OpenText™ LiquidOffice™

Form Designer User Guide

OpenText LiquidOffice Documentation

Release 20.2

OpenText™ LiquidOffice
Form Designer User Guide
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Contents

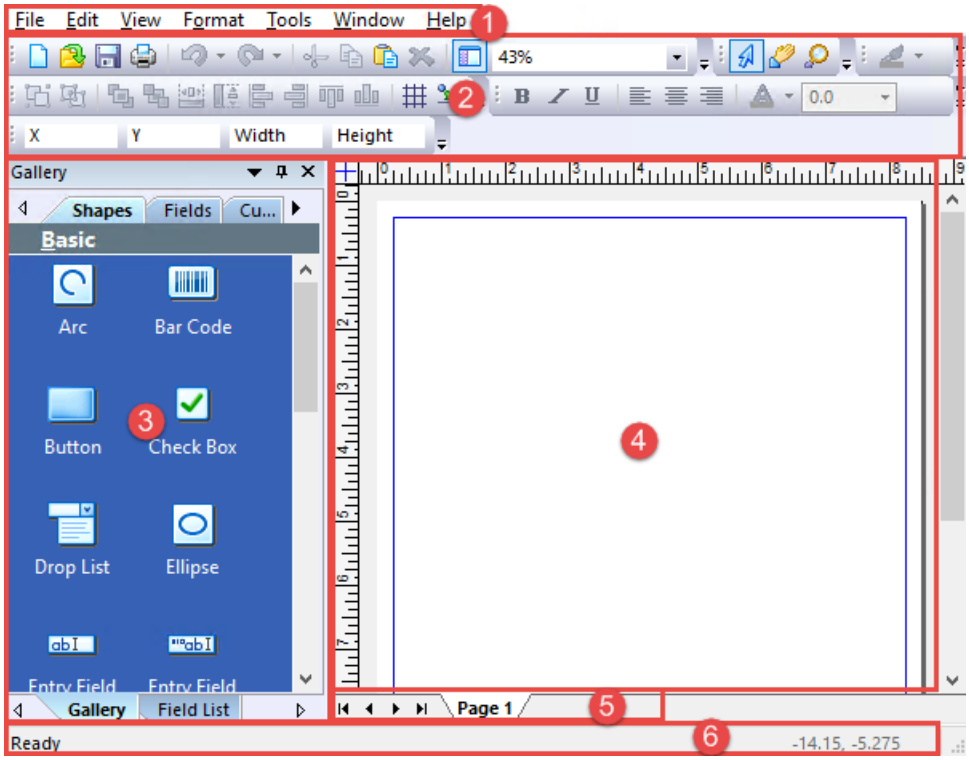
1 Getting Started with Form Designer

This section introduces OpenText LiquidOffice, and describes how to navigate the Form Designer user interface.

1.1 Navigating the Form Designer user interface

The following figure shows the Form Designer user interface.

Navigate the Form Designer



1	**Menus** provide access to Form Designer commands. Many of the commands are also available through toolbar buttons or shortcut keys. To see a description of the function of a menu command, position the cursor over the command. A description appears in the status bar.
2	**Toolbars** provide quick access to useful commands. See "Managing Form Designer toolbars" on the next page.

3	**Sidebar** contains objects to use to build forms. It also contains the Field List, which lists objects on the form. See "Navigating the Form Designer Sidebar" on page 10.
4	**Work Area** displays the form page for editing. See "Using the Form Designer work area" on page 14.
5	**Page Navigation** area is used to navigate between the pages in a form. You can click the Page Indicators  to navigate between the pages in multipage forms. To display a page in the work area, click a page indicator. You can use the navigation buttons  to scroll through the Page Indicators when your form contains more pages than can be displayed in the Form Designer window. For information about managing multiple page forms see "Editing multipage forms in Form Designer" on page 45. For information about defining page properties, see "Defining the page setup and margins of a form" on page 51.
6	**Status Bar** shows information about Form Designer, the position of the mouse pointer, and the position of the selected object.  1. The status of the system. If you position the pointer over a menu command or toolbar button, the status bar provides a description of that command. 2. If no objects are selected, the status bar displays the position of the cursor. If you select objects, the status bar displays the position of the dominant object. 3. If one or more objects are selected, this area shows the width and height of the dominant object.

This section describes how to navigate and customize the Form Designer user interface.

- "Managing Form Designer toolbars" below
- "Navigating the Form Designer Sidebar" on page 10
- "Using the Form Designer work area" on page 14
- "Useful Form Designer shortcut keys" on page 18

1.1.1 Managing Form Designer toolbars

Toolbars provide quick access to commonly-used commands.

> **Tip:** To see the function of a toolbar button, position the cursor over the button. A tooltip description appears.

The default toolbars do not display every toolbar button. You can customize the toolbars by adding or removing buttons. You can also create new toolbars or move toolbars around the workspace.

You can dock (attach) toolbars to the sides of the work area or float them within the Form Designer window. Toolbars dock to the top of the window by default. You can place a floating toolbar anywhere in the Form Designer work space.

To	Do this
To increase the size of the toolbar buttons in the Form Designer user interface	1. On the menu bar, click **Tools > Customize**. The **Customize** dialog box opens. 2. Select the **Large Buttons** check box. 3. Click **Close**. The toolbars update.
To show or hide toolbars	1. On the menu bar, click **Tools > Customize**. The **Customize** dialog box opens. 2. In the **Toolbars** list, select the check boxes for the toolbars that you want to show. Clear the check boxes for the toolbars that you want to hide. 3. Click **Close**. The toolbars update.
Create custom toolbars	1. On the menu bar, click **Tools > Customize**. The **Customize** dialog box opens. 2. Click **New**. The New Toolbar dialog box opens. 3. Type a name for your new toolbar, and then click **OK**. The new toolbar appears. It is very small because it does not contain any toolbar buttons. 4. Click **Close**. The toolbars update.
To add, move, or remove toolbar buttons	**Tip:** You can remove buttons from a toolbar at any time. Hold down `Alt` and drag the button off the toolbar. 1. On the menu bar, click **Tools > Customize**. The **Customize** dialog box opens. 2. Click the **Commands** tab. 3. To add a toolbar button, complete the following steps: a. In the **Categories** list, click a command type. The toolbar buttons associated with the selected category appear in the **Commands** panel. An explanation of a button's function appears in the **Description** area. b. To add a toolbar button, drag it from the **Commands** panel to a toolbar. 4. To move a toolbar button, drag the button to a new location. 5. To remove a button from a toolbar, drag the button off the toolbar. 6. Click **Close**. The toolbar updates.

To	Do this
You can reset the Form Designer toolbars to their default state and delete custom toolbars. **Note:** You cannot delete the default toolbars.	1. On the menu bar, click **Tools > Customize**. The **Customize** dialog box opens. 2. Click the toolbar in the **Toolbars** list. 3. Do one of the following: • To reset a default toolbar, click **Reset** . • To delete a custom toolbar, click **Delete**. 4. Click **Close**. The toolbar updates.
Move a toolbar	You can dock toolbars to the sides of the Form Designer interface or float them within the Form Designer window. • To move a docked toolbar, drag the toolbar to a new location with the mouse pointer anywhere except on a button. • To move a floating toolbar, drag the title bar of the toolbar window to move it to a new location.
Enable or disable tooltips	When you position the cursor over a toolbar button, a descriptive *tooltip* appears.  To enable or disable tooltips 1. On the menu bar, click **Tools > Customize**. The **Customize** dialog box opens. 2. Click the **Toolbars** tab. 3. To show tooltips, select the **Show Tooltips** check box. To disable tooltips, clear the check box. 4. Click **Close**.

1.1.2 Navigating the Form Designer Sidebar

The Sidebar is a moveable part of the Form Designer user interface.

To show or hide the sidebar

- On the menu bar, click **View > Gallery**.
- On the Main toolbar, click  .

The sidebar includes the following sections:

Section	Description
Gallery	**Gallery** contains tabs that hold objects such as entry fields or shapes. You use these objects to build forms. The **Gallery** includes the following tabs. • The **Shapes** tab contains standard form objects that you can drag directly on to the form. These objects include data entry fields and drawing objects, such as lines and rectangles. • The **Fields** tab contains preconfigured sample fields that you can drag on to the form. You can customize these fields after you add them. Using predefined objects allows you to work efficiently, and to design forms that maintain a consistent appearance. • The **Custom** tab allows you to store commonly-used objects or groups of defined objects. You can use the **Custom** tab to create, rename, or delete your own objects. See "Personalizing the Custom tab of the Gallery" on the next page. • The **Gallery** can have an optional **Network** tab if your organization has multiple designers and requires using shared form objects. See "Sharing form objects with multiple designers" on page 13. **Related topics:** • "Shapes and objects" on page 91 • "Adding an object to a form" on page 93 • "Configuring the appearance of the Gallery" on page 22
Field List	**Field List** summarizes the data entry fields, Buttons, Hyperlinks, and Submit Actions on your form. It does not show drawing objects such as ellipses, lines, or pictures. To sort the Field List, click one of the column headings. The fields sort by that value. • **Field Name**—The name of the object. • **Field Type**—The object type (for example, "entry field"). • **Page**—The page on which the object is located. • **Tab**—The item's position in the Tab Order. For information about changing the tab order, see "Setting the tab order of objects on a form" on page 47. To edit the properties of a field • Right-click the field name, and then click **Properties** To show hidden fields in the field list • Select the **Show hidden fields** check box **Related topics:** • "Creating a hidden field" on page 150

Personalizing the Custom tab of the Gallery

You can save groups of objects, and even entire form pages, in the **Custom** tab of the **Gallery** to create a library of custom objects. Saving custom objects allows you to work efficiently, because you do not have to recreate items that you use frequently.

This section discusses the following topics:

Add Objects to the Custom Tab

To add objects to the **Custom** tab:

1. On the form, select the object or group of objects that you want to add to the Custom tab.
2. In the **Gallery**, click the **Custom** tab.
3. Drag the objects into the **Custom** tab.
4. Type a name for the saved object, and then press `Enter`.

Modify Object Properties

To view or modify the properties of an object in the gallery:

1. Right-click the object, and then click **Properties**.
   The Properties dialog box opens.
2. Type a description and author for the custom object in the **Description** and **Author** boxes.
   The Author box is filled (by default) with the User Name of the user who created the object. For more information about setting your User Name, see "Applying global settings in Form Designer" on page 19.
   The Properties dialog box displays the path of the file (where the object is saved), the file size, and the date it was last modified.
3. Click **OK**.

Add a Form Page to the Custom Tab

To add an entire form page to the Custom tab:

1. In the **Gallery**, click the **Custom** tab.
2. Right-click inside the **Custom tab**, and then click **Add** > **Current Page To Gallery**.
3. Type a name for the saved page, and then press `Enter`.

Add a Drawer to the Custom Tab

To add a drawer to the **Custom** tab:

1. Right-click an existing **drawer,** and click **New Drawer**.
2. Type a name for the new drawer, and then press `Enter`.
   Form Designer adds a shortcut key based on the new drawer name.
   When the **Custom** tab has focus, you can open a drawer by pressing `Alt` and the key for that drawer.

Rename an Object or Drawer

To rename an object or drawer in the **Custom** tab of the gallery:

1. Right-click the drawer or object, and then click **Rename**.
2. Type the new name, and then press `Enter`.

Delete an Object or Drawer

To delete an object or drawer from the **Custom** tab:

1. Right-click the drawer or object that you want to delete, and then click **Delete** or **Delete Drawer**.
   A message box asks you to confirm the action.
2. Click **Yes**.

Sharing form objects with multiple designers

If your organization includes multiple designers, you can use a shared network folder to share form objects. This folder can appear as a tab in the Form Designer **Gallery**. Designers can then:

- Add objects to the tab
- Delete objects from the tab
- Use the objects to create forms

For each subfolder of the shared folder, Form Designer displays a drawer in the **Network** tab, using the name of the subfolder as the name of the Drawer. Shared objects are saved in these subfolders.

To configure the **Network** tab, see "Enable the Gallery Network tab" on page 241.

Changes to the shared folder while Form Designer is open are reflected in Form Designer. For example, if a user adds, deletes, or renames an item in the shared folder, the **Gallery** updates to reflect the change. Similarly, if a subfolder is created, renamed, or deleted, the **Gallery** reflects it.

If the shared folder itself is deleted, Form Designer does not delete the **Network** tab, but the tab does not have any contents.

To add items to the Network tab

1. On the form, select an object to add to the Network tab.
2. On the menu bar, click **Edit > Copy**.
3. Start Windows Explorer and navigate to a subfolder of the shared network folder.
4. On the menu bar, click **Edit > Paste**.
   A file is created containing the custom gallery item.

   Tip: You can drag and drop items from the Form Designer Form to the shared folder in Windows Explorer.

1.1.3 Using the Form Designer work area

The work area displays form pages for editing. This section describes the design aids that can help you to design forms.

- "Using zoom controls to magnify the view of a form" on the next page
- "Moving around a form" on the next page
- "Showing or Hiding rulers" on page 16
- "Using guidelines and point guides" on page 16
- "Using a grid to align objects on the form" on page 17
- "Show Field Text" on page 17
- "View Fillable Areas" on page 18

Using zoom controls to magnify the view of a form

The zoom controls adjust the magnification of the form.

Task	Description
To magnify the view so that you can see a specific level	1. On the menu bar, click **View > Zoom > Zoom**. The Zoom dialog box opens. 2. In the Zoom dialog box, choose a zoom level: • To choose a predefined zoom level , click an option. • To choose a custom zoom level, click **Custom**, and in the adjacent box, enter a zoom setting in the box (for example, 85). 3. Click **OK**.
To magnify the view so that you can see see every object on the form.	On the menu bar, click **View > Zoom > All Objects**.
To magnify the view so that you can see all the selected objects.	1. Select the objects that you want to view. 2. On the menu bar, click **View > Zoom > Selected Objects**.
To magnify the view so that you can see the left and right edges of the form in the work area.	On the menu bar, click **View > Zoom > Page Width**.
To magnify the view so that you can seethe top and bottom edges of the form in the work area.	On the menu bar, click **View > Zoom > Page Height**.

Moving around a form

LiquidOffice provides multiple options to help you easily move around a form:

Method	Description
To use the scroll bars to move around a form	To move around a form, use the scroll bars at the sides of the work area.
To use a mouse to move around a form	You can use the mouse wheel to move around a form: • To scroll up or down, rotate the wheel • To scroll left or right, hold down `Shift` and rotate the wheel • To zoom in or out, hold down `Ctrl` and rotate the wheel.
To use the Pan tool to move around a form	Form Designer includes a Pan tool that you can use to drag the form page around the work area. To use the pan tool 1. Click **Pan**  . The mouse pointer changes to a hand  . 2. Move the form by dragging the mouse pointer in the work area, in any direction.

Showing or Hiding rulers

Rulers indicate the size of the form and the size of objects on the form.

Note: Ruler divisions depend on the units of measurement defined on the Page Setup dialog box. See "Defining the page setup and margins of a form" on page 51.

To show or hide rulers

- On the menu bar, click **View > Rulers**.
- Click **Show/Hide Rulers**  .

Using guidelines and point guides

By using the guidelines, you can align multiple objects along a vertical or horizontal axis line.

Point guides serve as anchors or reference points for objects. You can place as many point guides as you need anywhere on the form.

Note: Guidelines and point guides are only available when rulers are visible. See "Showing or Hiding rulers" above.

Task	Description
To show or hide guidelines and point guides	Do one of the following: • On the menu bar, click **View > Guides**. • Click **Show/Hide Guides**  .
To create a guideline:	1. Place your mouse pointer inside the horizontal or vertical ruler. 2. Drag the mouse pointer onto the page. When you release the mouse button a guideline appears on the form.
To create a point guide:	Drag the **Point Guide** onto your form. The **Point Guide** button  is located at the intersection of the horizontal and vertical rulers. When you release the mouse button a point guide appears on the form.

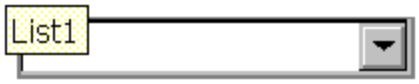
Using a grid to align objects on the form

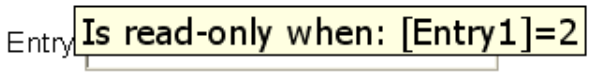
You can apply a grid to your work area to help you align objects on the form. When the grid is visible, you can also optionally select to snap objects to the grid so that objects move automatically to the closest grid lines. The appearance of the grid can differ depending on the unit of measurement that you select from the **Page Setup** dialog box. For more information the options available on the Page Setup dialog, see "Defining the page setup and margins of a form" on page 51.

Task	Description
To toggle the appearance of the grid in the work area	Complete one of the following steps: • On the menu bar, click **View > Grid > Show Grid**. • On the Format toolbar, click  .
To enable objects to snap to the grid	Complete one of the following steps: • On the menu bar, click **View > Grid > Enable Snap to Grid**. • On the Format toolbar, click  .

Show Field Text

Field names, field types, and expressions can be displayed above the entry fields in the work area. This information is useful when you configure a form. It does not appear on published forms.

Task	Description	Example
To show field names	You can view the names of the data entry fields and objects on the form. To show or hide Field Names • On the menu bar, click **View > Field Names**	
To show field types	You can view the types of the data entry fields and objects on the form. To show or hide field types • On the menu bar, click **View > Field Types**.	

Task	Description	Example
To show expressions	You can view expressions for the data entry fields on a form. If an entry field is associated with an expression, the expression appears in a tooltip above the field. To show or hide expressions • On the menu bar, click **View > Expressions**.	

View Fillable Areas

When Fillable Areas is selected on the View menu, the fillable sections of the data entry fields are highlighted in yellow. This function is useful when the form includes “Title Inside” Entry Fields, but you can use it to view the fillable area of all data entry fields, regardless of title position.

To show or hide fillable areas

- On the menu bar, click **View > Fillable Areas**.

1.1.4 Useful Form Designer shortcut keys

The following table lists some useful shortcut key combinations.

Note: For a complete list of shortcut key combinations, see “Shortcut keys reference” on page 244.

Command	Keystroke
Duplicate an object	Hold `Ctrl`, and then drag the object to a new location on the form.
Move the selected object	Arrow keys (`Up`, `Down`, `Left`, `Right`)
Precisely move an object	`Shift` + arrow keys (`Up`, `Down`, `Left`, `Right`)
Group selected objects	`Ctrl` + `G`
Ungroup objects	`Ctrl` + `Shift` + `G`
View next or previous form page	`Ctrl` + `Page Down` `Ctrl` + `Page Up`
Open the spelling checker	F7

Command	Keystroke
Edit text in a text box or title	F2
Open Form Designer help	F1
Close Form Designer	Alt + F4

1.2 Applying global settings in Form Designer

The global settings configure the behavior of the Form Designer application and define the default settings for new forms.

Form Designer uses a tiered structure for certain settings.

- **Global** settings determine the behavior of the Form Designer application and define the default settings for new forms. Changes to the global settings do not affect the forms that have been saved or are open or that were imported in Form Designer.
- **Form-level and page-level settings** override the global settings. For example, if your global fill font is Arial, you can configure a specific form to use Times New Roman as the default fill font.
- **Field-specific settings** override both the global and the form or page-level settings. For example, if your global fill font is Arial and your form-level fill font can be Times New Roman, but you can configure a specific List Field to use Helvetica as its fill font.

Note: Global settings do not always have corresponding settings at the form or field level.

This section discusses the following topics:

1.2.1 Configuring the Global General settings

The Global General settings control the behavior of the Form Designer application. Changes to these settings affect all future forms that you create.

To change global general settings

1. On the menu bar, click **Tools > Options**.
   The Options dialog box opens.
2. Click the **General** tab.
3. To enable the relaxed selection of objects, select the **Select options partially within selection area** check box.
   If you make the relaxed selection of objects available, any object that falls partially within the bounding outline is selected. If this selection is unavailable, an object must be completely enveloped by the bounding outline to be selected. For more information about selecting objects, see "Selecting objects in a form" on page 94.
4. Some of the features in Form Designer require a connection to the LiquidOffice server. To prevent Form Designer from prompting you to connect to the LiquidOffice server, select the **Do not prompt to login to a server** check box.
   You might want to make the prompt unavailable if you do not have access to an LiquidOffice server.
5. In the **Units of measurement** box, click one of the units to define the default units for new form pages. For information about picas and points, see "Use picas and points" on page 242.
6. In the **User name** box, type your user name.

   Note: Your user name is copied to the **Author** field in the form properties (see "Form properties" on page 53), and can be used in smart text fields.

7. Configure the undo/redo settings.
   Form Designer records your steps so that you can undo or redo actions.
   a. In the **Undo levels** box, type or select a value to specify how many actions to save.
   b. By default, selection and zooming commands are not saved in the undo history. To include selection and zooming operations in the undo/redo list, select the **Include selection and zooming operations in the undo/redo List** check box.
8. In the **Language** area, you can configure the language to use for the Form Designer user interface. See "Changing the language of the Form Designer user interface" on the next page.
9. Click **OK**.

1.2.2 Changing the language of the Form Designer user interface

The Form Designer user interface appears in the default system language, however, you can use Form Designer in your preferred language.

Language settings are stored for each user so that users on the same computer can have different language preferences.

> **Note:** If you change the Form Designer language settings, you must restart Form Designer for the change to take effect.
>
> Changing the language of the Form Designer user interface also changes the default language for new forms. For more information about changing the language of a form, see "Setting the language for a form" on page 56.

To change the language of the Form Designer user interface

1. On the menu bar, click **Tools > Options**.
   The **Options** dialog box opens.
2. Click the **General** tab, and then configure the language settings.
   - To use the system language, click **Select language based on system settings**.
   - To use a different language for Form Designer, click **Use the indicated language**, and then click a language in the list.
3. Click **OK** to save the language selection.

1.2.3 Configuring the Global Font settings

This topic is about configuring the global settings for fonts. If you want to configure the font settings for a individual form or for a form that has previously been saved, see "Form properties" on page 53.

Global Font settings define the default display and fill fonts for new forms.

- **Display font** appears in text for titles and text boxes.
- **Fill font** is the font used inside data entry fields.

In the following example, *City* is the display text and *London* is the fill text.

Changing these settings only affects newly created forms. It does not affect saved forms.

