ProcedureMessage[] {});
else {
    if(isDebug()){
        _logger.debug(getName() + "::Errors while validating Selection
Form.");
    }
    // ProcedureResult with -1 status shows validation failure for
    // some of the attributes.
    ProcedureMessage[] proMessages = new ProcedureMessage[errorMessages
        .size()];
    result = new ProcedureResult(STATUS_FAILED, errorMessages
        .toArray(proMessages), "||");
}

```

```

    }
} else if (Offer_Assignment_Form
    .equalsIgnoreCase(customValidationContext.getCurrentFormName())) {

    if(isDebug()){
        _logger.debug(getName() + "::Validating Offer Assignment Form.");
    }

    String csFormOfferPercentage = Selection_Form + "."
        + OFFER_Percentage;
    //get the Offer percentage attribute from Selection Form.
    IAttribute ctOfferPercentageAttr = (IAttribute) parameters
        .get(csFormOfferPercentage);

    String tier3OfferPercentage = Offer_Assignment_Form + "."
        + TIER_3_OFFER_Percentage;
    //get the Offer percentage attribute from Offer Assignment Form.
    IAttribute tier3OfferPercentageAttr = (IAttribute) parameters
        .get(tier3OfferPercentage);

    //Add the attributes to a list.

    ProcedureMessage[] proMessages = new ProcedureMessage[errorMessages
        .size()];
    result = new ProcedureResult(STATUS_FAILED, errorMessages
        .toArray(proMessages), "||");
}
} else if (Offer_Assignment_Form
    .equalsIgnoreCase(customValidationContext.getCurrentFormName())) {

    if(isDebug()){
        _logger.debug(getName() + "::Validating Offer Assignment Form.");
    }

```

```

}

String csFormOfferPercentage = Selection_Form + "."
    + OFFER_Percentage;
//get the Offer percentage attribute from Selection Form.
IAttribute ctOfferPercentageAttr = (IAttribute) parameters
    .get(csFormOfferPercentage);

String tier3OfferPercentage = Offer_Assignment_Form + "."
    + TIER_3_OFFER_Percentage;
//get the Offer percentage attribute from Offer Assignment Form.
IAttribute tier3OfferPercentageAttr = (IAttribute) parameters
    .get(tier3OfferPercentage);

//Add the attributes to a list.
List<IAttribute>listOfAttributesForTotal = newArrayList<IAttribute>();
listOfAttributesForTotal.add(ctOfferPercentageAttr);
    listOfAttributesForTotal.add(tier3OfferPercentageAttr);

//Call method to find if total is 100
boolean isTotalCorrect = validateTotalPercentageForGivenAttributes(
    listOfAttributesForTotal, TOTAL_OF_OFFER_PERCENTS);

if (isTotalCorrect) {
    // Procedure result with 1 status shows successful validation of
    // the form/project.
    result = new ProcedureResult(STATUS_SUCCESS,
        new ProcedureMessage[] {});
} else {
    result = new ProcedureResult(STATUS_FAILED,
        new ProcedureMessage[] { (new ProcedureMessage(

```

```

        ProcedureMessageTypeEnum.ERROR,
        tier3OfferPercentageAttr.getName() + "||"
        + csFormOfferPercentage + " and "
        + tier3OfferPercentage
        + "should add up to 100"))        }, "||");
    }
} else {
    result = new ProcedureResult(STATUS_SUCCESS,
        new ProcedureMessage[] {});
}
return result;

}

/**
 * Validates if the number attribute is greater than 10
 * @param numberAttribute
 * @return
 */

public static boolean validateNumber(IAttribute numberAttribute) {
    if (numberAttribute != null) {
        Long[] values = ((IntegerAttribute) numberAttribute).getValues();
        for (int i = 0; i < values.length; i++) {
            if (values[i] > 10) {
                return false;
            }
        }
    }
}
return true;
}

```



```

        + "should be in "
        + DATE_FORMAT
        + " format "));
    }
}
} else {
    errorMessages.add(new ProcedureMessage(
        ProcedureMessageTypeEnum.ERROR,          dateFromAttr.getName()
        + "||" + "TextDate can not be empty.));
    }
}
return errorMessages;
}

/**
 * Validates whether the total of the provided attributes is equal to
 * @param listOfAttributesForTotal

 * @param totalOfOfferPercents
 * @return
 */
public static boolean validateTotalPercentageForGivenAttributes(
    List<IAttribute>listOfAttributesForTotal, int totalOfOfferPercents) {
    long total = 0;
    if (listOfAttributesForTotal != null
        && listOfAttributesForTotal.size() > 0) {
        for (Iterator iterator = listOfAttributesForTotal.iterator(); iterator
            .hasNext();) {
            IntegerAttribute iAttribute = (IntegerAttribute) iterator
                .next();
            if (iAttribute != null && iAttribute.getValues() != null
                && iAttribute.getValues().length > 0) {

```

```

        long percent = iAttribute.getValues()[0];
        total += percent;
    }
}
}
return (total > 0 && total == totalOfOfferPercents)
    || total == 0;
}

public void destroy() {
    // we don't need to do anything
}
}
}

```

The procedure plug-in definition file defines implementation class, metadata, and other information about the custom procedures to be hosted in Collaborate. By default, the procedure plug-in definition is assumed to be in the following path: `<Collaborate_Home>\devkits/integration/examples/src/procedure/procedure-plugins.xml`.

This file is an XML document that contains the information that is described.

Procedures: a list of zero or more Procedure elements.

Procedure: an element that defines a procedure. Each procedure contains the following elements.

- **Key (optional):** string that defines the lookup key for the procedure. This key must be unique regarding all standard (Unica-supplied) and custom procedures that are hosted by a particular Collaborate instance. If not defined, defaults to the fully qualified version of the `className` element. Names starting with the string "uap" are reserved for use by Collaborate.
- **className (required):** fully qualified package name of the procedure class. This class must implement the `IProcedure` class (`com.unica.publicapi.collaborate.plugin.procedure`).

- `initParameters` (optional): a list of zero or more `initParameter` elements.
`initParameter`(optional): parameter to be passed to the `initialize()` method of the procedure. This element includes the nested parameter name, type, and value elements.
 - **Name:** string that defines the parameter name
 - **Type:** optional class name of the Java wrapper class that defines the type of the parameter value. Must be one of the following types:
 - `java.lang.String` (the default)
 - `java.lang.Integer`
 - `java.lang.Double`
 - `java.lang.Calendar`
 - `java.lang.Boolean`
 - **Value:** string form of the attribute value according to its type.