To change the default display or fill font

1. On the menu bar, click **Tools > Options**.
   The Options dialog box opens.
2. Click the **Fonts** tab.
3. In the **Default display font** or **Default fill font** area, click **Change**.
   The Font dialog box opens.
   The Font dialog box allows you to change the type, size, and style of text (see "Font dialog box" on page 208).
4. Click **OK**.

Note: All elements of OpenText LiquidOffice, including the Form Designer, support the Unicode character sets.

For more information about Unicode, visit the Unicode Consortium site at http://www.unicode.org.

The LiquidOffice server should have Unicode fonts installed for PDF flattening to work correctly. The Unicode Consortium offers tips to find and install Unicode fonts at http://www.unicode.org/help/display_problems.html.

1.2.4 Configuring the appearance of the Gallery

To configure the appearance of the Gallery:

1. On the menu bar, click **Tools > Options**.
   The **Options** dialog box opens.
2. Click the **Gallery** tab, and then click an option in the **View style** list to change the appearance of objects in the **Gallery**.
   - **Small Icon**. Objects appear as small icons with descriptive titles.
   - **Large Icon**. Objects appear as large icons with descriptive titles.
   - **List**. Objects appear in multiple columns as small icons with descriptive titles.

- **Report**. Objects appear as small icons with descriptive titles with information about the objects.

3. To change the arrangement of gallery objects, use the options in the **Sorting** area.
   - In the **Sort by** list, click **Name** or **Type**.
   - In the **Sort order** list, click **Ascending** or **Descending**.
4. If required, use the **Background color** and **Text color** lists to change the color of the **Gallery**.
5. Click **OK**.

1.2.5 Configuring the auto-save settings

Form Designer includes an auto-save feature that can automatically save your form at a set interval. This feature can prevent you from having to recreate much work if your computer stops responding or loses power.

To enable and configure auto-save

1. On the menu bar, click **Tools > Options**.
   The Options dialog box opens.
2. Click the **Auto-Save** tab.
3. To enable auto-save, select the **Save recovery information every** check box, and then type a value in the **minutes** box to define how often to save recovery information.
   The default value is 10 minutes.
4. Click **OK**.

Tip: When Form Designer starts, it searches for recovery files. If no such files exist, the program starts normally. If Form Designer finds recovered files, a message box opens.

- Click **Yes** to save the recovered files to your default form directory. The original file names are appended with a time stamp to indicate that these are recovered files.
- Click **No** to leave the recovery file in the temporary directory. The location of the temporary directory is as follows.
  `C:\Users\<user>\AppData\Roaming\LiquidOffice\Form Designer`

1.2.6 Configuring the global page setup

This topic is about configuring the global settings for page setup. If you want to configure

the page setup settings for a individual form or for a form that has previously been saved, see "Defining the page setup and margins of a form" on page 51.

The global page setup options define the default size, orientation, and background for new form pages. Global page setup options do not affect existing pages. You can override these settings for any pages that you create in the future.

To configure page setup:

1. To select the default page size, either:
   - To select a standard page size, from the **Page size** drop-down list, select a page size.
   - To enter a custom page size, type the page size in the **Width** and **Height** boxes.
2. To select the orientation of the page, click **Portrait** or **Landscape**.
3. Forms have a solid white background by default. To customize the default form background, complete one of the following steps:

To	Do this
Apply a solid background color	In the **Background** area, click the **Color** drop-down list to select a background color.
Apply a background image	a. In the **Background** area, select one of the following image layouts from the **Image** drop-down list. • **Center**—The graphic file appears at the center of the form page. • **Stretch**—The graphic file resizes to fit the page size. • **Tile**—Multiple copies of the graphic file appear on the form page, so that the entire page area is covered with copies of the image. The **Select an Image** dialog box opens. b. Select an image, and then click **Open**. **Tip:** To change the background image, click **Browse** 

4. To define a highlight color for tables on the page, in the **Table highlight** area, use the color picker to select a highlight color. To configure a custom color, see "Color Picker" on page 206
5. For HTML pages, to show a border around the page, select the **Show page border** check box. This option is selected by default and is not available for PDF forms.
6. Click **OK**.

Related topics:
- "Defining the page setup and margins of a form" on page 51

1.2.7 Configuring Global Spell Check settings

The Global Spell Check settings define how the Spell Checker handles problematic words and combinations of characters.

To change spell checking settings

1. On the menu bar, click **Tools > Options**.
   The **Options** dialog box opens.
2. Click the **Spell Check** tab.
3. Select the check boxes for the types of words that you want to ignore.
   - Words in UPPERCASE
   - Words with numbers (for example, X34HYT)
   - Internet addresses (URLs)

   Tip: You can add words in UPPERCASE, words that include numbers, and Internet addresses to your Spell Checking dictionary. The next time you review the form, these questionable words are not questioned by the Spell Checker.
4. Click **OK**.

   Note: These settings only affect spell checking in Form Designer. They do not affect field spell checking in Acrobat.

Related topics:
- "Spelling Checker" on page 208

1.2.8 Configuring Publishing settings

With the Publishing settings, you can define the default publishing settings for forms published as standard HTML and PDF forms as well as standalone documents.

For additional information about managing standalone documents for use with LiquidOffice, see *Management Console User Guide*

Tip: If you publish a form in multiple formats, users can choose a preferred format.

To change the publishing settings:

1. Do one of the following:

To	Do this
Change the global publishing settings **Note:** Changing the Global Publishing settings does not affect the settings of forms that have already been saved.	On the menu bar, click **Tools > Options**. The **Options** dialog box opens.
Change the publishing settings of a specific form	a. Open the form. b. On the menu bar, click **File > Properties**.

2. Click the **Publishing** tab.
3. If you are publishing standard HTML forms, complete the following steps to set the default HTML publishing options:
   a. In the **Publishing Formats** list, select the **HTML** check box.
   b. With **HTML** highlighted in the list, click **Setup**.
   The **HTML Publishing** dialog box opens.
   c. In the **Backdrop** area, use the color picker to choose a backdrop color for the form.
   The backdrop color appears in the area around the form.
   d. In the **Default page view** area, select a default page view:
      - **Continuous**—Forms appear as a single, continuous page. Continuous view is the default setting. Respondents can scroll between form pages.

        Important: If your form will be viewed offline *and* includes multiple Ink Pictures, you *must* set the Default page view to Continuous.

      - **Paged**—Form pages appear as multiple HTML pages.

   e. To specify how pages accommodate dynamic tables, complete one of the following steps:

To	Do this
Add a new page to the form if a dynamic table grows beyond the page height	Select the **Enable legacy dynamic page behavior** check box.
Allow the page height to grow or shrink to accommodate the dynamic table as the size changes (no new page is added). For example, if a row is added to the dynamic table that is 1.5 inches, then the page will grow by 1.5 inches to accommodate the size of the table.	Clear the **Enable legacy dynamic page behavior** check box.

   f. To enable legacy behavior for lists, select the **Enable legacy list insertion behavior** check box.

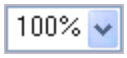
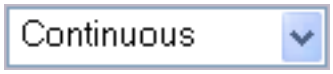
> **Note:** When a database lookup populates a list, the contents of the list are replaced by the lookup data. If you select the **Enable legacy list insertion behavior** check box, the lookup data is appended to the end of the list.
>
> If you select the **Enable legacy list insertion behavior** check box, the following rule applies.
>
> If a list entry from the lookup has the same Display Name as an existing list item, but a different value, the original item is overwritten by the entry from the lookup. Although the list might look the same after the lookup, the export values for one or more items might change.

g. To change the tab order focus, do one of the following:

- To set the tab order focus to the first entry field, select the **Set Focus to First Field** check box. This is the default setting for new HTML forms.
- To set the tab order focus on the first item on the page, clear the **Set Focus to First Field** check box.

h. To control the appearance of the top toolbar, complete the following steps, as needed:

- To show the top toolbar on the form, select the **Show top toolbar** check box.
- To control the appearance of controls on the top toolbar, select the following options as needed:

To show these controls the top toolbar	Control(s) included	Do this
Paging controls	•  (PageBack) •  (PageFwd) •  (PagePick) •  (Zoom) •  (View)	Select the **Paging** check box. The paging controls are enabled by default.
PDF download	 (Download)	Select the **Download** check box. The PDF download option is enabled by default.

To show these controls the top toolbar	Control(s) included	Do this
Offline controls	 (Mode)  (Save)  (SaveAs)	Select the **Offline** check box. The offline controls are enabled by default.

i. To show the bottom toolbar on the form, select the **Show bottom toolbar** check box.

j. Click **OK**.

The **HTML Publishing** dialog box closes.

4. If you are publishing standard PDF forms, complete the following steps to set the default PDF publishing options:
   a. In the **Standard Form Publishing Options** list, select the **PDF** check box.
   b. With **PDF** highlighted in the list, click **Setup**.

      The **PDF Publishing** dialog box opens.
   c. To prepare the PDF for PDF/A1-b flattening (by embedding all fonts used in the form), select **Prepare for PDF/A1-b Flattening**.

      Note: Embedding fonts can result in larger PDF file sizes than previously expected. You can minimize this effect by making sure that you use a limited set of font types, sizes, and styles in your form.

   d. To change the tab order focus, do one of the following:
      - To set the tab order focus to the first entry field, select the **Set Focus to First Field** check box. This is the default setting for new PDF forms.
      - To set the tab order focus on the first item on the page, clear the **Set Focus to First Field** check box.

   e. Click **OK**.

      The **PDF Publishing** dialog box closes.

5. If you are publishing a form as a standalone document, do one of the following to specify the document format:

To	Do this
Create a editable PDF form that can be filled before printing or saving	Click the **Fillable PDF** radio button.
Create a non-fillable PDF form that can be printed and then filled by hand.	Click the **Non-fillable PDF** radio button.
Create a non-fillable flattened PDF form that can be printed and then filled by hand. Flattening a PDF form results in a file that can be opened and viewed consistently by the majority of PDF viewers, editors, and web browsers.	Click the **Non-fillable Flattened PDF** radio button.

6. Click **OK**.

   The **Options** dialog box closes.

2 Design, create, and publish forms

Tip: LiquidOffice includes a tutorial that demonstrates how to build and publish forms in Form Designer. To open the tutorial, on the menu bar, click **Help > Tutorial**. Your default web browser opens and the tutorial starts.

This section provides information about designing, creating, and publishing forms.

2.1 General workfow for designing a form

To design a form:

1. **Plan the form**. The design process is most efficient if you design the form before you begin working in Form Designer. See "Planning your form" on page 32.
2. **Create a new form**.
    a. On the menu bar, click **File > New**.
    The **New Form** dialog box opens.
    b. Click **OK**.
3. **Configure Form Properties**. See "Form properties" on page 53.
    a. In the work area, right-click an empty area of the form, and click **Properties**.
    The **Form Properties** dialog box opens.
    b. Configure the form and click **OK**.

4. **Place Shapes and Objects on the Form**. Forms can include graphics, text, and the configurable data entry fields used to collect information.
    a. In the sidebar, click the **Gallery** tab.
    b. Click the **Shapes** tab.
    c. Drag an object from the **Shapes** tab to the form page in the work area.
    The object is placed on the form.

5. **Configure Shapes and Data Entry Fields**. You can configure your data entry fields to help get the most accurate data from your respondents. You can also configure the appearance of form objects and provide explanatory text to improve accessibility.
    a. Double-click an object on the form.
    The **Properties** dialog box opens.
    b. Configure the object, and then click **OK**.

6. **Save the form**.
    a. On the menu bar, click **File > Save**.

7. **Test**. OpenText recommends to release a form to production only after testing it. See "Testing your form" on page 58.
8. **Connect to the LiquidOffice server**. Some of the features in Form Designer require a connection to the LiquidOffice server.
    a. On the menu bar, click **Tools > Connect**.
    The **Login** dialog box opens.
    b. Type your credentials, and then click **OK**.

9. **Publish**. Publishing a form converts it to an HTML or a PDF file, and then uploads it to an LiquidOffice server.
    a. On the menu bar, click **File > Publish**.
    The **Publishing Wizard** dialog box opens.
    b. Use the Publishing Wizard to publish the form. See "Publishing a form in Form Designer" on page 60.

Related topics:

- “Creating and editing forms” on page 37
- “Shapes and objects” on page 91
- “Saving a form in Form Designer” on page 43
- “Connecting to and disconnecting from the LiquidOffice server” on page 58
- “Testing your form” on page 58
- “Previewing a form” on page 59
- “Printing a Form” on page 59
- “Publishing a form in Form Designer” on page 60

2.2 Planning your form

Thinking about what you want a form to do and how you want it to look can save a lot of time in design.

Consider several important things before you start building a form.

- Does the form need graphics, such as a logo or a picture? See “Adding a picture to a form” on page 164.
- Will you include instructions on the form? See “Creating a text box object” on page 204.
- Which kind of data entry fields will the form use? See “Creating an entry field object” on page 136.
- How will you use the collected data?
- Which published format will be useful to recipients of the form?

Read the following sections to ensure that you are familiar with the processes of designing a new form.

- “Considerations for designing forms with form templates” on the next page
- “Considerations for designing HTML forms” on the next page
- “Considerations for designing forms for mobile devices” on page 34
- “Considerations for designing forms for offline mode” on page 35
- “Considerations for designing multipage forms” on page 35
- “Considerations for designing forms for accessibility and multiple languages” on page 35

Considerations for designing forms with form templates

For the most efficient use of Form Designer, you can use templates to help create forms. In the provided templates, the form design and layout are complete. Most of the field and object properties are defined, but you might need to make some changes. After all of the fields and objects are set up exactly as you need, you can save, use, and reuse the template.

Note: You can save your own templates using the Save as command. For more information on saving templates or adding tabs to the New Form dialog box, see "Saving a form in Form Designer" on page 43.

Using templates to create forms gives you more time to focus on content and accuracy, and allows you to quickly create multiple forms with a consistent appearance.

Form Designer includes templates for General, Finance, and Human Resources.

Related topics:

- "Creating a new form " on page 38
- "Saving a form in Form Designer" on page 43

Considerations for designing HTML forms

This section contains advice for designing HTML forms.

- Different web browsers render HTML in slightly different ways. OpenText recommends to view HTML forms in multiple web browsers.
  To view a HTML form, see "Previewing a form" on page 59. You can copy the URL of the preview form to other web browsers.
- If precise rendering is important, use the PDF format.
- Use fonts that are commonly available and can be expected to be found on your respondents' devices. Avoid using fonts that are not available on client machines. If a font is not available, the web browser substitutes a different font that might not appear as you intend.
- To aid readability, use fonts larger than 8 points.
- Diagonal lines are not supported in HTML forms. When positioning or resizing a line in Form Designer, hold down `Shift` to ensure that the line is exactly horizontal or vertical.
- Arcs and ellipses are not supported in HTML forms. Make sure your form design works without these elements.

The following table describes HTML support for form features.

Form Feature	HTML Support
Form pages	Each form page appears as a rectangular area on the screen, surrounded by a one-pixel wide, black border. Pages can be viewed in *paged* or *continuous* mode. In paged mode, a single form page appears on the screen. In continuous mode, all of the pages in the form appear as one HTML page. The respondent is provided with controls to navigate through the form pages and to magnify the pages as needed.
Entry Fields	Comb appearance for entry fields is not supported. Field breaks (dividing a field into multiple text boxes, using the ! template character) are not supported.
Check boxes and Radio Groups	The appearance of check boxes and radio buttons cannot be customized for HTML forms. The default system appearance settings are used for these objects.
Arcs and Ellipses	Not supported in HTML. Arcs and ellipses do not appear on HTML forms.
Text rotation	Not supported in HTML. Rotated text appears. but it is not rotated.
Background fill color and patterns	HTML supports solid background fill colors, but fill patterns are not supported.
Digital Signatures	Only Click-through and OpenText LiquidOffice Certify digital signature types are supported in HTML. Certificate-based signatures are not supported for HTML forms. Forms published using certificates for authentication display an error message. Signature objects for HTML allow approval authentication using a password.

Considerations for designing forms for mobile devices

This section contains advice for designing forms that can be opened on mobile devices.

Form Feature	Mobile Forms
Publishing format	Ensure that the HTML publishing format is available. PDF forms cannot be used on mobile devices.
Page size	The standard, Letter page size is suitable for most tablet computers. If you design forms for devices with a small screen area, consider reducing the width of the page.
Field placement	Consider leaving more space between form fields so that the fields are easy to select using a touch interface.
Image viewers	On a mobile device, images cannot upload to an Image Viewer from a URL.
Barcodes	Barcodes are supported on mobile devices only when using **JavaScript** as the **HTML technology**. For more information about defining the **HTML technology** for a barcode object, see "Creating a barcode object" on page 121.

Considerations for designing forms for offline mode

This section contains advice for designing forms that are suitable for offline use.

For information about using forms and processes offline, see *Mobile Portal User Guide*.

When a form is used offline, any features that require a connection to the LiquidOffice server are not available. The following table lists the features that are affected, and explains how to design forms to ensure a positive user experience in offline mode.

Form feature	Offline forms
Initial values	• Forms that open in offline mode are not filled with initial values. • Unique sequential numbers are not available. • Form fields are not filled with user profile data.
Database lookups	Database lookups that are configured to fill form fields when the form opens, or when a user leaves a field, are not available. If you need to use database lookups, configure the lookup to occur upon clicking a button. Offline users can save the form and run the lookup when they connect to the LiquidOffice server.
Database validation	Database validation is not available in offline mode. If you need to use database validation, configure validation to occur when the form is submitted, not when the user leaves a field.
Signature fields	Signature fields cannot be used offline. Offline users can save the form and sign it when they connect to the LiquidOffice server.
Attachments	Attachments cannot be added to offline forms. Offline users can save the form and add attachments when they connect to the LiquidOffice server.

Considerations for designing multipage forms

Forms can have multiple pages. Forms with many pages are typically large files and might take longer to distribute and to open than smaller forms, but there is no restriction on how large your form can be.

Each page in a multipage form can have a different size, orientation, background image, and use different units of measurement. You can make these settings in the Page Setup dialog box. See "Defining the page setup and margins of a form" on page 51.

Related topics:

- "Editing multipage forms in Form Designer" on page 45
- "Navigating the Form Designer user interface" on page 7

Considerations for designing forms for accessibility and multiple languages

Form designers who must make forms accessible to blind or limited-vision users, or that must meet US Government Section 508 standards, can take advantage of the accessibility features in Form Designer.

This section describes accessible content that you can configure in Form Designer.

Form feature	Description
Form Descriptions and Content	You can apply a description to a form to describe the purpose of the form. When a a screen reader accesses a form, it reads the description aloud. Adding a description to a form prevents the screen reader from moving straight to the data entry fields and objects. The description is not visible to sighted respondents, who can rely on instructional text boxes for this type of information. To add a description to a form, see "Form properties" on page 53. You can configure form objects to aid accessibility by adding: • text boxes to provide further instructions • titles to form objects (see "Configuring titles for objects" on page 117). Titles indicate to users the function of a form field and indicate what data to enter. When a screen reader processes a form field, it reads the title to the respondent. • Alternate text for graphics. You can add a textual description to any graphic on a form. When a screen reader processes the graphic, it reads this text aloud. To add alternate text to an image, see "Adding a picture to a form" on page 164. **Related topics:** • "Form properties" on page 53 • "Configuring titles for objects" on page 117 • "Adding a picture to a form" on page 164
Set the Language for a Form	You can specify the language of each form that you create in Form Designer. The language setting has the following effects. • Messages that appear on the form (for example, for entry field validation) are in the selected language • Screen readers use the language setting to ensure that form content is vocalized with the correct pronunciation rules. Form content is *not translated* by the screen reader. If you need to create a form in a specific language, you must write the content of the form in that language *and* change the form language setting. • The language setting sets the language choice for the spelling checker For information about changing the language of a form, see "Setting the language for a form" on page 56. **Tip:** To publish a form to multiple languages, save the form with different names. Translate the text on the form and change the language setting. Then publish the form. **Note:** LiquidOffice users can choose a preferred language in the Portal or Web Desktop. For information about user language settings, refer to the *OpenText LiquidOffice Portal User Guide* or the *OpenText LiquidOffice Web Desktop User Guide*.

Form feature	Description
Tab Order	The tab order defines the order in which a respondent visits the data entry fields, buttons, hyperlinks, and Submit Actions on a form. For example, when the form opens, the respondent automatically visits the first data entry field in the tab order. When the respondent leaves this field by pressing `Tab`, the focus moves to the next field in the tab order. Screen readers help blind and visually-impaired individuals to access information, including forms, that are traditionally thought of as visual information. In LiquidOffice, the tab order defines the reading order—the sequence in which a screen reading tool verbally interprets the form objects. OpenText recommends for the tab order to follow a logical sequence so that the questions posed by the form (and information conveyed by text boxes, pictures, and SmartText fields) build upon one another. Further, place the Submit Action at the end of the tab order so that respondents are not prompted to submit the form before they complete all the data entry fields. The following objects are part of the tab order. • data entry fields • tables • pictures (alternate text is part of the tab order) • buttons and Submit Actions • text boxes, hyperlinks, and smart text fields **Note:** Drawing objects (arcs, ellipses, lines, and rectangles) are not part of the tab order. To view or edit the tab order, see "Setting the tab order of objects on a form" on page 47.

2.3 Creating and editing forms

This section describes how to create, open, and configure forms using Form Designer.

2.3.1 Creating a new form

To create a form using a template or existing form:

1. On the menu bar, click **File > New**.
2. Do one of the following:

To	Do this
Create a blank form	a. Make sure that **Blank Form** is selected. b. Click **OK**.
Use a built-in template	a. On the **New Form** dialog box, browse the tabs as needed, and then click the template that you want to use for the form. b. Click **OK**.
Use a PDF form	a. On the **New Form** dialog box, click the **General** tab, and then click **PDF Form**. b. Click **OK**. c. Browse to the location of the PDF file that you want to use as a template, and then click the file. d. Click **OK**.
Use a custom template or existing form	a. On the **New Form** dialog box, click the **General** tab, and then click **Custom Form**. b. Click **OK**. c. Browse to the location of the XFM file that you want to use as a template, and then click the file. d. Click **OK**.

Related topics:

- “Planning your form” on page 32
- “Saving a form in Form Designer” on page 43
- “Shapes and objects” on page 91

2.3.2 Opening an existing form in Form Designer

To open an existing form:

1. On the menu bar, click **File > Open**.
   The Open dialog box opens.
2. In the **Files of type** list, click the desired **file type**.
3. Select the form that you want to open, and then click **Open**.

Related topics:
- "Importing forms from OpenText TeleForm" on page 42

2.3.3 Importing a PDF Form into Form Designer

You can import and open PDF forms in Form Designer. With these imported PDF forms you can either import as a simple background (where the imported form acts as a static graphic) or as an editable form (where the imported form retains data entry field properties and other form attributes).

Keep in mind the following considerations before importing a PDF form:

Consideration	Details
Publishing	Imported PDF forms can be published as either a PDF form or a HTML form on the LiquidOffice Server; however, if you publish an imported PDF form as an HTML form, the original PDF form is converted to a PNG image that is used as a background image in the HTML form.
Editing in LiquidOffice	• Whether you import a PDF form as a simple background or as an editable form, you cannot edit the background image in Form Designer. • After you save and reopen a PDF form, any objects that you added to the form while in Form Designer will have become background objects, and will be uneditable. • Because the PDF file is converted to a LiquidOffice form on import, edits in LiquidOffice are to the LiquidOffice properties and not to PDF properties.
Conversion formats	When the PDF form is imported into LiquidOffice, the PDF form converts to a Form Designer form (an `.xfm` file).
PDF feature support	• If you import a PDF form as an editable form, form fields can be imported from PDFs that use the AcroForm feature, however, LiquidOffice does not support importing form fields from XFA (Adobe LifeCycle) forms. • If you import a PDF form as an editable form, form fields imported from linearized PDFs might not import correctly.
Importing LiquidOffice forms	• If you import a PDF form that was generated from LiquidOffice as an editable form, form fields, text, and static objects do not import correctly. • If you import a PDF form that was created by Form Designer using the PDF Form Input as an editable form, Form Designer does not import all scripts, lookups, expressions, and formatting. OpenText recommends that you use the original `.XFM` file where possible.

If you want to import a PDF form as an editable form, the following table lists common PDF files that are imported and indicates what features are retained:

Form features imported into LiquidOffice

Imported PDF file created by	Form field appearance on resulting XFM file
Form Designer	Not recommended.
Microsoft Word document with fields—Printed to PDF—Form fields with transparent appearance added through the Acrobat **Form** Tool	The appearance of fields created in Microsoft Word are retained.
Adobe Acrobat, with form field appearances created by Acrobat **Form** tool.	Retained. Acrobat fields without Background Color render with a white Fill Color in Form Designer.

To import a PDF:

1. In Form Designer, on the menu bar, click **File > New**.
2. In the **New Form** dialog box, click the **General** tab.
3. Double-click **PDF Form**.
4. In the **Open** dialog box, select the PDF file that you want to import and click **Open**.
5. Choose how to format the imported PDF:

To	Do this
Convert form elements in the original PDF to LiquidOffice form objects (such as data entry fields, buttons, and so forth)	Click **Form (create entities from PDF Form fields)**.
Retain the appearance of the PDF file, but discard the functionality of any form elements **Note:** If a form fields appearance is part of the page, it is retained. However, if the form field's appearance is not part of the page, it is discarded.	Click **Simple background (discard PDF Form fields)**.

> **Note:** If the PDF *does not contain form elements*, such as data entry fields or buttons, the PDF imports as a static background for a new form.
>
> If the PDF *contains form elements*, such as data entry fields or buttons, the PDF Form Import dialog box opens. You can choose whether to import the PDF file as a static background or as an editable form.

6. Click **OK**. The PDF file imports.

2.3.4 Importing an HTML form into Form Designer

You can import and open HTML forms in Form Designer. Importing HTML forms into LiquidOffice allows you to more quickly replicate the function of an existing external form for use as a LiquidOffice form or as a form template to be used with the External Web Forms virtual submissions feature.

Keep in mind the following considerations before importing an HTML form:

Consideration	Details
Publishing	Imported HTML forms can be published as either PDF forms or HTML forms on the LiquidOffice server; however, because the layout of an imported HTML form is better suited for HTML output, it is a best practice to output imported HTML forms only as HTML forms unless the fields are re-organized into a more traditional page layout.
Conversion formats	When an HTML form is imported into Form Designer, each supported HTML element is individually converted to supported LiquidOffice elements. For more information about how HTML form elements are converted, see the following table about how HTML elements are imported into LiquidOffice.

Consideration	Details
HTML feature support	• LiquidOffice supports static HTML content only. You cannot import dynamic content generated from JavaScript. • Fields are added to the form in the order that they are encountered straight down the page. No style, size or position information is extracted from the HTML. The page will be extended in length to fit all the fields. • When you select the HTML file to import, you cannot select a file that is loaded from a web page that is protected by a login. If the HTML file is loaded from a web page that is protected by a login, you must save the HTML to a file and import the HTML from the file. • ASPX and JSP source files are not loadable as the actual HTML elements are generated from the server. While these pages might be loadable from a web page, the field names might not convert as expected and there might be hidden fields specific to the ASPX or JSP files.

When you convert an HTML form, the supported form elements are converted to the following LiquidOffice elements:

Element	LiquidOffice object equivalent	Additional formatting or actions
`hidden`	Hidden field.	—
`button`	Button.	The action is set to **Submit**, **Reset**, or **Available for lookup or script**.
`textarea`	Multi-line entry field.	—
`select`	List or drop-list.	—
`input type=button`	Button.	The action is set to **Available for lookup or script**.
`input type=submit`	Button.	The action is set to **Submit**.
`input type=reset`	Button.	The action is set to **Reset**.
`input type=radio`	Radio button.	Add to radio group of buttons with same name.
`input type=checkbox -`	Check box.	—
`input type=text`	Entry field	with format 'text'.
`input type=password`	Entry field	with format 'text' and 'Password' checked.
`input type=number`	Entry field	with format 'number'.
`input type=(all other)`	Entry field	with format 'text'.

To import an HTML form:

1. In Form Designer, on the menu bar, click **File > New**.
2. In the **New Form** dialog box, click the **General** tab.
3. Double-click **HTML Form**.
4. In the **HTML Form Import** dialog box, do one of the following:

Task	Description
Import an HTML form from a Web page URL	a. Select the **Web page URL** radio button. b. In the adjacent box, enter the URL of the Web page that you want to import.
Import an HTML form from a saved HTML file	a. Select the **HTML file** radio button. b. In the adjacent box, enter or browse to the location of the HTML file that you want to import.

5. Click **OK**. The HTML form imports.

2.3.5 Importing forms from OpenText TeleForm

Creating an LiquidOffice version of an TeleForm document requires that you work in both TeleForm and LiquidOffice Form Designer.

Before you export a TeleForm document to LiquidOffice, keep in mind the following considerations:

- The following properties are retained in the TeleForm to LiquidOffice conversion:

Property	Conversion
Form	Title and author are retained, comments appear in the Comments field, and the revision and schema version numbers reset to zero.
Pages	Page name is Page *n*, where *n* is the page number.
Page width and height	Retained exactly.
Detail Groups	Each field in each row translates into an individual field in a standard group. This changes how the data is exported.
Image Zones	Converts to Entry Fields.
Date Fields	Converts to Entry Fields with Date Templates.
Constrained Print Fields	Converts to Entry Fields. They retain all settings, except for rotation.
Choice Fields (single-choice)	Converts to radio groups.
Choice Fields (multiple choice)	Converts to multiple check boxes.
Entry Fields	Converts to Entry Fields. If possible, a template is created to restrict user input to the valid range.
Signature Fields	Converts with all lock actions, but the Forward and Submit features do not convert since there is no equivalent in LiquidOffice.
Capture Zones	Exports to a separate page at the end of the LiquidOffice form.
Text	Layouts, fonts, and colors are maintained as closely as possible.
Drawing Objects	Rectangles, ellipses, and lines convert.

- The following TeleForm properties are not retained in the LiquidOffice Form:
  - data entry field database lookups
  - recognition dictionaries
  - auto exports
  - recognition settings, including expected characters
  - basic script
  - eForm autofill
  - text rotation
  - reference marks, form ID marks, user ID marks
  - dropout information
- The export does not place a Submit Action on the form.

To import a form from TeleForm:

1. Start either TeleForm Designer or Reader.
2. On the menu bar, click **File > Forms**.
   The Forms dialog box opens.
3. Right-click the form to export, and then click **Export a Form**.
   The Export a Form dialog box opens.
4. In the **To** box, type the drive and directory where you want to save the exported version of the form.
5. In the **Export Format** list, click **`FXF` (Form Exchange Format)**.
6. (*Optional*) Click **Properties**, and then change the export settings.
7. Click **Export**.
   A `.FXF` version of the form saves to the specified directory.
8. Start **Form Designer**.
9. On the menu bar, click **File > Open**.
10. In the **Files of type** list, click **Form eXchange Format** (`*.fxf`).
11. Select the file you exported from TeleForm.
12. Click **Open**.
    The file opens in Form Designer.

    Note: An TeleForm form does not retain all its properties when it is exported as an `.FXF` file. In most cases, the properties that are not converted do not affect the function of the LiquidOffice version of the form.

    For example, LiquidOffice forms are filled out electronically and the Recognition features of an TeleForm form serve no purpose in LiquidOffice.

13. Save this file as an LiquidOffice form.

2.3.6 Saving a form in Form Designer

When you save a form, you have the option to save a new form, save an existing form, or save a form as a form template that can be reused to create other forms.

To save a form do one of the following:

To	Do this
Save a new form	**Note:** The Save as command lets you rename a file as part of saving it. 1. On the menu bar, click **File > Save as**. 2. Browse to the location where you want to save the file, enter a file name, and select a file type. 3. Click **Save**. You can save Forms in LiquidOffice as the following formats: • **Form (*.xfm)**—The default file type for forms. An `.XFM` file can be opened in Form Designer. • **Form eXchange Format (*.fxf)**—This format allows forms to be exchanged between different OpenText products (such as OpenTextTeleForm and LiquidOffice). It also allows forms to be opened by different versions of Form Designer. However, any features that are not supported by the version of Form Designer that is used to open the form are lost. • **LiquidOffice 3.0 Compatible (*.fxf)**—This format allows for backward compatibility so that forms created by later versions of LiquidOffice to be opened by LiquidOffice 3.0. • **HTML**—An HTML form can be saved along with the related components (images, JavaScript files etc.) for use on a web server so it can be accessed and completed in a web browser. • **PDF - Fillable**—A fillable form can be saved to a local drive and distributed like other PDF files, and then the form can be completed in Adobe Acrobat or Adobe Acrobat Reader. This format is useful when forms need to be distributed and then filled using Acrobat before printing or, alternatively, before saving the form and sharing electronically. This format is also useful when using LiquidOffice Virtual Submit which can process fillable PDF forms. • **PDF - Non-fillable**—A non-fillable form can be saved to a local drive and distributed like other PDF files, and then the form can be opened in Adobe Acrobat or Adobe Acrobat Reader for printing. This format is useful when forms need to be distributed and then opened in Acrobat to be printed and then filled out by hand. • **PDF - Non-fillable flattened**—A non-fillable flattened form can be saved to a local drive and distributed like other PDF files, and then the form can be opened in Adobe Acrobat, Adobe Acrobat Reader, and most browsers consistently for printing. This format is useful when forms need to be distributed and then opened in a browser or Acrobat to be printed and then filled out by hand.
Save an existing form	On the menu bar, click **File > Save**. **Note:** If a form is open in read-only mode, the **Save** command is unavailable.

To	Do this
Save a form as a form template	1. On the menu bar, click **File > Save As**. 2. Browse to the `Templates` directory. The default location of the `Templates` directory is as follows: `C:\ProgramData\LiquidOffice\Form Designer\<Language_Code>\Template` **Note:** The paths shown in this document are the default paths for new installations. When existing installations are upgraded, the upgrade will replace the files in the currently installed locations. 3. Do one of the following: **Note:** Each top level folder under the `Templates` directory is equivalent to a tab in the **New Form** dialog box. • If you want to store a template on a specific tab of the **New Form** dialog box, then you must save the template file in the equivalent folder under the `Templates` directory. . • If you want to create a custom tab in the **New Form** dialog box, you can create a new folder under the `Templates` directory. Any new top level folder that you create under the `Templates` directory appears as a separate tab in the **New Form** dialog box. 4. Click **Save**. You must restart Form Designer before you can use the template. **Related topics:** • "Creating a new form " on page 38 • "Numeric language codes" on page 242

2.3.7 Editing multipage forms in Form Designer

This section describes how to work with multipage forms.

For information about how to navigate in multipage forms, see "Navigating the Form Designer user interface" on page 7.

- "Adding pages to a multipage form" on the next page
- "Renaming pages in a multipage form" on the next page
- "Deleting pages in a multipage form" on the next page
- "Moving and copying pages in a multipage form" on the next page

Adding pages to a multipage form

Forms can contain as many pages as required.

To add a page to a form:

- Right-click any page indicator, and then click **New Page**.
  A new page is added after the selected page.

Renaming pages in a multipage form

It can be helpful to name the pages of your form rather than using the default page numbers.

To rename a page

1. Click the page indicator that you want to rename.
2. On the menu bar, click **Edit > Rename Page**.
   The text on the Page Indicator is selected.
3. Type the new page name, and then press `Enter`.

Deleting pages in a multipage form

You can delete pages from multipage forms by using the next procedure.

To delete a page

1. Click the page indicator that represents the page you want to delete.
2. On the menu bar, click **Edit > Delete Page**.
   The page is deleted.

Moving and copying pages in a multipage form

You can move and copy pages within forms. Form Designer also allows you to move or copy a page to another form.

To move or copy a page:

1. (*Optional*) To move or copy a page to another form, open that form must be open.
2. Right-click the page indicator that represents the page you want to move or copy, and then click **Move or Copy**.
   The Move or Copy dialog box opens.
3. In the **To** list, click where you want to move the form.

> **Note:** Click **(new form)** to move or copy the page to a new form.
>
> To move or copy a page to another form, that form must be open.

4. In the **Before page** list, click a page or click **(move to end)**.
   You can place the selected page before any existing page or place it at the end of the form.
5. To create a copy of the page, select the **Create a copy** check box.
   To move the page (that is, to copy the page to the new location and remove the original), clear the **Create a copy** check box.
6. Click **OK**.

2.3.8 Setting the tab order of objects on a form

The tab order is the default path through the data entry fields, buttons, hyperlinks, and other objects on a form.

When a form opens, the cursor is in the first field in the tab order. If a user presses Tab, the cursor moves to the next object in the tab order.

OpenText recommends to define the tab order so that the questions asked by the form (and information conveyed by text boxes, pictures, and SmartText fields) build upon one another. Place the Submit Action at the end of the Tab Order so that respondents do not attempt to submit the form before completing the required data entry fields.

Respondents can bypass the tab order. It does not prevent respondents from selecting data entry fields in a different order, however, if any of the fields use the Entry Required constraint, users cannot submit the form until they enter the required data.

Drawing objects (arcs, ellipses, lines, and rectangles) are not part of the tab order.

Keep in mind the following considerations for tab order:

Form Designer object	Consideration
Multipage Forms	Each page of a multipage form can use a different method of establishing the tab order. For example, you can set the tab order manually on page 1, use the Auto Row option on page 2, and use the Auto Column option on page 3.
Table Tab Order	Tables have an internal tab order that is separate from the tab order of the form. When respondents select a field in a table, the table tab order controls the sequence in which to complete the fields. When the end of the table is reached, the tab order of the form again becomes the controlling sequence. For more information about the tab order for table, see "Table tab order" on page 189.
Grouped Objects	Grouped objects can be assigned individual positions in the tab order.

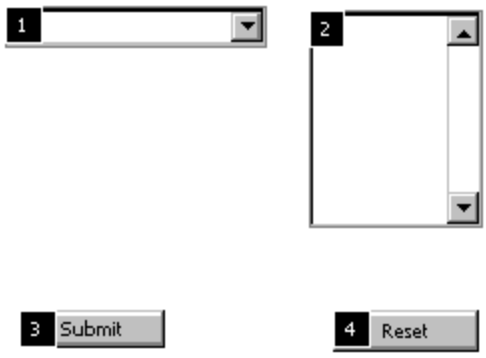
This section discusses the following topics:

- “Setting the tab order manually” on the next page
- “Modifying part of the tab order” on page 50

Viewing the tab order

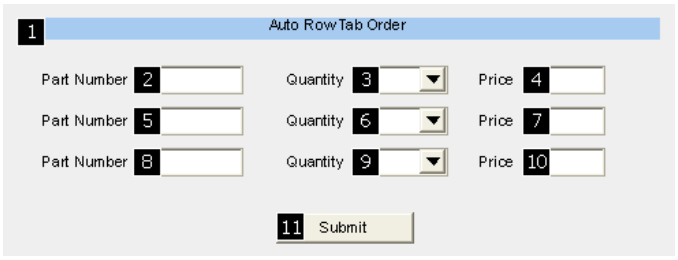
To view the tab order:

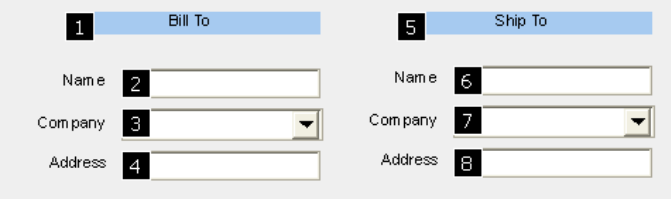
- On the menu bar, click **Format > Tab Order > Show Tab Order**.
  Numbered boxes appear next to the data entry fields and command buttons on the form. They indicate the position of each object in the tab order. These boxes do not appear on the published form.



Setting the tab order automatically

The tab order can be defined automatically using *Auto Row* and *Auto Column* tab orders. If you use an automatic tab order, Form Designer updates the tab order whenever you move an object.

-	Description
Auto Row	Auto Row is the default tab order. The object closest to the upper-left corner of the form is the first item in the tab order. The tab order proceeds from left to right, then moves down the form, and continues from left to right.  To use the auto row tab order, click **Format** > **Tab Order** > **Auto Rows**

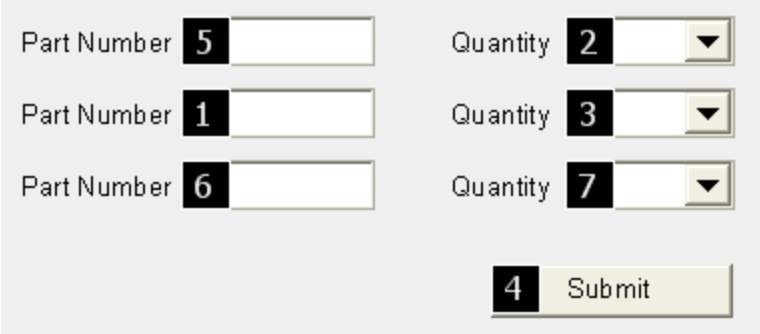
-	Description
Auto Column	Auto Column defines the tab order by sorting form objects from top to bottom, and then from left to right. The first objects in the tab order are those closest to the left edge of the form, moving from top to bottom. Form Designer then selects objects farther to the right of the form, again moving from top to bottom, and continues placing objects in the tab order until every object has an assigned position.  To use the auto column tab order, click **Format** > **Tab Order** > **Auto Columns**

Setting the tab order manually

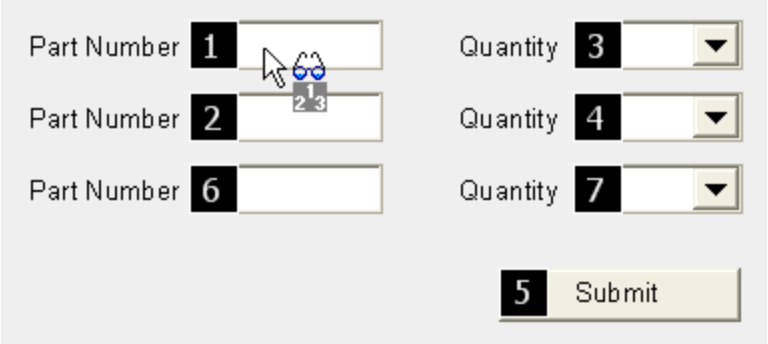
To specify the tab order manually, follow these steps.

To set the tab order manually

1. Click **Format** > **Tab Order** > **Set Tab Order**.
   The tab order is set to manual, and the objects on your form display numbered boxes that indicate their position in the tab order.



2. Click the object that you want to be the first item in the tab order.
   The numbered box for that object now displays “1”.



3. Click the objects on the form in the desired tab order. The second item you click becomes the second item in the tab order, and so on.

   Note: Do not skip an object in the Tab Order, even if it appears to be in the right place. If you skip an object, the next object that you click takes that object's place in the tab order.

4. To stop setting the tab order, either:
   - press `Esc`
   - click an empty part of the form

Modifying part of the tab order

You might not need to set the entire tab order, particularly on a long form. You can modify part of the tab order. For example, you can change the sequence for objects numbered 12 to 18, leaving the other fields in their existing positions in the sequence.

To modify part of the tab order

1. Click **Format** > **Tab Order** > **Set Tab Order.**
   The tab order is now set to manual and the objects on your form display numbered boxes to indicate their position in the tab order.
2. Hold down `Shift + Ctrl,` and then click the last item that will keep its original position in the tab order.
   For example, to reset the tab order for items 12 to 18, click item 11.
3. Click the item to come next in the tab order.
   This item follows the object you selected in Step 2. In this example, the item you click becomes the 12th object in the tab order.
4. Continue to click objects in the desired sequence.

> **Note:** Do not skip an object in the tab order, even if it appears to be in the “right” place. If you skip an object, the next object you click takes that object's place in the tab order.

5. To stop setting the tab order, do one of the following:
   - Press `Esc`.
   - Click an empty part of the form.

2.3.9 Defining the page setup and margins of a form

When you set up a page you can access the page properties to define the page setup and margins in the form.

Feature	Description
Page setup	Page setup allows you to specify a size, orientation, and background for the pages in your form. Each page in a multipage form can have a different size, orientation, background image, and use different units of measurement. Page setup overrides any global page settings for form pages. For information about global page settings, see “Configuring the global page setup” on page 23.
Margins	Margins define the printable area of a form. They act as guidelines and can be used to align objects on your form. Margins are represented by a blue rectangle on the form in the Work Area. The margins do not restrict object placement. You can place objects outside the margins. Use margins as a design aid to remind you not to place objects too close to the edges of the form. **Important:** To avoid printing problems, leave at least a 1/8th inch (3.175 mm) margin around the edge of the form pages. Some printers cannot accommodate objects that are placed close to the edge of a page.

To define the page setup and margins of a form:

1. Right-click the **Page Indicator** that represents the page you want to configure, and then click **Properties**.
   The **Page Setup** dialog box opens on the **Page** tab.
2. To change the page size, complete the following steps:
   a. In the **Page size** drop-down list, select a standard page size or enter a customer page size in the **Width** and **Height** boxes.
   b. To specify the unit of measurement to use, select a unit of measurement from the **Units** drop-down list.

Note: If you enable a grid in your work area by clicking  on the Format toolbar, the appearance of the grid in the work area can differ depending on the unit of measurement that you select. For more information about using a grid in your work area, see "Using a grid to align objects on the form" on page 17.

Note: If you select **Pixels** from the **Units** list, the **Enable page margins** check box on the **Margins** tab is automatically cleared by default.

3. To change the orientation of the page, click **Portrait** or **Landscape**.
4. Forms have solid white backgrounds by default. To customize the appearance of the form background, complete one of the following:

To	Do this
Apply a solid background color	In the **Background** area, click the **Color** drop-down list to select a background color.
Apply a background image	a. In the **Background** area, select one of the following image layouts from the **Image** drop-down list. • **Center**—The graphic file appears at the center of the form page. • **Stretch**—The graphic file resizes to fit the page size. • **Tile**—Multiple copies of the graphic file appear on the form page, so that the entire page area is covered with copies of the image. The **Select Image** dialog box opens. b. Select an image, and then click **Open**. **Tip:** To change the background image, click **Browse** 

5. In the **Highlighting** area, use the color picker to define the highlight color for tables on the page.

Important: The Accept Dropped Objects feature uses the highlight color (see "Changing whether a table accepts dropped objects" on page 185).

6. To specify whether margins are shown or hidden on the form in the work area:
   a. Click the **Margins** tab.
   b. Do one of the following:

To	Do this
To show page margins	i. Select the **Enable page margins** check box. ii. To define the page margins, select or enter values in the **Top**, **Bottom**, **Left**, and **Right** boxes.
To hide page margins	Clear the **Enable page margins** check box. **Note:** If you select **Pixels** from the **Units** list in the **Page** tab, the **Enable page margins** check box is automatically cleared by default. For more information about **Page Setup** options, see "Defining the page setup and margins of a form" on page 51.

7. Click **OK**.

Related topics:
- "Form properties" below
- "Configuring the global page setup" on page 23
- "Color Picker" on page 206

2.3.10 Form properties

Form properties describe a form and define the form behavior. If you have defined global settings in Form Designer, form properties override the global settings.

For more information about defining global settings, see "Applying global settings in Form Designer" on page 19.

To configure **Form Properties**:

1. On the menu bar, click **File > Properties**.
   The **Form Properties** dialog box opens.
2. To define the general form properties (such as Name, Author, Description) as well as define the form language or protect the form with a password, complete the following steps:
   a. Click the **General** tab.
   b. Define the following options as needed:

Option	Description	What you need to know
Name	The name of the form.	These values are visible when a user browses the available forms on the LiquidOffice server.

Option	Description	What you need to know
Author	The name of the form designer. The Author field is populated with the user name defined in the Form Designer Global settings (see "Configuring the Global General settings" on page 20).	These values are visible when a user browses the available forms on the LiquidOffice server.
Description	The text in the Description field is published with the form and is the first text translated into speech if the form is viewed by a screen reading tool. The Description is not visible on published forms. The maximum Description length is 500 characters.	These values are visible when a user browses the available forms on the LiquidOffice server.
Keywords	Keywords associated with the form.	These values are visible when a user browses the available forms on the LiquidOffice server.
Language	Click a language.	For information about the importance of the Language setting, see "Setting the language for a form" on page 56.
Password and **Confirm Password** boxes	To protect the form with a password, type a password in the **Password** and **Confirm Password** boxes. Users cannot open the published PDF version of the form without providing this password. The password is ignored by forms opened in HTML format.	
Virtual Submission Parameters	Click **Setup** to define the Virtual Submission parameters to include as hidden form fields and set initial values. Setting the values in the **Virtual Submission Parameters** dialog box allows you to create hidden fields. These hidden fields use the **Parameter** name as the field name and the **Value** box values as the field values. While hidden fields are added to published PDF forms, HTML forms, and standalone PDF documents when publishing, hidden fields are most useful when creating standalone PDF documents so that these documents can be more easily processed using Virtual Submission. Keep in mind that parameters might be used differently depending on the type of virtual submission that you are using.	For more information about integrating with Virtual Submission and for specific descriptions of each parameter and how it is used, see *Management Console User Guide*..

Note: It is important to type a name, author, description, and keywords for the form so that users can find it easily when searching the LiquidOffice server.

3. To control how the form behaves, complete the following steps:
   a. Click the **Behavior** tab.
   b. Define the following options as needed:

Option	Description	What you need to know
Unique Sequential Numbers	Select the **Enable unique sequential numbering** check box to enable the unique sequential number feature.	See "Dynamic Initial Values" on page 146.
Error Handling	Select the **Highlight invalid fields** check box to automatically highlight any fields that a respondent fills incorrectly. Use the color picker to select the highlight color. The default highlight color is light red.	See "Color Picker" on page 206
Compatibility	Select the **Enable v3 rendering** check box to ensure backward-compatibility for forms designed with Form Designer 3 or earlier. OpenText recommends not to use this backward-compatibility feature to design new forms.	

4. To configure fonts
   a. Click the **Fonts** tab.
   b. Complete the following steps as needed:

To	Do this	What you need to know
Configure the font that applies to the titles of data entry fields (the display font)	i. In the **Default display font** area, click **Change**. The **Font** dialog box opens. ii. Configure the font. iii. Click **OK**.	These settings affect all text boxes and data entry fields that are added to form from the time they are set. They do not affect objects already present on the form. See "Font dialog box" on page 208 See "Configuring the Global Font settings" on page 21
Configure the font that applies to the text that is entered into entry fields (the fill font)	i. In the **Default fill font** area, click **Change**. The **Font** dialog box opens. ii. Configure the font. iii. Click **OK**.	These settings affect all text boxes and data entry fields that are added to form from the time they are set. They do not affect objects already present on the form. See "Font dialog box" on page 208 See "Configuring the Global Font settings" on page 21

5. To override global publishing settings for the form:
   a. Click the **Publishing** tab.
   b. Customize the settings as needed.

      For information about customizing the Publishing settings see "Configuring Publishing settings" on page 25.

6. Click **OK**.

2.3.11 Setting the language for a form

You can specify a form language for each form that you create in Form Designer. Each form language has a different level of support and determines the HTML language, LiquidOffice UI language, and spell check language.

Each form language is also connected to the following actions:

Language	Actions
HTML language	• The language selected is used in the `HTML lang` attribute embedded within the form. • This is typically the language used for text on the form such as field labels. • Web browsers typically use this value with screen readers. • Search engines typically use this value to return language specific results.
LiquidOffice UI language	• The language selected is used in standard LiquidOffice user interface elements • The language of messages such as those used after field validation is determined by the language selection • The language used in LiquidOffice form elements in the form toolbars is determined by the language selection
Spell check language	• The language selected determines the dictionary used for spell checks within Form Designer.

The form language that you select can have varying levels of support for HTML language, LiquidOffice UI language, and spell check language; This means that the form language that you select might not be supported in all language categories. The following table provides a list of support information for the HTML language, LiquidOffice UI language, and spell check language that is used based on the form language that you select:

Selected form language	Supported HTML language	Supported LiquidOffice UI language	Supported spell check language
Danish	Danish	English	Danish
Dutch	Dutch	English	Dutch
English (US)	English	English	English (US)
English (UK)	English	English	English (UK)
Finnish	Finnish	English	Finnish
French	French	French	French
German	German	German	German
Japanese	Japanese	Japanese	English
Italian	Italian	English	Italian
Norwegian	Norwegian	English	Norwegian
Portuguese (Portugal)	Portuguese	Portuguese	Portuguese
Portuguese (Brazil)	Portuguese	Portuguese	Portuguese
Spanish	Spanish	Spanish	Spanish
Swedish	Swedish	English	Swedish
All other languages	Selected language	English	English

Tip: To publish a form to multiple languages, save the form with different names. Translate the text on the form and change the language setting. Then publish the form.

Note: The Form language is different from the language that is used for the Form Designer, Portal, Web Desktop, and other LiquidOffice applications. LiquidOffice users can choose a preferred language in Portal or Web Desktop.

- For information about changing the language settings in Form Designer, see "Changing the language of the Form Designer user interface" on page 21.
- For information about changing the language settings in Portal, see *Portal User Guide*.
- For information about changing the language settings in Web Desktop, see *Web Desktop User Guide*.

To set the language for a form

1. On the menu bar, click **File > Properties**.
   The **Form Properties** dialog box opens.
2. In the **Language** list, click the language to use for the form.
3. Click **OK**.

Related topics:
- "Form properties" on page 53

2.4 Connecting to and disconnecting from the LiquidOffice server

To complete certain tasks (for example, publishing a form or configuring a database lookup), Form Designer requires a connection to the LiquidOffice server.

Action	Description
Connect to the LiquidOffice server	To connect to an LiquidOffice server 1. On the menu bar, click **Tools > Connect**. The **Login** dialog box opens. 2. In the **Server** box, either type or select the server that you want to use. 3. In the **User name** and **Password** boxes, type your user name and password. 4. (*Optional*) To avoid having to retype these credentials each time you log on to the server, select the **Save user name and password** check box. 5. Click **OK**.
Disconnect from the LiquidOffice server	To disconnect from the LiquidOffice server (for example, if you need to log on to a different server): • On the menu bar, click **Tools > Disconnect**.

2.5 Testing your form

OpenText recommends to test all forms before using them in a production environment.

To test a form

1. Confirm that your data entry fields are configured correctly.
2. Check the layout of your form for: graphics, appearance, the spacing around shapes, and so on.
3. Publish the form to an LiquidOffice server.
   Ideally, the LiquidOffice server has a prerelease or testing folder for such forms.
4. Have volunteers fill out and submit the form, using realistic information.
5. Ask for feedback from those who filled out the form.
   This feedback might be useful enough to either change this form or to note for future form designs.
   - Did users encounter any problems when filling out the form?
   - Do users have any suggestions about the form to make it easier to understand or to fill

out?

6. Verify that the data collected during testing is properly formatted and stored.

2.6 Previewing a form

To preview a form in HTML or PDF format, use the preview feature.

> **Important:** To preview a form in PDF format, you must have a PDF reader installed on your system (for example, Adobe Acrobat or Adobe Reader).
>
> To set up various browsers in order to preview a form in PDF format, click the following link:
>
> https://helpx.adobe.com/acrobat/using/display-pdf-in-browser.html

Previewed forms have the following limitations:

- The form cannot be submitted
- Database lookups are not available
- Fields configured to use profile information from the LiquidOffice server remain blank
- Server scripts are disabled. Client-side script can be previewed (except *OnSubmit*).
- Any other functions that require interaction with the LiquidOffice server are unavailable

To preview a form:

- On the menu bar, click **File > Preview > As HTML**.
- On the menu bar, click **File > Preview > As PDF**.

2.7 Printing a Form

To print a form, use the Print command.

To print a form

1. Open the **Print** dialog box:
   - On the menu bar, click **File > Print**.
   - On the main toolbar, click  .

- On the keyboard, press `Ctrl + P`.

2. (*Optional*) Set the print range, number of copies, and change the printer properties.
3. Click **OK**.

2.7.1 Printable Area

If objects on your form are beyond the printable page area as determined by your printer driver, you might find that parts of these objects do not print correctly.

To fix the issue of page edges not printing

- Use the **Publish Preview** option to print the PDF version of the form. In many cases, printing the PDF version can produce higher quality results.
- Redesign your form so that the objects are farther from the edges of the page. The exact dimensions of the printable area depend on the specific printer. As a general rule, leave at least a $1/8^{th}$ (0.125) inch (3.175 mm) margin on all edges of the form pages.
  Use the **Margins** tab of the **Page Setup** dialog box to define the printable region. See "Defining the page setup and margins of a form" on page 51.

Entry Fields

If you print a form that includes an Entry Field, any text that exceeds the boundaries of the entry field does not print.

2.8 Publishing a form in Form Designer

Publishing a form saves the form to the LiquidOffice server. Publishing a form consists of the following steps.

1. Complete the following prerequisites before you attempt to publish the form:

Prerequisite	Related topics
Save the form	"Saving a form in Form Designer" on page 43
Determine the publishing settings for the form	"Configuring Publishing settings" on page 25
Connect to the LiquidOffice server	"Connecting to and disconnecting from the LiquidOffice server" on page 58

Tip: Optionally, you can preview the form before you start the publishing process.

For more information about previewing a form, see "Previewing a form" on page 59

2. Do one of the following:

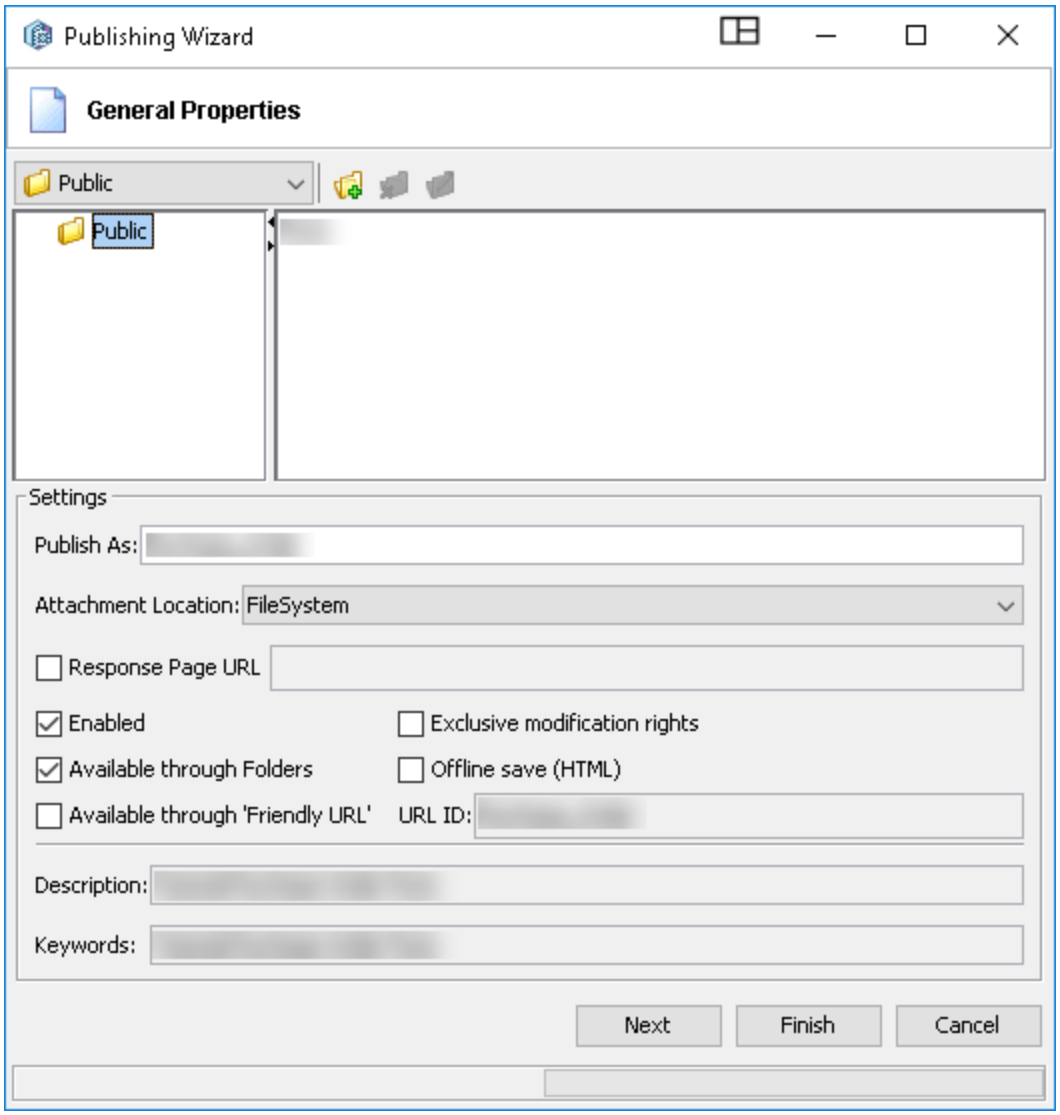
To	Do this
Publish the form as an HTML or PDF form	a. In Form Designer, on the menu bar, click **File > Publish > As Standard Form**. In Management Console, complete the following steps: i. Right-click the form and select **Properties**. ii. Click **Publish As**. b. Complete the Publishing Wizard, as needed. For additional information about Publishing Wizard setup for forms, see the following topics: • "Publishing Wizard: General Properties (in Form Designer)" below • "Publishing Wizard: Permissions (in Form Designer)" on page 65 • "Publishing Wizard: Routing Settings (in Form Designer)" on page 69 • "Publishing Wizard: Data Export (in Form Designer)" on page 73
Publish the form as a standalone document	a. On the menu bar, click **File > Publish > As Standalone Document**. In Management Console, complete the following steps: i. Right-click the form and select **Properties**. ii. Click **Publish As**. b. Complete the Publishing Wizard, as needed. For additional information about Publishing Wizard setup for standalone documents, see the following topics: • "Publishing Wizard: General Properties (in Form Designer)" below • "Publishing Wizard: Permissions (in Form Designer)" on page 65

2.8.1 Publishing Wizard: General Properties (in Form Designer)

This topic assumes that you have already initiated the publishing process and have started the Publishing Wizard.

For more information about publishing a form, see "Publishing a form in Form Designer" on page 60.

The **General Properties** page of the Publishing Wizard allows you to define the basic properties of the published form (such as the name, location, as well as general availability and response information.



To configure the general properties for a published form:

<table>
<tr><th>Option</th><th>Setting(s)</th><th>What you need to know</th></tr>
<tr><td>Folders area</td><td>Browse the Folders area for the location where you want to save the published form.</td><td>Keep in mind the following considerations about the Folders area:
The Folders area displays the available folders to store published forms on the LiquidOffice server. You can only see forms in folders for which you have publishing rights.
If you select a folder to which you do not have publishing rights, the controls on the Publishing Wizard dialog box are unavailable. A Lock icon on the selected folder indicates that you do not have publishing rights.
You can delete empty folders to which you have publishing rights. You cannot delete or rename folders that contain forms.
When a new subfolder is created, it inherits publishing permissions from its parent folder.
To create a new folder, delete a folder, or rename a folder, use the toolbar buttons:<table><tr><th>To</th><th>Do this</th></tr><tr><td>Create a subfolder in the selected folder</td><td>Click  .</td></tr><tr><td>Delete the selected folder</td><td>Click  .</td></tr><tr><td>Rename the selected folder</td><td>Click  .</td></tr></table></td></tr>
<tr><td>Publish As box</td><td>In the Publish As box, enter a name for the form. The name of the form can be a maximum of 128 characters.</td><td>Processes can be published over existing forms or processes. When a process is published over a form, all permissions, routing settings, and export settings are removed. This ensures that if another form is published over the process, the new form does not inherit the settings from the original form.
The Publish As box might already contain the name of the form. You can publish the form using the existing name or enter a new name.
If you enter or select the name of an existing form, Form Designer will attempt to overwrite the existing form.</td></tr>
</table>

Option	Setting(s)	What you need to know
Attachment Location list	To specify where to store attachments, select an option from the **Attachment Location** list.	• If you select **FileSystem**,the attachments are stored in `Server Resources/attachments`. The location of the server resources directory is specified when OpenText LiquidOffice server is installed. • If you export data to a Document Management System, click a Document Management System Connect Agent. If you select a Document Management System Connect Agent, files attached to forms upload to the Document Management System in the directory provided when the Document Management System Connect Agent was configured (with the exception of URL attachments, which are stored in the OpenText LiquidOffice ROUTEATTACH database table). If you select a Document Management System that does not allow users to be authenticated automatically using the OpenText LiquidOffice Form, they need to set up their Document Management System User Names and Passwords. For more information about document management in Portal, see *Portal User Guide* . For more information about document management in Web Desktop, see *Web Desktop User Guide*.
Response Page URL check box	To use a custom response page, select the **Response Page URL** check box In the adjacent box, enter the URL for the response page that you want to use. The maximum URL length is 250 characters.	The default response page thanks the respondent for submitting the form. A response page appears when one of the following occurs: • For forms, after a form is submitted, and (if applicable) completes the routing settings, a response page appears. If forms are open for Work Queue processing, response pages are ignored and the next form appears until either processing is canceled or there are no more items in the queue. The response page of the last form is used in case of a Cancel action or Work Queue exhaustion. • For processes, after the process initiates, a response page appears. If a process is initiated and an initial form task is not specified in the process definition, the user is redirected to the response page URL (or the default response page). If an initial form task is specified in the process definition, the form appears and the response page URL is ignored.
Enabled check box	To enable the form so that it can be used by the users that you will later specify on the **Permissions** page, select the **Enabled** check box.	
Available through Folders check box	To allow the published form to be accessed through Portal, Web Desktop, or Mobile Portal, select the **Available through folders** check box.	

Option	Setting(s)	What you need to know
Available through 'Friendly URL' check box	To specify a user-friendly URL for the form, select the **Available through 'Friendly URL'** check box. In the **URL ID** box, enter the URL.	• The URL must be relative to the LiquidOffice server URL. For example, a friendly URL of `my/sample` would be accessed as `http://host:port/lfserver/my/sample`. • The URL must contain only legal URL characters. Spaces and other illegal characters are converted to underscores. • The URL ID must be unique throughout the entire OpenText LiquidOffice system (not just in the selected folder). If the URL ID is not unique, characters are appended to make it unique. • The maximum length of the URL is 250 characters.
Exclusive modification rights check box	To prevent anyone besides the publisher and OpenText LiquidOffice administrators from modifying the form, select the **Exclusive modification rights** check box.	
Offline save (HTML) check box	To allow the form to be saved for use offline, select the **Offline save (HTML)** check box.	• This feature is not available for PDF forms. • This option is available only if your license includes the Offline Forms option.
Description and **Keywords** boxes	The existing description and keywords assigned to the form automatically appear in the Description and Keyword boxes. This information is read-only and is specified in Form Designer or Process Studio before the form is published.	• To edit the description and keywords for forms, see "Publishing Wizard: General Properties (in Form Designer)" on page 61.

To progress forward through the Publishing Wizard, do one of the following:

- To continue the Publishing Wizard configuration, click **Next** to proceed to the Permissions page.

  For more information about the Permissions page, see "Publishing Wizard: Permissions (in Form Designer)" below.

- To accept the default options for any remaining Publishing Wizard settings, click **Finish**. The form is published to the LiquidOffice server. You can modify any of the Publishing Wizard properties later, using the Management Console.

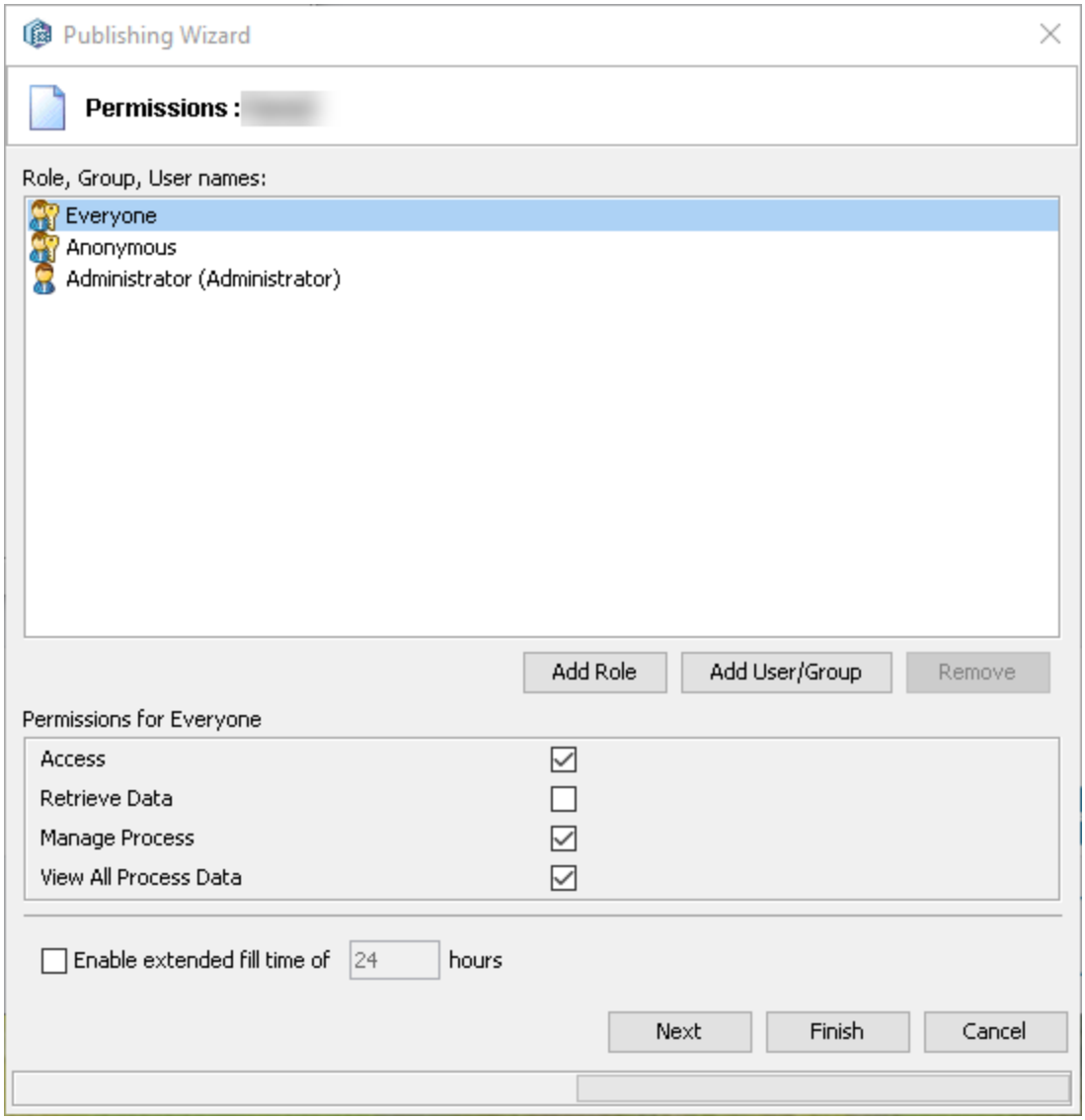
2.8.2 Publishing Wizard: Permissions (in Form Designer)

This topic assumes that you have already initiated the publishing process and have completed the General Properties of the Publishing Wizard.

For more information about publishing a form, see "Publishing a form in Form Designer" on page 60.

For more information about completing the general properties, see "Publishing Wizard: General Properties (in Form Designer)" on page 61.

The Permissions page of the Publishing Wizard controls how OpenText LiquidOffice users can interact with published forms.



To update permissions complete the following:

Action needed
Add any roles, groups, or users as needed (See "Managing Roles, Groups, and Users" on the next page)
Customize permissions for each user or group as needed (See "Customizing User Permissions" on page 68)

Action needed
To progress forward through the Publishing Wizard, do one of the following: • If you are publishing a form, click **Next** to proceed to the Routing page. For more information about the Routing page, see "Publishing Wizard: Routing Settings (in Form Designer)" on page 69. • If you are publishing a standalone document, click **Finish** to complete the publishing process. • To accept the default options for any remaining Publishing Wizard settings or to complete the publishing process, click **Finish**. The form is published to the LiquidOffice server. You can modify any of the Publishing Wizard properties later, using the Management Console.

Managing Roles, Groups, and Users

The **Role, Group, User names** list shows the roles, groups, and users whose permissions can be configured. By default, the list includes the following roles:

- **Everyone**—All authenticated users logged into the LiquidOffice server.
- **Anonymous**—Unauthenticated users that can access the form, process, or standalone document without logging in.

Note: If a form includes user profile fields and an Anonymous user opens it, the autofill function does not work.

Ensure that you test your form before granting Anonymous or Everyone access permission.

To add additional roles, users, or groups to the list:

Note: Groups apply only if a directory server is configured.

To	Do this
Add a user or group to the **Role, Group, User names** list	1. Click **Add User/Group**. The **Search Users** dialog box opens. 2. Search for or select any user or group. For more information about searching the LiquidOffice server, see "Searching the LiquidOffice Server (Form Designer)" on page 88. 3. Click **Add**. The user or group appears in the **Selected Items** list. If required, you can continue to add more users and groups. 4. Click **OK**. The selected users are added to the **Role, Group, User names** list on the **Permissions** page.
Add a role to the **Role, Group, User names** list	1. Click **Add Role**. The **Search Roles** dialog box opens. 2. Click a role in the list, and click **Add**. The role appears in the **Selected Items** list. You can add more roles if required. 3. Click **OK**. The selected roles are added to the **Permissions** page.

Customizing User Permissions

Depending on the role, group, or user that you select in the **Role, Group, User names** list, the **Permissions** area shows the permissions that are available to those users. Use the **Permissions** area to customize the permissions assigned to specific users.

Groups are only applicable if you have configured a directory server.

To configure the permissions of a form:

1. In the **Role, Group, User names** list, click the user, group, or role that you want to customize.
   For information about how to add users to this list, see "Managing Roles, Groups, and Users" on the previous page.
2. In the **Permissions** area, select or clear the permissions check boxes as needed to customize the permissions for the selected user. Review the following permissions options, as needed:

   Note: If a permission is available to a user or group by default, the check box is selected and is unavailable.

Permission	Description
Access	Allows users to open a form. If the Access permission is granted to *Anonymous* users, all other users, groups, and roles inherit this permission.
Retrieve Data	Allows users to retrieve data through the Data Client. For more information about retrieving data using data client, see *Data Client User Guide*. To retrieve data through the latest version of Data Client, a user must also be assigned the *My Data* role.
Manage Process	Allows users to manage the process in the **Activities** section of the Management Console. To manage the process, a user must also be assigned the *Process Administrator* role. **Note:** The Manage Process and View All Process Data permissions can apply to either a form or a process. If a form is associated with a process, both (Manage Process and View All Process Data) permissions set on the process take precedence over the permissions set on the form.
View All Process Data	Allows users to open a form associated with a process and to view the current form data. To use of this permission, a user must also be assigned to the *Process Administrator* role. **Note:** The Manage Process and View All Process Data permissions can apply to either a form or a process. If a form is associated with a process, both (Manage Process and View All Process Data) permissions set on the process take precedence over the permissions set on the form.

> **Note:** The only permission allowable for directory server groups and *Anonymous* is Access. The remaining permissions require a user ID on the OpenText LiquidOffice server.

3. For forms, to allow a user to submit forms after the session expires (without being required to log on to the OpenText LiquidOffice server), select the **Enable extended fill time** check box, and enter a time limit in the **hours** box.

> **Note:** If you select the **Enable extended fill time** check box, you must also edit the `dfserver.properties` server configuration file and set `EFTSessions` to `True`.

2.8.3 Publishing Wizard: Routing Settings (in Form Designer)

This topic assumes that you have already initiated the publishing process and have completed the Permissions page of the Publishing Wizard.

For more information about publishing a form, see "Publishing a form in Form Designer" on page 60.

For more information about completing the Permissions page, see "Publishing Wizard: Permissions (in Form Designer)" on page 65.

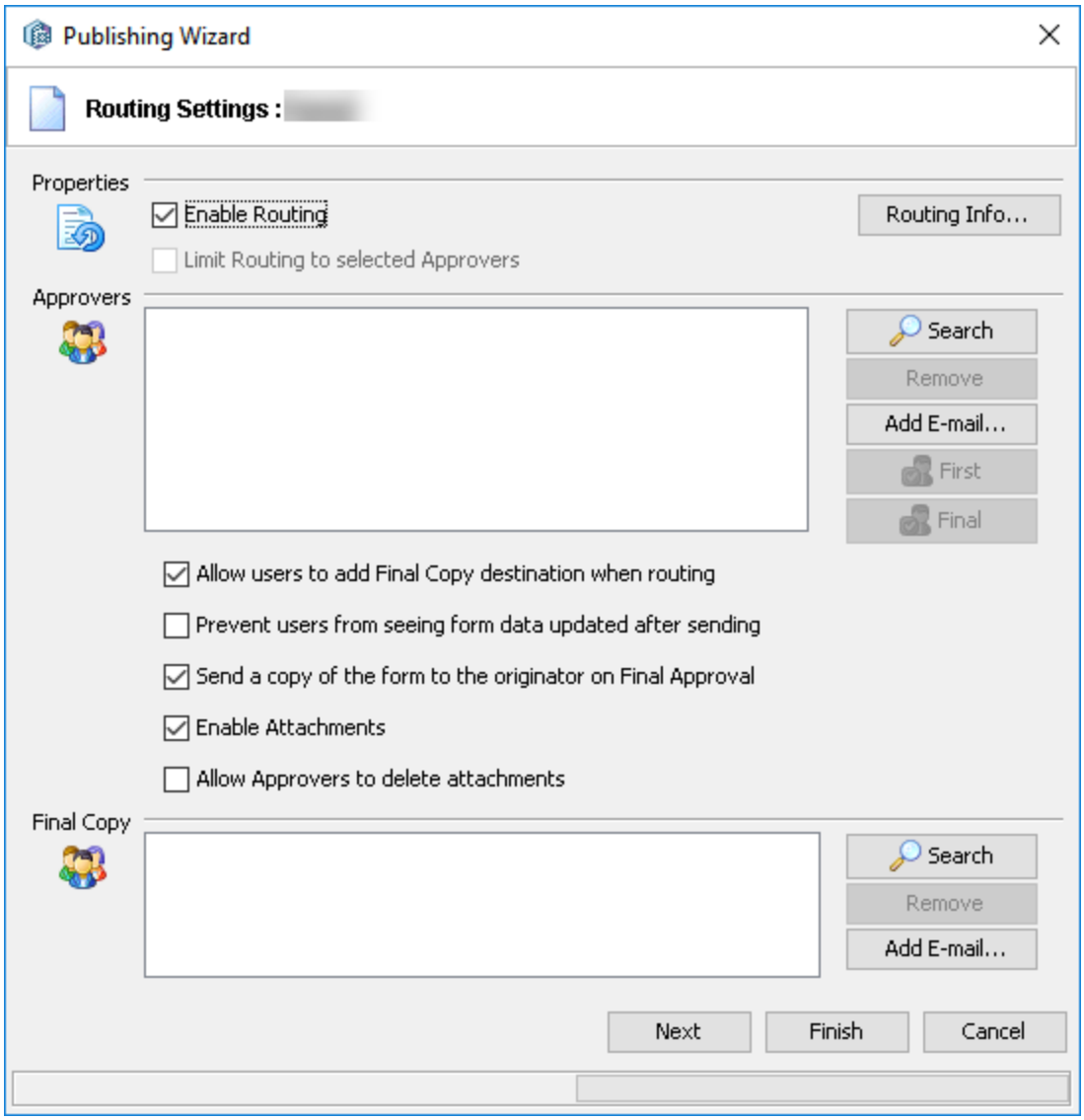
The Routing Settings page of the Publishing Wizard defines what happens to a form after the form is submitted. Routing is an optional function, you can publish a form without configuring routing or approval settings.

While working with approval settings, it is important to understand the following routing definitions:

- *Originator*—The user who first submits the form.
- *First approver*—A user who reviews the form after the originator submits it. The first approver reviews the form before any other user. If the first approver rejects the form, the routing process ends. Define a *First Approver* to make a form suitable for anonymous users to fill out. If an anonymous user completes a form, he or she can click Submit without seeing a routing page.
- *Final approver*—The last person to review the form before it is completely submitted. The final approver is the only user allowed to complete the approval process by finally approving the form. An email address cannot be used as a final approver.
  If a form requires only one approval, define the final approver.

Keep in mind the following considerations:

- If routing is enabled and a *first approver* is defined, a submitted form automatically goes to a predefined destination (for example, another user or a work queue).
- If routing is enabled and a *first approver* is not defined, a routing page opens to the user submitting the form. The routing page allows the user to route the form to a selected user.
- If routing is not enabled, the data from a submitted form is either exported or stored on the OpenText LiquidOffice server (depending on the data export settings), and the form is not forwarded to another user.



To configure form routing:

1. Do one of the following to specify whether routing is enabled on the form:

To	Do this
To enable routing,	a. Select the **Enable Routing** check box. b. Continue to the next step.
To disable routing,	a. Clear the **Enable Routing** check box. b. Skip to step 10.

2. To edit the routing instructions that appear on the published form, complete the following steps:
   a. Click **Routing Info**.
   b. In the **Routing information** dialog box, in the **HTML editor** box, enter the routing instructions to appear on the published form. You can use basic HTML tags to enhance the text.

      Tip: Click **Preview** to see the instructions in the **Preview** area.

   c. Click **OK**.

3. To configure the users who can approve the form, in the **Approvers** area, complete the following steps as needed:

To	Do this
Add approvers to the **Approvers** list	a. Click **Search**. b. In the **Search Users** dialog box, search for or select any user or group. For more information about searching the LiquidOffice server, see "Searching the LiquidOffice Server (Form Designer)" on page 88. c. Click **Add**. The user or group appears in the **Selected Items** list. If required, you can continue to add more users and groups. d. Click **OK**.
Assign a final approver for the form	a. In the **Approvers** list, click a user. b. Click **Final**. **Tip:** If a form requires only one approval, define only the final approver.
Assign a first approver for the form,	a. In the **Approvers** list, click a user. b. Click **First**.

To	Do this
Add an email address where the form can be sent for approval,	a. Click **Add E-Mail**. b. In the **E-mail address** box, enter an email address. c. Click **OK**. When routing to an email address, the OpenText LiquidOffice server first searches for that email address in the user profile settings on the OpenText LiquidOffice server. If a user is assigned that email address, the form routes to that user's OpenText LiquidOffice Inbox (instead of the corresponding email address).

4. Configure the following options as needed :

Option	Setting(s)	What you need to know
Limit Routing to select Approvers check box	• To prevent intermediate recipients from routing the form to users who are not defined in the **Approvers** list, select the **Limit Routing to selected Approvers** check box. • To allow users to submit the form and route it to an Approver of their choice, clear the **Limit Routing to selected Approvers** check box.	This option is unavailable unless users or email addresses are provided in the **Approvers** list.
Allow users to add Final Copy destination when routing check box	To allow anyone who accesses the form to send a final copy to users of their choice, select the **Allow users to add Final Copy destination when routing** check box	
Prevent users from seeing form data updated after sending check box	If you do not want users to see the form data after they submit the form, select the **Prevent users from seeing form data updated after sending** check box. If you want users to be able to access form data through their Sent Items folder, clear the **Prevent users from seeing form data updated after sending** check box.	
Send a copy of the form to the originator on final approval check box	To send a copy of the form to the originator after approval, select the **Send a copy of the form to the originator on final approval** check box.	If the originator is Anonymous, the **Send a copy of the form to the originator on final approval** option is unavailable.
Enable Attachments check box	To allow the originator and any approver to add attachments to the form, select the **Enable Attachments** check box.	
Allow Approvers to delete attachments check box	To allow approvers to delete attachments added by other users, select the **Allow Approvers to delete attachments** check box.	

5. To send a final copy of the form (after it completes the routing process) to one or more users, in the **Final Copy** area, complete the following steps as needed:

To	Do this
Add the users to the **Final Copy** list	a. Click **Search**. b. In the **Search Users** dialog box, search for or select any user or group. For more information about searching the LiquidOffice server, see "Searching the LiquidOffice Server (Form Designer)" on page 88. c. Click **Add**. The user or group appears in the **Selected Items** list. If required, you can continue to add more users and groups. d. Click **OK**.
Add email addresses to the **Final Copy** list	a. Click **Add E-Mail**. b. In the **E-mail address** box, enter an email address. c. Click **OK**. When routing to an email address, the OpenText LiquidOffice server first searches for that email address in the user profile settings on the OpenText LiquidOffice server. If a user is assigned that email address, the form routes to that user's OpenText LiquidOffice Inbox (instead of the corresponding email address).
Remove a user, work queue, or email address from the **Final Copy** list	a. In the **Final Copy** list, click the user or email address that you want to remove. b. Click **Remove**.

6. To progress forward through the Publishing Wizard, do one of the following:
   - If you are publishing a form, click **Next** to proceed to the Data Exports page.

     For more information about searching the LiquidOffice server, see "Searching the LiquidOffice Server (Form Designer)" on page 88.
   - To accept the default options for any remaining Publishing Wizard settings or to complete the publishing process, click **Finish**. The form, process, or file is published to the LiquidOffice server. You can modify any of the Publishing Wizard properties later, using the Management Console.

2.8.4 Publishing Wizard: Data Export (in Form Designer)

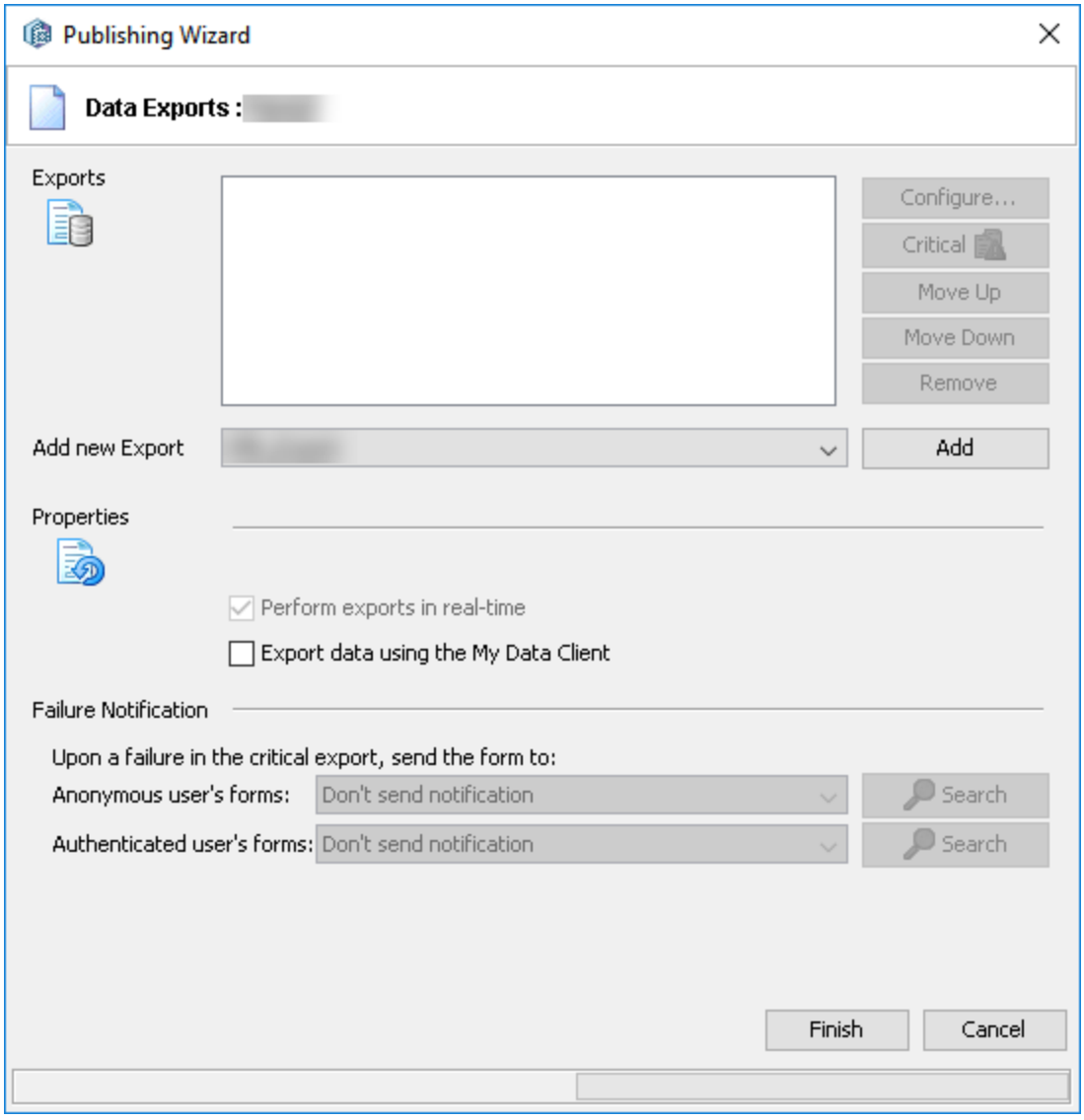
This topic assumes that you have already initiated the publishing process and have completed the Routing Settings page of the Publishing Wizard.

For more information about publishing a form, see "Publishing a form in Form Designer" on page 60.

For more information about completing the Routing Settings page, see "Publishing Wizard: Routing Settings (in Form Designer)" on page 69.

The Data Export page allows you to define how to export and store form data. Data exports run upon the finalization of a routed form, or upon the submission of an unrouted form. Form data can be exported to an external database, an XML file, or stored on the OpenText LiquidOffice server for retrieval using the OpenText LiquidOffice Data Client.

The OpenText LiquidOffice server uses *connect agents* to export data to external databases. Your OpenText LiquidOffice server administrator configures the connect agents. To configure a data export to an external database, you need to know the name of the connect agent to use.



To configure data exports

1. In the **Exports** area, configure the data exports that you require to export form data.

To	Do this
Add a data export definition, or to configure a data export definition	See the following topics: • "Data Export to a SQL Database (in Form Designer)" on the next page • "Data Export to XML (in Form Designer)" on page 80 • "Data Export using an Export Script (in Form Designer)" on page 81 • "Data Export to WorkSite (in Form Designer)" on page 82 • "Data Export to Meridio (in Form Designer)" on page 85 • "Data Export to OpenText Content Server (in Form Designer)" on page 87 • "Data Export to Microsoft SharePoint (in Form Designer)" on page 88
Delete a data export definition	Click the export in the **Exports** list, and then click **Remove**.
Define a data export definition as critical	You can define data exports as *critical*. If a critical data export fails, the form submission is incomplete. Critical data exports always run before noncritical exports. **Important:** If a critical data export fails and **Perform Exports in real-time** is selected, it is essential to configure export failure notification. To define critical data exports a. In the **Exports** list, click a data export. b. Click **Critical**. If a data export is marked as critical, an exclamation point appears next its name. If the critical status is removed, the exclamation point is removed.
Change the order in which a data export executes	Data exports run in the order they appear in the Exports list. To change the execution order, do one of the following: • To run a data export definition earlier in the sequence, click the export in the list, and then click **Move Up**. • To run a data export definition later in the sequence, click the export in the list, and then click **Move Down**.

2. Configure the following options as needed:

Option	Setting(s)	What you need to know
Perform exports in real time check box.	To export form data immediately after the submission of an unrouted form, select the **Perform exports in real time** check box. If the **Perform exports in real time** check box is clear, data might be exported after the user receives the response. **Note:** The user receives a response for submitting the form after the data is exported.	It is useful to clear this check box if you have a connect agent that takes excessive time to export the data.
Export Data using the Data Client check box.	To store form data on the OpenText LiquidOffice server so that it can be retrieved using OpenText LiquidOffice Data Client, select the **Export Data using the Data Client** check box.	For more information about Data Client, refer to the *OpenText LiquidOffice Data Client User Guide*.

3. To configure how LiquidOffice responds to a failure in a critical export, In the **Failure Notification** area, complete the following steps as needed:

For these forms	Do this
Anonymous user's forms	a. In the Anonymous user's forms box, click the name of the user that should be notified when a data export fails. b. To select a user, click **Search**.
Authenticated user's forms	a. In the Authenticated user's forms box, click the name of the user that should be notified when a data export fails. b. To select a user, click **Search**. c. To also notify the user who submitted the form, click **Submitter**.

4. To complete the publishing process, click **Finish**. The form, process, or file is published to the LiquidOffice server. You can modify any of the Publishing Wizard properties later, using the Management Console.
5. On the Publishing Completed page, do one of the following:
   - To open the published form, click **Open**. The Publishing Wizard closes and the published form opens.
   - To close the Publishing Wizard, click **Close**.

Data Export to a SQL Database (in Form Designer)

This topic assumes that you have already initiated the publishing process and are currently defining Exports for the Data Export page of the Publishing Wizard.

For more information about publishing a form, see "Publishing a form in Form Designer" on page 60.

For more information about completing the Data Export page, see "Publishing Wizard: Data Export (in Form Designer)" on page 73.

This topic assumes you have previously set up a SQL database connect agent. For information about setting up a SQL database connect agent, see *Management Console User Guide*.

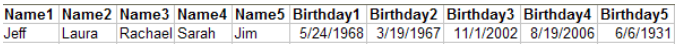
To configure a data export to an external database using a new table:

1. In the Publishing Wizard, in the Data Exports page, do one of the following:

To	Do this
Configure an existing data export	Select the export in the **Exports** list, and click **Configure**.
Add a new data export	a. In the **Add new Export** list, click the SQL database connect agent that you want to use. b. Click **Add**.

   The **Data Export Configuration** dialog box opens.

2. In the **Data Export Configuration** dialog box, to specify the format of exported data, in the **Export Mode** list, select the data export mode:

Option	What you need to know
Form mode	If the form does not contain any tables, **Form View** is selected by default. Form mode exports data from each form field to a separate column in the database. Form mode is therefore suitable for exporting data from individual form fields. However, form mode is not optimized to export data from tables. For example, if a form contains a table with five repetitive rows, and each row contains two data entry fields, the exported data requires ten columns.  The Form Fields list and the field mapping table in the Data Export Configuration dialog box respond to the selected export mode. When Form export mode is selected: • All form fields appear. Repetitive fields in tables are listed separately and are exported to different columns in the export database. • Fields added dynamically to dynamic tables do *notappear* If the form includes a dynamic table, only the fields in the default table rows are listed. It is not possible to export dynamically-created table fields in **Form** mode. To export dynamic table fields, you must configure another data export and use **Table** mode.

Name1	Name2	Name3	Name4	Name5	Birthday1	Birthday2	Birthday3	Birthday4	Birthday5
Jeff	Laura	Rachael	Sarah	Jim	5/24/1968	3/19/1967	11/1/2002	8/19/2006	6/6/1931

Option	What you need to know
Table mode	Table export mode simplifies the export of data collected from tables. Data collected from "repetitive" data entry fields is exported to a single column. (For more information about repetitive tables, refer to the *OpenText LiquidOffice Form Designer User Guide*.) For more information about repetitive tables, see "Creating a table object" on page 181. For example, if a form contains a table with five repetitive rows (as in the previous example), and each row contains two data entry fields, the exported data requires only two columns as shown in the following table. **Name** / **Birthday** Jeff — 5/24/1968 Laura — 3/19/1967 Rachael — 11/1/2002 Sarah — 8/19/2006 Jim — 6/6/1931 The Form Fields list and the field mapping table in the Data Export Configuration dialog box respond to the selected export mode. When a table in **Table export** mode is selected: • The fields in the heading row of the selected table are listed. Duplicated fields do not appear because in Table export mode, data from repetitive fields is stored in the same column. (For more information about repetitive fields, refer to the *OpenText LiquidOffice Form Designer User Guide*.) For more information about repetitive tables, see "Creating a table object" on page 181. • Fields in other tables are not exported in Table mode. If a form contains multiple tables, more than one data export is necessary to export all of the data. Create a data export for each table in the **Export Mode** list. • The remaining form fields appear at the bottom of the **Form Fields** list or the field mapping table. You can choose to collect these fields (for every table row), or not export these fields and to collect them using a separate **Form** mode export.

Important: The most efficient method of collecting data from forms that contain repetitive or dynamic tables is to use the following strategy.

- Use a single, **Form mode** data export to collect data from individual form fields.
- Use a **Table mode** data export to collect data from each repetitive or dynamic table on the form.

3. Depending on whether you are using a new or existing table in an external database, do one of the following:

To	
Export data to a new table in an external database	a. Click **Create a new Table** and in the adjacent box, enter a table name. b. Do the following to select the fields that you want to export to the external database: • To select the form fields to export to the external database, in the **Form Fields** list, select the form fields you want to export and click  to add the form field ot the Database Columns . **Note:** The form fields that are available for export depend on the selected export mode. **Tip:** To select multiple items, click the first field, hold down `Shift`, and click the last field in the range. To select multiple nonsequential fields, click the first field, hold down `Ctrl`, and click another field. • To remove form fields that you do not want to export to the external database, in the **Database Columns** list, select any form fields that you *do not want* to export and click  to move the selected form field back to the **Form Fields** list . • To change the order of the exported fields, use a sequence button to move a selected field. **Note:** The field values are exported in the order the fields appear in the Database Columns list. The first item in this list is exported to the first column in the target database.  Move the selected field to the top of the export order.  Move the selected field up the export order.  Move the selected field one down the export order.  Move the selected field to the bottom of the export order.

To	
Export data to an existing table in an eternal database	When you export form data to an existing database table, you can choose which columns in the table receive data from which form fields. The Table Columns list shows the existing columns in the database table. The Column Type list shows what type of data each column can accept. a. Click **Select an existing Table,** and then click a table name in the list. b. Map the form fields to the columns in the database table. **Note:** The form fields that are available for export depend on the selected export mode. • Click each cell in the **Form Field** column and then select a form field from the list. • The value from the selected form field is stored in the database column indicated in the **Table Column** column.

Data Export to XML (in Form Designer)

This topic assumes that you have already initiated the publishing process and are currently defining Exports for the Data Export page of the Publishing Wizard.

For more information about publishing a form, see "Publishing a form in Form Designer" on page 60.

For more information about completing the Data Export page, see "Publishing Wizard: Data Export (in Form Designer)" on page 73

This topic assumes that you have previously set up an XML connect agent. For information about setting up an XML connect agent, see *Management Console User Guide*.

OpenText LiquidOffice can export form data to XML files. A unique XML file is created for each submitted form.

To add or configure data export to an XML file:

1. In the Publishing Wizard, in the Data Exports page, do one of the following:

To	Do this
Configure an existing data export	Select the export in the **Exports** list, and click **Configure**.
Add a new data export	a. In the **Add new Export** list, click the XML connect agent that you want to use. b. Click **Add**.

   The **XML Export Setup** dialog box opens.

2. In the **File Name** box, enter a file name for the XML file.

3. To use UTF-8 encoding, select the **UTF-8 encoding** check box.
4. To include a PDF copy of the form in the data export, complete the following steps:
   a. Select the **Include form** check box.
   b. To include attachments in the data export, select the **and attachments** check box.
   c. To flatten the PDF, select the **Flatten form image** check box and configure the PDF form:

Option	Description
Include Notes page	To include routing notes, select the **Include Notes page** check box. The notes are appended to the PDF file.
Include Routing page	To include the routing history of the form, select the **Include Routing page** check box. The routing information is appended to the PDF file.
Encrypt PDF	To encrypt the PDF, select the **Encrypt PDF** check box. The PDF is encrypted with a blank, open password and a randomly-generated, owner password. The PDF can be read, but not edited. This prevents changes being made to the document.
Auto size text to fit in viewable field	To automatically modify the size of text so that it fits the visible area of a form field, select this check box. This can result in a small text size when a large amount of data is placed in a small entry field, but it ensures that all of the text can be read.
Expand into multiple pages based off the viewed representation	To enable page breaking, select this check box.
Evaluate expressions prior to flattening	To evaluate all expressions before generating the PDF, select this check box.

> **Caution:** If you try to export a form containing a large dynamic table, it can produce very large PDF pages. Adobe Reader or Acrobat might not be able to open a PDF file containing a page more than 200 inches long.
>
> To split a large dynamic table across multiple pages in a flattened PDF, select the option **Expand into multiple pages based off the viewed representation**.

5. Click **OK**.

Data Export using an Export Script (in Form Designer)

This topic assumes that you have already initiated the publishing process and are currently defining Exports for the Data Export page of the Publishing Wizard.

For more information about publishing a form, see "Publishing a form in Form Designer" on page 60.

For more information about completing the Data Export page, see "Publishing Wizard: Data Export (in Form Designer)" on page 73.

This topic assumes that you have previously set up an Export Script connect agent. For information about setting up an Export Script connect agent see *Management Console User Guide*.

The Export Script Connect Agent uses a custom script to export data. For more information about writing custom script, refer to the *Management Console User Guide*.

To configure data export with an Export Script Connect Agent

1. In the Publishing Wizard, in the Data Exports page, do one of the following:

To	Do this
Configure an existing data export	Select the export in the **Exports** list, and click **Configure**.
Add a new data export	a. In the **Add new Export** list, click the Export Script Connect Agent that you want to use. b. Click **Add**.

   The **Export Script Setup** dialog box opens.

2. In the **Export Script Setup** dialog box, to specify a parameter for the script, enter the parameter in the **Parameter** box.

   When you use an Export Script Connect Agent to export data from OpenText LiquidOffice, you can pass parameters to the script.

   - A *base parameter* can be defined when the connect agent is created in the Management Console. All of the data exports that use the connect agent pass the base parameter to the script. The base parameter typically specify a folder or general area for data storage.
   - A *secondary parameter* can be defined when you create a data export. Each data export can use a different secondary parameter. The secondary parameter typically specifies a file name or the detailed data storage location.

   For example, If you configure your Export Script to send an email, with the following code, the base parameter specifies the address that the email is sent from. The secondary parameter specifies the destination address.

```
SERVERMail.send ( base, secondary, "Export Script", "Form Submitted");
```

Data Export to WorkSite (in Form Designer)

This topic assumes that you have already initiated the publishing process and are currently defining Exports for the Data Export page of the Publishing Wizard.

For more information about publishing a form, see "Publishing a form in Form Designer" on page 60.

For more information about completing the Data Export page, see "Publishing Wizard: Data Export (in Form Designer)" on page 73.

This topic assumes that you have previously set up a WorkSite Export Plug-in connect agent. For information about setting up a WorkSite Export Plug-In connect agent, see *Management Console User Guide*

OpenText LiquidOffice includes a WorkSite Export Plug-In connect agent that you can use to export form data and attachments to WorkSite.

To configure data export to WorkSite:

1. In the Publishing Wizard, in the Data Exports page, do one of the following:

To	Do this
Configure an existing data export	Select the export in the **Exports** list, and click **Configure**.
Add a new data export	a. In the **Add new Export** list, click the Worksite Connect Agent that you want to use. b. Click **Add**.

2. In the **Export to Worksite Setup** dialog box, click the **Document Creation** tab.
3. Do the following:

Option	Setting(s)	What you need to know

Location information box	Enter the location where you want to save the exported form and attachments.	• To export data to the location defined when the connect agent was configured, use the default location.
		• To specify a different location, type the location in the format `[Database]\Workspace\Folders.` `Database` is a WorkSite database or library. `Workspace` is a WorkSite workspace. For example:
		The workspace must already exist, however, if you specify folders that do not exist, they are created.
		`[LO]\LO Exports\MyFolder`
		• To specify a location using the value of a form field, use the syntax `$Field(FieldName)`.
		In the following example, the data and attachments from each form are exported to a different folder (based on the value of the `Originator` field).
		`[LO]\LO Exports\$Field(Originator)`
		• To specify a location using a workspace moniker, type the moniker.
		If the moniker does not exist the export fails. The moniker must start with the exclamation (!) character. For example:
		If you do not specify a form field or type text, the following default values are used:
		`!nrtdms :0:!session:loworksite9:!database:LOWS_ 9:!page:14:`

Option	Setting(s)	What you need to know
File Name box	Specify the file name for the exported form image.	If you include additional folders, these are appended to the location specified in Step 2. In the following example, the form and any attachments are saved in a folder called `Form and Attachments`, and the PDF form image is named `Form`. `Form and Attachments\Form`

4. To include attachments in the data export, select the **Include attachments** check box.
5. To include a PDF copy of the form in the data export, complete the following steps:
   a. Select the **Include form** check box.
   b. To flatten the PDF, select the **Flatten form image** check box and configure the PDF form:

Option	Description
Include Notes page	To include routing notes, select the **Include Notes page** check box. The notes are appended to the PDF document.
Include Routing page	To include the routing history of the form, select the **Include Routing page** check box. The routing information is appended to the PDF document.
Encrypt PDF	To encrypt the PDF, select the **Encrypt PDF** check box. The PDF is encrypted with a blank, open password and a randomly-generated, owner password. The PDF can be read, but not edited. This prevents changes from being made to the document.
Auto size text to fit in viewable field	To automatically modify the size of text so that it fits the visible area of a form field, select this check box. This can result in a small text size when a large amount of data is placed in a small entry field, but it ensures that all of the text can be read.
Expand into multiple pages based off the viewed representation	To enable page breaking, select this check box.

> **Caution:** If you try to export a form containing a large dynamic table, it can produce very large PDF pages. Adobe Reader or Acrobat might not be able to open a PDF file containing a page more than 200 inches long.
>
> To split a large dynamic table across multiple pages in a flattened PDF, select the option **Expand into multiple pages based off the viewed representation**.

6. Click the **Document Properties** tab.
7. To configure the profile information for documents (forms, documents, and attachments) that are exported through the WorkSite Connect Agent, in the **Form Fields** column, do one of the following:

To	Do this
Select an existing LiquidOffice form field to populate the property values	In the Form Fields column, select the name of the LiquidOffice form field that you want to use for the property value.

To	Do this
Enter a custom value for the form fields	In the Form Fields column, enter a name for the form field.
Use the default values for the form fields	If you do not specify a form field or type text, the following default values are used: Property: Value Class: DOC Type: Auto Detected Author: Connect Agent User Name Operator: Connect Agent User Name Description: Original File Name

Data Export to Meridio (in Form Designer)

This topic assumes that you have already initiated the publishing process and are currently defining Exports for the Data Export page of the Publishing Wizard.

For more information about publishing a form, see "Publishing a form in Form Designer" on page 60.

For more information about completing the Data Export page, see "Publishing Wizard: Data Export (in Form Designer)" on page 73.

This topic also assumes that you have previously created a Meridio connect agent. For more information about creating a Meridio connect agent, see *Management Console User Guide*.

OpenText LiquidOffice includes a Meridio Export plug-in connect agent that allows you to export form data and attachments to Meridio.

Tip: Field value substitution [for example, `$Field(UNIT4)`] can be used in the **Storage Settings**, **Document Info**, and **Field Selection** tabs.

To configure data export to Meridio:

1. In the Publishing Wizard, in the Data Exports page, do one of the following:

To	Do this
Configure an existing data export	Select the export in the **Exports** list, and click **Configure**.
Add a new data export	a. In the **Add new Export** list, click the Meridio connect agent that you want to use. b. Click **Add**.

   The **Export to Meridio Setup** dialog box opens.

2. Click the **Document Creation** tab.

3. To select the path to the folder that Meridio monitors for new data, in the **Path to EDC Generic Importer** box, click Select to browse to and select the path.
   OpenText LiquidOffice exports the form data to this folder.
4. To include attachments in the data export, select the **Include attachments** check box.
5. To include a PDF copy of the form in the data export, complete the following steps:
   a. Select the **Include form** check box.
   b. To flatten the PDF, select the **Flatten form image** check box and configure the PDF form:

Option	Description
Include Notes page	To include routing notes, select the **Include Notes page** check box. The notes are appended to the PDF document.
Include Routing page	To include the routing history of the form, select the **Include Routing page** check box. The routing information is appended to the PDF document.
Encrypt PDF	To encrypt the PDF, select the **Encrypt PDF** check box. The PDF is encrypted with a blank, open password and a randomly-generated, owner password. The PDF can be read, but not edited. This prevents changes from being made to the document.
Auto size text to fit in viewable field	To automatically modify the size of text so that it fits the visible area of a form field, select this check box. This can result in a small text size when a large amount of data is placed in a small entry field, but it ensures that all of the text can be read.
Expand into multiple pages based off the viewed representation	To enable page breaking, select this check box.

> **Caution:** If you try to export a form containing a large dynamic table, it can produce very large PDF pages. Adobe Reader or Acrobat might not be able to open a PDF file containing a page more than 200 inches long.
>
> To split a large dynamic table across multiple pages in a flattened PDF, select the option **Expand into multiple pages based off the viewed representation**.

6. Click the **Storage Settings** tab.
7. To specify how exported documents are stored, customize the following settings as needed:

Option	Description
Fileplan	Meridio's storage path
Owner	A Meridio user who should own the exported document
Access Control	Meridio access is generally inherited. This box provides for one additional Meridio user.
Protective Markings	This box provides one additional marking.
Keep Online	Keep the document online, regardless of the Meridio policy.
Policy	The Meridio system determines the archive and deletion strategy.
Disposal Schedule Chain	Disposal Schedule Chain is the name of the Meridio disposal schedule.
Indexing Type	Type of Meridio indexing to perform. By default the **New** box is selected.

8. (*Optional*) Click the **Storage Settings** tab.
   The Storage Settings tab specifies how exported documents (forms, documents, or attachments) are stored.
9. Click the **Document Info** tab.

   Note: The Document Info tab allows you to specify information about documents (that may be forms, documents, and attachments) that are exported through the Meridio Connect Agent. All fields on this tab are optional.

   a. Type the following information.

Title	A title for the Meridio document to add.
Comment	A description of the document or comments about the document.
Author	An author for the Meridio document.
Category	The Meridio category name.

10. Click the **Field Selection** tab.

    Note: The Field Selection tab allows you to select fields from the form to export to Meridio.

    a. Select the check boxes for the fields that you want to export to Meridio.
    b. If necessary, you can modify the Meridio Index fields.
11. Click **OK**.

Data Export to OpenText Content Server (in Form Designer)

This topic assumes that you have already initiated the publishing process and are currently defining Exports for the Data Export page of the Publishing Wizard.

For more information about publishing a form, see "Publishing a form in Form Designer" on page 60.

For more information about completing the Data Export page, see "Publishing Wizard: Data Export (in Form Designer)" on page 73.

This topic also assumes that you have previously created a Content Server export connect agent. For more information about creating a Content Server export connect agent, see *Management Console User Guide*.

A Content Server export connect agent allows exporting form data and attachments to OpenText Content Server.

Because of the setup requirements for Content Server export connect agents, you cannot configure or add a new Content Server data export using the Publishing Wizard. If you want to use a Content Server export connect agent, you must complete the setup using the file properties in Management Console.

Note: If you attempt to select a Content Server export connect agent as a new data export you are prompted to instead configure the connect agent using Management Console.

For more information about managing Data Export to Content Server using the file properties in Management Console, see*Management Console User Guide*.

Data Export to Microsoft SharePoint (in Form Designer)

This topic assumes that you have already initiated the publishing process and are currently defining Exports for the Data Export page of the Publishing Wizard.

For more information about publishing a form, see "Publishing a form in Form Designer" on page 60.

For more information about completing the Data Export page, see "Publishing Wizard: Data Export (in Form Designer)" on page 73.

This topic also assumes that you have previously created a SharePoint connect agent. For more information about creating a Content Server export connect agent, see *Management Console User Guide*.

The SharePoint export connect agent allows exporting form data and attachments to SharePoint, specifically to a document library in a SharePoint site.

Because of the setup requirements for SharePoint export connect agents, you cannot configure or add a new SharePoint data export using the Publishing Wizard. If you want to use a SharePoint export connect agent, you must complete the setup using the file properties in Management Console.

Note: If you attempt to select a SharePoint export connect agent as a new data export you are prompted to instead configure the connect agent using Management Console.

For more information about managing Data Export to SharePoint using the file properties in Management Console, see*Management Console User Guide*.

2.9 Searching the LiquidOffice Server (Form Designer)

Sometimes, while working through specific tasks in LiquidOffice, you might be required to search the LiquidOffice server to find the object needed to complete the task.

For example in Form Designer, when you add a user to the **Role, Group, User names** list, you can search for the users that you want to assign to the list.

The search feature enables you to search for the following content, depending on the task that you are trying to complete:

- LiquidOffice users
- Groups (for LiquidOffice servers with LDAP or OTDS)
- Work queues
- Relationships

To search the LiquidOffice server:

1. Access the search dialog box. You can access the search dialog box from multiple locations in the interface depending on the task that you are performing.

   For information about accessing specific search functionality in Form Designer, see the following topics:

   - "Publishing Wizard: Permissions (in Form Designer)" on page 65
   - "Publishing Wizard: Routing Settings (in Form Designer)" on page 69

   For information about specific Management Console tasks that involve searching the LiquidOffice server, see *Management Console User Guide*.

   For information about specific Process Studio tasks that involve searching the LiquidOffice server, see *Process Studio User Guide*.

2. In the **Search for** box, enter a search term. For example, you can enter the name of the form or information that you know is associated with the form such as searching the form text, the name of the author, the process name, and other keywords.

   > **Note:** You can use the asterisk (*) character as a wildcard. For example, type * to search for everything.
   >
   > You must type at least one alpha-numeric character or the wild-card character * in the **Search for** box to perform a search.

3. In the **in** list, click an option to specify where to search.
   The available options depend on the type of search.

Search option	Where used	Description
Everywhere	All searches	Includes all available search areas
UserID	Users	User IDs
First Name	Users	First Names
Last Name	Users	Last Names
Last Name, First Name	Users	Last Name, First Names

Search option	Where used	Description
Work Queue	Work Queues	Work Queues
Relationship	Relationships	Relationships

4. If you search for Users, you can specify further options.

Contains	Search for words that contain the search term.
Starts With	Search for words that start with the search term.
Exact Match	Search for an exact match of the search term.

5. Click **Search**.
   The search results appear in the list. If necessary, you can search again.
6. Select one or more of the search results.

Task	Description
To browse the folders on the LiquidOffice server	• To open a folder, double-click its name in the list. • To move up a level in the directory structure, click  .
To select one search result	Click the item, and then click **OK**.
To select multiple items	a. Select one or more items in the list, and then click **Add**. The items are added to the **Selected Items** list. If required, you can search the LiquidOffice server again. To remove an item from the **Selected Items** list, click the item, and then click **Remove**. b. Click **OK** to confirm your selection.

3 Shapes and objects

This section provides information about the shapes and objects that are available in Form Designer.

The shapes and objects in the **Gallery** are available to build and customize your forms. The following table provides an overview of each object.

Object	Description	HTML	PDF
 Arc	Adds a curved line to the form. For more information, see "Creating general shapes (arc, ellipse, line, rectangle)" on page 120	✗	✓
 Barcode	Barcodes can be populated with data from the fields on a form. For more information, see "Creating a barcode object" on page 121.	✓	✓
 Button	Buttons trigger events. When a respondent clicks a button, an event occurs. For more information, see "Creating a button object" on page 128.	✓	✓
 Check Box	Use a check box to collect a *yes* or *no* response, or to allow a respondent to choose multiple items from a list of choices. For more information, see "Creating a check box object" on page 133.	✓	✓
 Drop List	Use a drop list to allow respondents to choose from a selection of items while minimizing the space needed on the form. For more information, see "Creating a list or drop list object" on page 159.	✓	✓
 Ellipse	Use the ellipse to draw a circle or an ellipse around an item on your form. For more information, see "Creating general shapes (arc, ellipse, line, rectangle)" on page 120.	✗	✓
 Entry Field	Entry fields collect textual data typed by respondents. Entry fields allow you to collect many types of information. For more information, see "Creating an entry field object" on page 136.	✓	✓
 Entry Field (title inside)	An entry field (title inside) is an entry field that is configured to display its title inside the border of the field itself. For more information, see "Creating an entry field object" on page 136.	✓	✓
 HTML Viewer	The HTML viewer displays HTML. For more information, see "Creating an HTML viewer object" on page 152.	✓	✗
 Hyperlink	Use the hyperlink object to add a link to a Web site or an Intranet page. For more information, see "Creating a hyperlink object" on page 156.	✓	✓

Object	Description	HTML	PDF
 Image Viewer	The image viewer adds a viewing area to HTML forms that allows users to view images. For more information, see "Creating an image viewer object " on page 157.	✓	✗
 Ink Picture	An ink picture field can capture free-form drawing or an online signature created with a stylus/pen device or a mouse. Ink pictures are read-only in PDF format. For more information, see "Creating an ink picture object" on page 158.	✓	✓
 Line	Adds a line to the form. You might want to insert a line to separate sections of your form. HTML forms support only horizontal and vertical lines. For more information, see "Creating general shapes (arc, ellipse, line, rectangle)" on page 120.	✓	✓
 List	A list allows respondents to choose from a predefined selection of items. For more information, see "Creating a list or drop list object" on page 159.	✓	✓
 PDF417	The PDF417 format is a high-density, two-dimensional bar code that allows the entire 255-character ASCII set. For more information, see "Creating a barcode object" on page 121.	✓	✓
 Radio Group	Radio groups limit a respondent to choose only one item from a defined list. For more information, see "Creating a radio group object" on page 166.	✓	✓
 Rectangle	Use the rectangle object to add a rectangle to the form. You might want to use a rectangle to divide sections of the form. For more information, see "Creating general shapes (arc, ellipse, line, rectangle)" on page 120.	✓	✓
 Signature	Add a signature object to collect validation information and lock form fields after a respondent signs the form. For more information, see "Creating a signature object" on page 170.	✓	✓
 Smart Text	The smart text object adds a variable to your form (for example, the date, time, or page count). For more information, see "Creating a smart text object" on page 178.	✓	✓
 Submit Action	A Submit Action object provides respondents with options for submitting a published form, depending on where the form is in the routing process. For more information, see "Creating a submit action object" on page 179.	✓	✓
 Table	Tables provide an organizational structure or quickly create repetitive rows of data entry fields and other objects. For more information, see "Creating a table object" on page 181.	✓	✓
 Text Box	Use a text box to add formatted text to the form. For more information, see "Creating a text box object" on page 204.	✓	✓

In addition to the previously listed objects, this section also discusses the following topics:

- "Adding an object to a form" on the next page
- "Selecting objects in a form" on page 94

3.1 Adding an object to a form

To add objects to a form, complete one of the following tasks:

Tip: To avoid printing problems, leave at least a 1/8th (0.125) inch (3.175 mm) margin around the edge of form pages. Some printers cannot accommodate objects that are placed near the edge of a page. You can use Margins to indicate the portion of the form page that should be off-limits to objects. For more information about defining margins, see "Defining the page setup and margins of a form" on page 51.

Task	Description
To add objects from the Gallery to a form	• Drag an object from the **Gallery** to any part of the form • Right-click an object in the Gallery, and then click **Add to form**
To place and size objects simultaneously	To add an object to the form and to define its size at the same time: 1. In the **Gallery**, double-click the object that you want to add to the form. 2. Move the mouse pointer over the form. The pointer changes to display a small version of the object. 3. Drag the mouse pointer across the page to simultaneously place the object and set its dimensions. The object is added to the form as soon as you release the left mouse button.

Task	Description
To paste an object from the clipboard	You can copy objects from other applications on your computer, or from within Form Designer, and paste them onto your form. The following formats are supported: • Plain text • RTF (Rich Text Format) • BMP (Bitmap) • JPEG (Joint Photographic Experts Group) • PNG (Portable Network Graphic) • TIFF (Tagged Image File Format), except those that use LZW compression • WMF (Windows MetaFile) • LiquidOffice objects placed on the clipboard To copy and paste an item into Form Designer 1. Select the item that you want to add to your form and copy it to the clipboard (for example, click press `Ctrl+C`). 2. In Form Designer, click the page where you want to place the object, and paste the object (for example, press `Ctrl+V`).

3.2 Selecting objects in a form

Selecting an object makes it subject to modification. For example, if you select a rectangle, and then press `Delete`, the rectangle is removed from the form.

Before selecting objects in Form Designer, make sure that the  (**Pointer**) button is selected in the Modes toolbar.

To select an object, complete the following tasks as needed:

Task	Description
Select one or more objects by pointing and clicking them with the mouse	• To select a single object, click the object. • To select multiple objects, press and hold SHIFT as you click each additional object. **Tip:** To cancel selection of an object, click an object a second time.

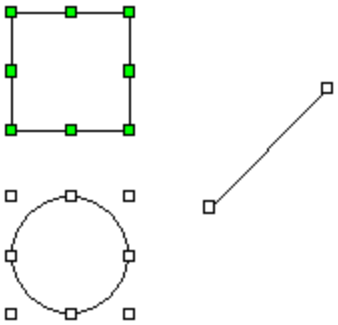
Task	Description
Select an object using the bounding outline or marquee	A bounding outline or marquee is a dashed line created by holding down the left mouse button and dragging the mouse pointer across the form. It represents the part of a form that is selected when you release the left mouse button. You can use a marquee to quickly select multiple objects. **Note:** Any object that is overlapped by the marquee is selected. You can change the operation of the marquee to select only objects that are completely enveloped. See "Configuring the Global General settings" on page 20. To select objects using the marquee: 1. Use the mouse to drag a marquee around all the objects that you want to select. 2. To cancel the selection of any objects, hold down `Shift` and click each item that you do not want in the selection.
Select the objects that you do not want to change and then invert the selection	1. Use your preferred selection method to select the objects that you do not want to change. 2. On the menu bar, click **Edit > Invert Selection**. • Any currently selected objects are cleared. • Any objects that currently are not selected are selected.

3.3 Adjusting the placement of objects

This section describes how to move and resize objects on the form.

3.3.1 Understanding how dominant objects affect object placement

When several items are selected, the object with green selection handles is the dominant object. In the following figure, the square is the dominant object.



The dominant object is used as a reference point for a command that affects multiple objects. For example, if you choose the **Make same height** command, every selected object becomes the same height as the dominant object.

If you hold `Ctrl` or `Shift` to select multiple objects, the dominant object is the first object you click. If you drag a marquee around multiple objects, the dominant object is the first object enveloped by the marquee. For information about selecting objects, see "Selecting objects in a form" on page 94.

To change the dominant object:

- Hold down `Ctrl`, and then click one of the selected objects.
  The object you click becomes the dominant object.

3.3.2 Moving and resizing objects

You can easily move objects by clicking and dragging them to where you want them in the design. You can also resize objects by clicking an object's handle and dragging it to make the object either larger or smaller. However, Form Designer also allows you to use the **Size and Position**toobar to either move objects to a specific location or resize objects to a precise size.

For example, if, due to printing requirements, you need a table to be exactly five inches wide, you can easily resize the table to be exactly five inches wide.

> **Note:** For barcodes, you cannot shrink the barcode beyond a certain size, even if you reduce the number of characters that it can store.

To move or resize an object, complete the following tasks as needed:

Task	Description
To move an object	1. Select an object. 2. In the **Size and Position** toolbar, in the **X** (horizontal position) and **Y** (vertical position) boxes, enter new values. 
To resize an object	1. Select an object. 2. In the **Size and Position** toolbar, in the **W** (width) and **H** (height) boxes, enter new values. 
To automatically resize a text object	1. Right-click the text object or title. Keep in mind that to select a title, you must click the title and not the data entry field to which the title is attached. 2. Click **Snap to text bounds**.
To resize a barcode to fit an exact number of characters	1. Right-click the bar code, and click **Bar Code** > **Size to Fit**. The Resize Bar Code dialog box opens. 2. Type a value in the **Characters** box. 3. Click **OK**.
To resize an image back to it original size	**Note:** Resizing images might affect their quality. If you resize an image, you can revert it to its original size. Right-click the image, and then click **Reset to Original Size**.

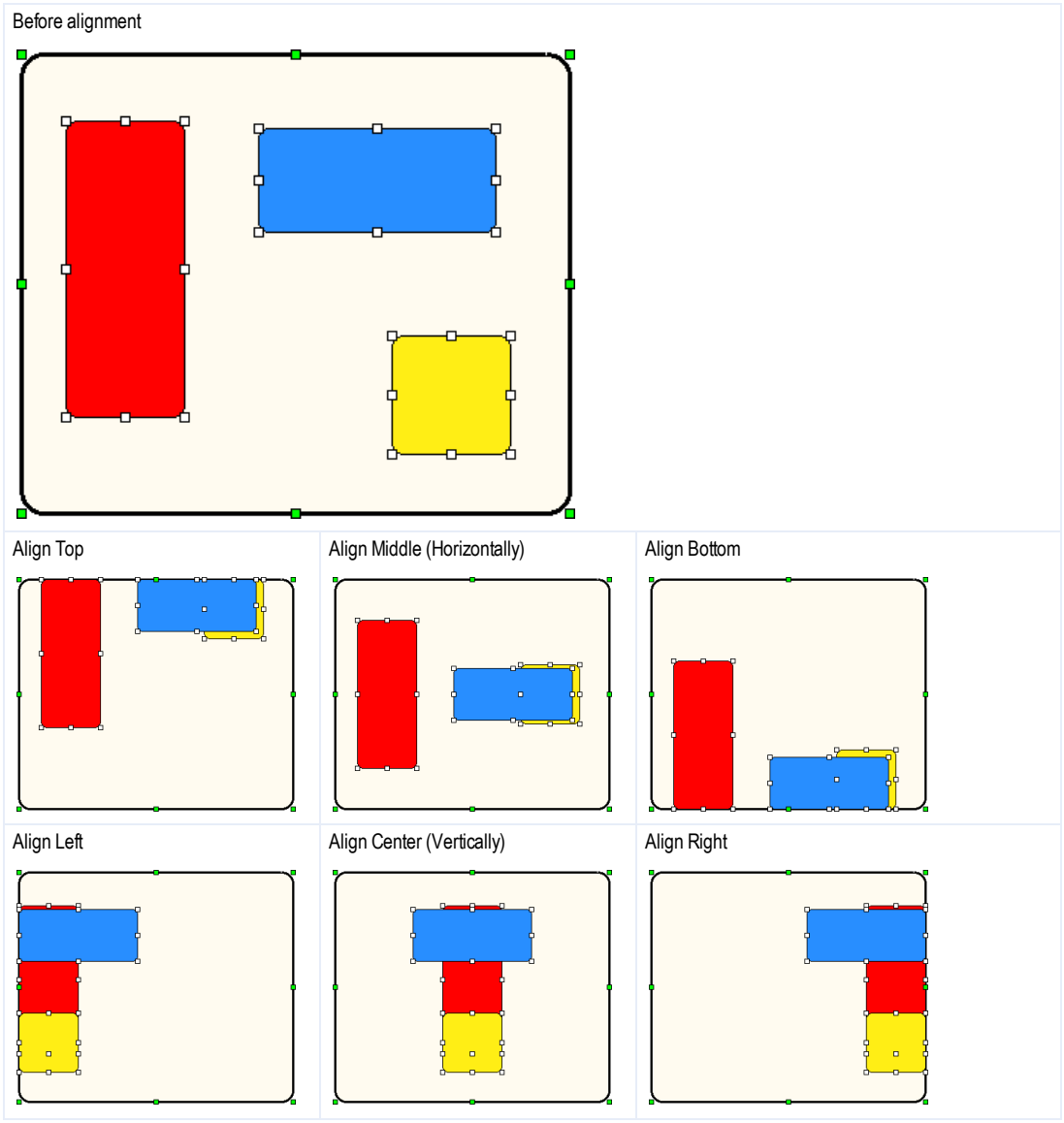
Note: The units of measurement in the **Size and Position** toolbar controls reflect the settings on the Page Setup dialog box. See "Defining the page setup and margins of a form" on page 51.

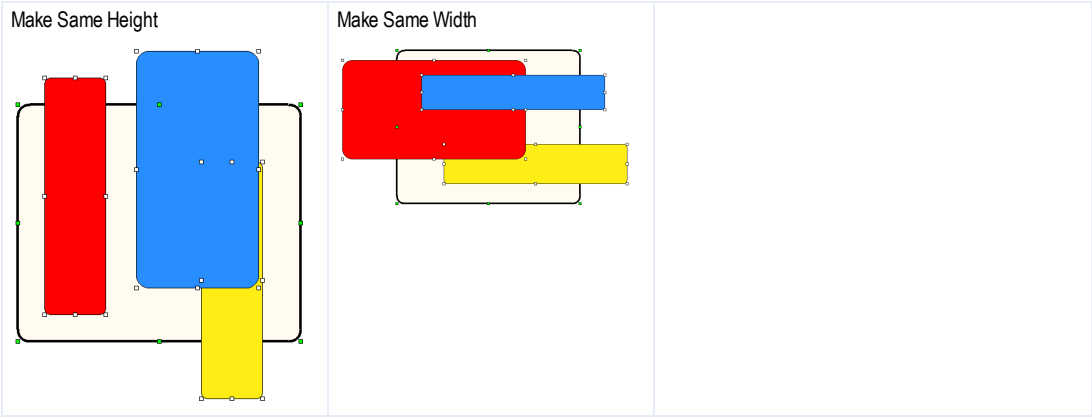
3.3.3 Aligning objects

Form objects can be aligned relative to the page. When multiple objects are selected, objects can be aligned against the dominant object. For more information about selecting the dominant object, see "Understanding how dominant objects affect object placement" on page 95.

The alignment options are illustrated in the following figure. The dominant object is the white square in the background.

Alignment options





Note: If you align objects that have titles, the alignment commands are based on the boundaries of the object without the titles, as shown here:

To align objects, complete one of the following tasks:

Task	Description
Align a single object or a grouped object on a page	1. Select the object or the grouped object. 2. Select from the following options as needed: • To align the object in the center of the page vertically, on the menu bar, click **Format > Alignment > Align Middle**. • To align the object in the center of the page, on the menu bar, click **Format > Alignment > Align Center**.
Align multiple objects horizontally and vertically	1. Select the objects to align. 2. Select from the following options as needed: • On the menu bar, click **Format > Alignment > Top**. • On the menu bar, click **Format > Alignment > Middle**. • On the menu bar, click **Format > Alignment > Bottom**. • On the menu bar, click **Format > Alignment > Left**. • On the menu bar, click **Format > Alignment > Center**. • On the menu bar, click **Format > Alignemnt > Right**.

Task	Description
Make objects the same size as the dominant object	1. Select the objects to size. 2. Select from the following options as needed: • On the menu bar, click **Format > Alignemnt > Make same height**. • On the menu bar, click **Format > Alignemnt > Make same width**.

3.3.4 Distributing objects

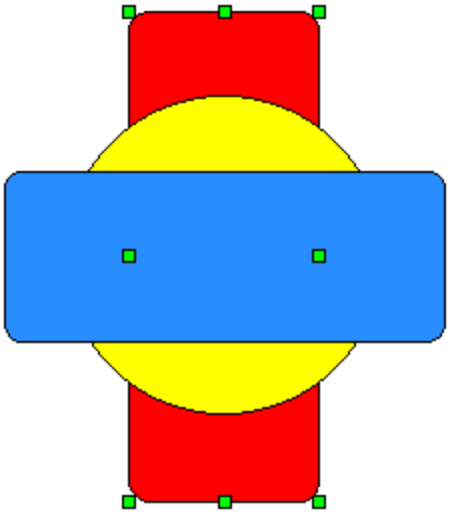
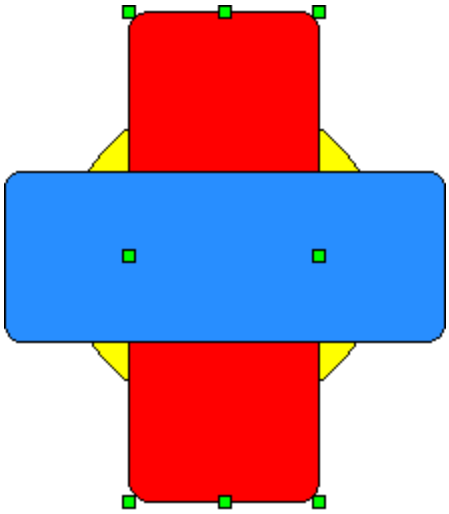
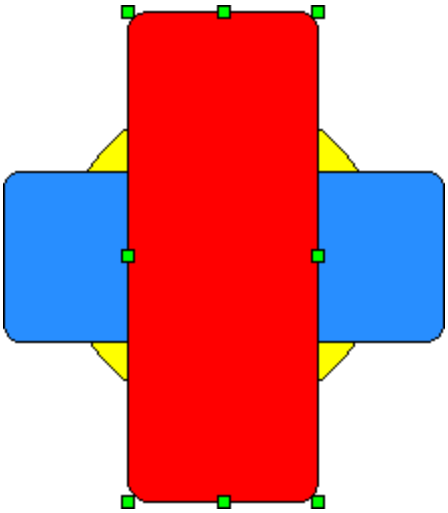
Form designer includes a feature for automatically distributing form objects. The **Space Evenly** commands move objects so that there is an equal amount of space between them. Objects can be spaced either horizontally or vertically.

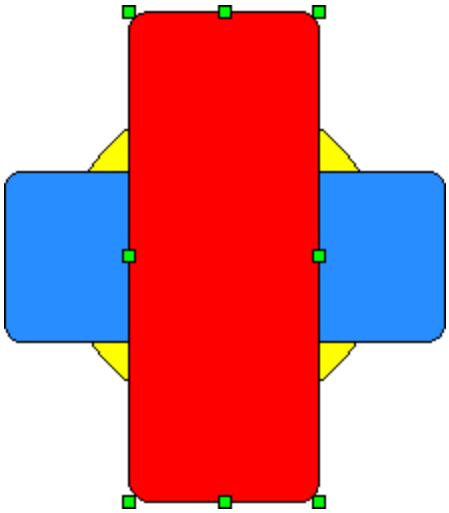
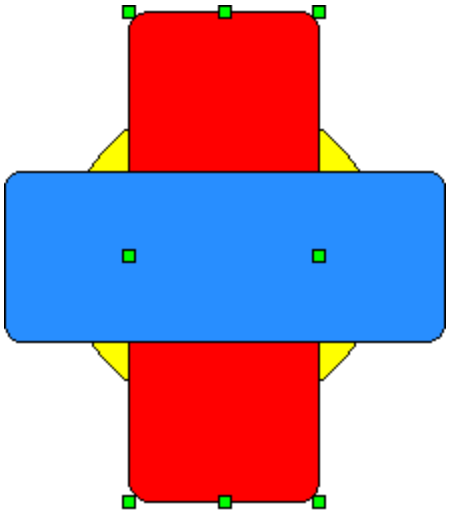
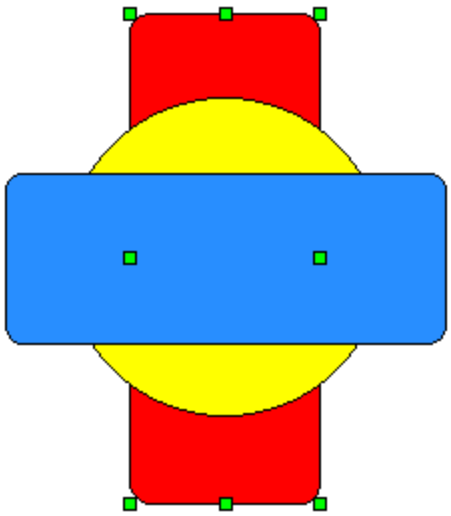
To distribute the objects evenly

1. Select the object or objects that you want to move.
2. Select from the following options as needed:
   - On the menu bar, click **Format > Distribute > Space Evenly Across**.
   - On the menu bar, click **Format > Distribute > Space Evenly Down**.

3.3.5 Reordering objects

When objects overlap each other, you can change how they are layered. In the following examples, the selected object is the red rectangle.

Order type	Example
• **Bring Forward** moves the selected object one layer closer to the top layer of the form. • **Bring to Front** moves the selected object in front of all overlappin g objects.	Before Moving  Bring Forward  Bring to Front 

Order type	Example
• **Send Backward** moves the selected object one layer toward the bottom of the object stack. • **Send to Back** moves the selected object behind all overlapping objects.	Before Moving  Send Backward  Send to Back 

To reorder an object

1. Select the object or objects that you want to move.
2. Select from the following options as needed:
   - On the menu bar, click **Format > Order > Bring to Front**.
   - On the menu bar, click **Format > Order > Send to Back**.
   - On the menu bar, click **Format > Order > Bring Forward**.
   - On the menu bar, click **Format > Order > Send Backward**.

3.3.6 Rotating text and objects

Note: Rotating text is supported in PDF forms only.

To rotate text and objects:

1. Select the text or object.
2. Select from the following options as needed:
   - On the menu bar, click **Format > Rotation > Rotate 90 degrees Clockwise**.
   - On the menu bar, click **Format > Rotation > Rotate 90 degrees Counter-clockwise**.
   - On the menu bar, click **Format > Rotation > Rotate 180 degrees**.

3.3.7 Grouping shapes and objects

Grouping objects allows you to manipulate several objects as one. If you resize the group, all of the objects in that group are resized. If you delete the group, all of the objects are deleted. Grouping saves you from repeatedly selecting multiple objects.

Tip: Objects in a group can be selected individually by holding down `Ctrl` + `Shift`. You do not need to Ungroup the objects first.

Task	Description
To group shapes and objects	To group objects: 1. Select the objects that you want to group. 2. Use the Group command. • On the menu bar, click **Format > Grouping > Group**. • Click **Group**  • Press `Ctrl` + `G` The selected objects are grouped as one object.

Task	Description
To ungroup shapes and objects	To ungroup shapes and objects: 1. Select the group. 2. Use the Ungroup command. • On the menu bar, click **Format > Grouping > Ungroup**. • Click **Ungroup**  • Press `Ctrl + Shift + G` The selected objects are separated.
Adding objects to a group	The **Add to Group** command allows you to add an object or group to an existing group without creating a nested group. A *nested group* is a group of objects inside another group. A nested group is normally created when you build a group of objects, and then add more objects by using the **Group** command. If you use the **Group** command multiple times, you can create groups nested to many levels. Modifying an object in a nested group can be difficult, because you must ungroup the surrounding objects and groups. The **Add to Group** command inserts an object into a group at the same level as the objects in the original group, so there is no nesting. If you need to modify an object in a group that was created with the **Add to Group** command, you can use the **Ungroup** command to immediately split it into all of its constituent objects. You do not need to use the Ungroup command multiple times to access any one object. To add an object to a group: 1. Select a group and then select the object that you want to add to the group. 2. On the menu bar, click **Format > Grouping > Add to Group**.
Remove objects from a group	You can remove a single object from a group without separating the remaining objects. For example, if a group includes 10 data entry fields, you can use the **Remove from Group** command to remove the seventh item while leaving the other nine components as a group. **Note:** The **Remove from Group** command does not delete the selected object. To remove one or more objects from a group: 1. Select the group. 2. Hold down `Ctrl + Shift`, and then click the object or objects to remove from the group. 3. On the menu bar, click **Format > Grouping > Remove from Group**.

3.4 Setting the general properties for objects

The **General** tab of the **Properties** dialog box allows you to change the name and behavior of objects on a form. The available properties can vary depending on the selected object.

General properties describe objects and define how the object collect data. For example, data entry fields can be defined as read-only, required for form submission, or hidden. You can use Conditional Expressions to apply these properties based on the result of an expression.

To configure the general properties of an object

1. Select the object(s) that you want to configure and open the **Properties** dialog box.

Selection	Task
To select a single object	• Double-click the object on the form • Right-click the object, and then click **Properties** • Select the object, and then click **Format** > **Properties** • Select the object, and then press `Alt + Enter`
To select multiple objects	You can edit the properties of multiple objects by selecting multiple objects. When you right click an object to open the Properties dialog box, one of the following actions occurs: • If the objects share common properties, the Properties dialog box opens. The Properties dialog box only displays the properties that are shared by all the selected objects. • If the objects do not share any properties, the No Common Properties dialog box opens.
To modify the properties of a grouped object without ungrouping the group	Hold down `Ctrl+Shift`, right-click the object, and then click **Properties**. The Properties dialog box opens.

2. In the **Properties** dialog box, click the **General** tab, and then define the general properties of the object, such as the name and general behaviors:

To	Do this
Name the object	In the **Field name** box, enter a name for the object. Keep in mind the following considerations when creating a **Field name**: • A **Field name** can contain alphanumeric characters, and underscores (_). • The first character in a **Field name** must be alphabetic, or an underscore. • The maximum length of a **Field name** is 30 characters. • Each object on a form must have a unique **Field name**.
Describe the object to respondents	In the **Field description** box, enter a description for the object. The description cannot exceed 1000 characters. On a published form, the description appears as a tooltip when a respondent hovers the mouse pointer over the field. Respondents who access the form with a screen reader hear the **Field description**. The field description should help explain the function of an object to respondents.
Make a data entry field read-only and prevent respondents from modifying the value of the field	a. Select the **Read only** check box. b. If you want to make read-only access conditional depending the result of an expression, click f() , and then define an expression.
Make a data entry field required for form submission	a. Select the **Entry required** check box. b. If you want to make requirement conditional depending the result of an expression, click f() , and then define an expression.

To	Do this
Hide the object on the published form	a. Select the **Hidden** check box. The object remains visible in Form Designer, but does not appear on the published form. b. If you want to make an object hidden conditional depending the result of an expression, click  , and then define an expression.
Specify that a check box should be selected by default	Select the **Initially checked** check box.

3. Click **OK**.

Related topics:

- “Creating a barcode object” on page 121
- “Creating a button object” on page 128
- “Creating a check box object” on page 133
- “Creating a list or drop list object” on page 159
- “Creating an entry field object” on page 136
- “Creating an HTML viewer object” on page 152
- “Creating an image viewer object ” on page 157
- “Creating an ink picture object” on page 158
- “Creating a radio group object” on page 166
- “Creating a signature object” on page 170
- “Creating a table object” on page 181
- “Build a Conditional Expression with the Simple Expression Builder” on page 225
- “Build a Conditional Expression with the Advanced Expression Builder” on page 228

3.5 Setting the appearance properties for objects

Appearance properties define the visual appearance of objects on the form. Depending on the object, you can add or remove borders, change the color and width of a line, apply rounded corners, and so on. The available Appearance properties can vary depending on the selected object.

To configure the appearance properties of an object

1. Select the object(s) that you want to configure and open the **Properties** dialog box.

Selection	Task
To select a single object	• Double-click the object on the form • Right-click the object, and then click **Properties** • Select the object, and then click **Format** > **Properties** • Select the object, and then press `Alt + Enter`
To select multiple objects	You can edit the properties of multiple objects by selecting multiple objects. When you right click an object to open the Properties dialog box, one of the following actions occurs: • If the objects share common properties, the Properties dialog box opens. The Properties dialog box only displays the properties that are shared by all the selected objects. • If the objects do not share any properties, the No Common Properties dialog box opens.
To modify the properties of a grouped object without ungrouping the group	Hold down `Ctrl+Shift`, right-click the object, and then click **Properties**. The Properties dialog box opens.

2. Click the **Appearance** tab.
3. To configure borders:

To	Do this
The object has no borders. This option is supported only for PDF, and is ignored for HTML format.	In the **Borders** area, click **None**.
The borders are lines.	a. In the **Borders** area, click **Flat**. b. Use the buttons around the preview window to choose which sides of the object have borders. Borders apply to all sides of an object by default.  Add or remove top border  Add or remove bottom border  Add or remove left border  Add or remove right border c. Define style of the borders in the **Line** area. i. In the **Style** list, click a border style. ii. In the **Width** box, type or select the weight of the border line (in points, where 1 point equals 1/72 inch (0.35 mm)). iii. In the **Color** list, select a color for the borders, or define a custom color. For information about using the color picker, see "Color Picker" on page 206.
The object has 3-D borders and appears sunken.	In the **Borders** area, click **3D - Sunken**.

To	Do this
The object has 3-D borders and appears raised.	In the **Borders** area, click **3D - Raised**.

4. To configure fill color and font:

> **Note:** *Fill color* is the color for the background of an object (for example, a data entry field). *Fill font* is the font used inside a data entry field.
>
> For example, the following figure shows a data entry field that has a custom fill color and font.
>
> 
>

   a. To select a fill pattern, in the **Pattern** list, click a fill pattern.

   b. To select a fill color, in the **Color** list, select a fill color, or define a custom color. For information about using the color picker, see "Color Picker" on page 206.

   c. To change the fill font, in the **Fill font** area, click **Change**.
   The Font dialog box opens. See "Font dialog box" on page 208.

   > **Note:** To change the font for all **Fill text** on your form, see "Configuring the Global Font settings" on page 21.

5. To rotate the text boxes or titles, in the **Angle** box, enter or click an angle.

> **Note:** Rotating text is supported in PDF forms only.

6. To round corners of lists, drop lists, entry fields, or rectangles:

> **Important:** For rectangles, in PDF output, rounded corners are supported only when borders are set to **Flat** borders. When using rectangles, PDF output does not support rounded corners on **None** (specifically the case where the rectangle has no borders), **3D - Sunken**, or **3D - Raised**.
>
> For lists, drop lists, and entry fields, PDF output does not support rounded corners.

   a. In the **Corners** area, select the **Round Corners** check box.

   b. In the **Radius** box, enter the radius of the rounded corner. For rectangles, enter the radius as the percentage of the shortest side. For all other supported objects, enter the radius in pixels. The maximum possible radius is equal to half the length of the

shortest side of the object. For example, if an entry field has a height of 100 pixels and a width of 200 pixels, the maximum rounded corner radius is 50 pixels.

7. Click **OK**.

Related topics:

- "Configuring titles for objects" on page 117
- "Creating general shapes (arc, ellipse, line, rectangle)" on page 120
- "Creating a list or drop list object" on page 159
- "Creating an entry field object" on page 136
- "Creating an HTML viewer object" on page 152
- "Creating a signature object" on page 170
- "Creating a smart text object" on page 178
- "Creating a table object" on page 181
- "Creating a text box object" on page 204

3.6 Editing text and text properties for objects

This section describes how to configure the properties of text objects (for example, text boxes, titles, hyperlinks, and smart text objects).

This section discusses the following topics:

- "Changing the text font" on the next page
- "Configuring text properties for objects" on page 111
- "Configure paragraph properties for objects" on page 112

3.6.1 Changing the text font

To change the font of any text:

1. Select the text to modify.
   - To edit the font used for a complete text object, select the object.
   - To edit the font used for specific words or paragraphs, select the text to modify.
     i. Select a text object
     ii. Press F2 to edit the text.
     iii. Select the text to modify.

2. Change the font.
   - Use the buttons on the Text toolbar.

	Make the selected text bold. Click again to reverse the attribute.
	Make the selected text italic. Click again to reverse the attribute.
	Make the selected text underlined. Click again to reverse the attribute.
	Align the text to the left.
	Align the text in the center.
	Align the text to the right.
	Justify the text.
	Change the text color.
	Change the font.
	Change the text size.

   - On the menu bar, click **Format > Font**.
     The **Font** dialog box opens. See "Font dialog box" on page 208.

> **Tip:** When you are using the Form Designer on forms that include languages with non-English characters, if the characters do not display properly, try the font **Arial Unicode MS**.
>
> This font includes most of the characters in most of the languages in the Unicode standard, including Arabic, Greek, Hebrew, Hindi, and Russian.

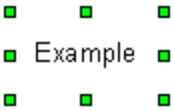
3.6.2 Configuring text properties for objects

To configure the general text properties (for example, spacing or vertical alignment):

1. Select the object(s) that you want to configure and open the **Properties** dialog box.

Selection	Task
To select a single object	• Double-click the object on the form • Right-click the object, and then click **Properties** • Select the object, and then click **Format** > **Properties** • Select the object, and then press `Alt + Enter`
To select multiple objects	You can edit the properties of multiple objects by selecting multiple objects. When you right click an object to open the Properties dialog box, one of the following actions occurs: • If the objects share common properties, the Properties dialog box opens. The Properties dialog box only displays the properties that are shared by all the selected objects. • If the objects do not share any properties, the No Common Properties dialog box opens.
To modify the properties of a grouped object without ungrouping the group	Hold down `Ctrl+Shift`, right-click the object, and then click **Properties**. The Properties dialog box opens.

2. Click the **Text** tab.
3. In the **Inset** box, type or select a value to specify the amount of spacing around the text. The default Inset is 0 points.

Inset value of `0.0`	Inset value of `10.0`
	

4. In the **Vertical Alignment** list, click **Top**, **Center**, or **Bottom** to specify the vertical alignment.
5. In the **Character Spacing** and **Word Spacing** areas, define the spacing between characters and words.
   - The default settings are **Normal (0.0 pts).** The characters or words are spaced according to the regular font definitions.
   - To increase the spacing, click **Expanded,** and then type or select a value in the box.
   - To decrease the spacing, click **Condensed**, and then type or select a value in the box.
6. Select the **Automatically size to fit contents** check box to automatically expand or reduce the boundaries of the Text Box to accommodate its contents.
   If the text box is larger than required for the text it contains, the size of the text box is

reduced.

7. Click **OK**.

3.6.3 Configure paragraph properties for objects

This section discusses the following topics needed to configure the paragraph formatting for a text box or title:

- "Configure Alignment" below
- "Configure Text Direction" on the next page
- "Configure Indentation" on page 115
- "Configure Line Spacing" on page 115

Configure Alignment

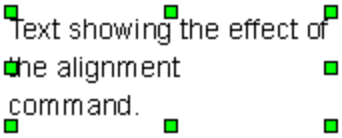
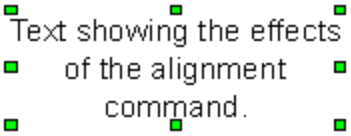
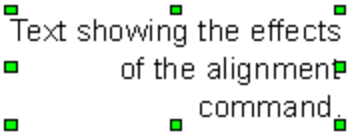
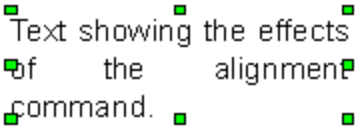
Tip: You can also change the alignment of the text in a text box by using the appropriate commands from the text toolbar.

To configure alignment:

1. Select the object(s) that you want to configure and open the **Properties** dialog box.

Selection	Task
To select a single object	• Double-click the object on the form • Right-click the object, and then click **Properties** • Select the object, and then click **Format** > **Properties** • Select the object, and then press `Alt + Enter`
To select multiple objects	You can edit the properties of multiple objects by selecting multiple objects. When you right click an object to open the Properties dialog box, one of the following actions occurs: • If the objects share common properties, the Properties dialog box opens. The Properties dialog box only displays the properties that are shared by all the selected objects. • If the objects do not share any properties, the No Common Properties dialog box opens.
To modify the properties of a grouped object without ungrouping the group	Hold down `Ctrl+Shift`, right-click the object, and then click **Properties**. The Properties dialog box opens.

2. Click the **Paragraph** tab.
3. Complete the following steps as needed:

Alignment	Example	What you need to know
Left alignment		In the **Alignment** drop-down list, click **Left**.
Center alignment		In the **Alignment** drop-down list, click **Center**.
Right alignment		In the **Alignment** drop-down list, click **Right**.
Justified		a. In the **Alignment** drop-down list, click **Justified**. b. To choose whether to justify lines that contain a single word, select or clear the **Justify lines with one word** check box. **Note:** Lines of text are justified by altering the amount of space between words. Lines of text that contain a single word are justified by adding space between characters, which can affect readability.

Configure Text Direction

Form Designer can handle bidirectional (BiDi) scripts such as Arabic and Hebrew. In such scripts, writing typically begins at the right side of a paragraph and moves to the left (Right to Left, or RTL), although it might be mixed with text that moves from Left to Right (LTR).

Form Designer accommodates BiDi script by implementing the Bidirectional algorithm as referenced in the Unicode Standard Annex #9 (http://www.unicode.org/reports/tr9/tr9-15.html).

Form Designer does not support directional embedding and override codes. Only the implicit properties of the text are used when applying the BiDi algorithm. Form Designer supports the common case in which text contains both LTR and RTL characters, but does not support an LTR segment embedded in an RTL segment that appears in an LTR paragraph (or vice versa).

Note: When editing bidirectional text, the cursor moves appropriately to the next logical character in the text store. This character might not be the character in the visible order, or even an adjacent character.

To configure text direction:

1. Select the object(s) that you want to configure and open the **Properties** dialog box.

Selection	Task
To select a single object	• Double-click the object on the form • Right-click the object, and then click **Properties** • Select the object, and then click **Format** > **Properties** • Select the object, and then press `Alt + Enter`
To select multiple objects	You can edit the properties of multiple objects by selecting multiple objects. When you right click an object to open the Properties dialog box, one of the following actions occurs: • If the objects share common properties, the Properties dialog box opens. The Properties dialog box only displays the properties that are shared by all the selected objects. • If the objects do not share any properties, the No Common Properties dialog box opens.
To modify the properties of a grouped object without ungrouping the group	Hold down `Ctrl+Shift`, right-click the object, and then click **Properties**. The Properties dialog box opens.

2. Click the **Paragraph** tab.
3. In the **Direction** drop-down list, click one of the following text directions:
   - **Auto**—The first strongly directional character found in the paragraph determines the base direction of the paragraph. The explicit Left-to-Right and Right-to-Left settings allow for times when the auto setting does not accurately meet your design needs.
   - **Left-to-Right**—Paragraph text is forced to align from left to right.
   - **Right-to-Left**—Paragraph text is forced to align from right to left.

Configure Indentation

Indentation defines the horizontal position of text within a text box.

To configure indentation:

1. Select the object(s) that you want to configure and open the **Properties** dialog box.

Selection	Task
To select a single object	• Double-click the object on the form • Right-click the object, and then click **Properties** • Select the object, and then click **Format** > **Properties** • Select the object, and then press `Alt + Enter`
To select multiple objects	You can edit the properties of multiple objects by selecting multiple objects. When you right click an object to open the Properties dialog box, one of the following actions occurs: • If the objects share common properties, the Properties dialog box opens. The Properties dialog box only displays the properties that are shared by all the selected objects. • If the objects do not share any properties, the No Common Properties dialog box opens.
To modify the properties of a grouped object without ungrouping the group	Hold down `Ctrl+Shift`, right-click the object, and then click **Properties**. The Properties dialog box opens.

2. Click the **Paragraph** tab.
3. In the **Indentation** area, complete the following steps as needed:
    a. In the **Left** box, type or select a value.
    This value specifies the indentation for the entire paragraph from the left side of the text box.
    b. In the **Right** box, type or select a value.
    This value specifies the indentation for the entire paragraph from the right side of the text box.
    c. In the **First Line** box, type or select a value.
    This value specifies the indentation for first line, from the left side of the text box.

Configure Line Spacing

Paragraph spacing defines the amount of vertical space between paragraphs.

Line spacing defines the amount of vertical space between lines of text within a single paragraph. You can use line spacing to change the spacing between lines without using character returns.

To configure line spacing:

1. Select the object(s) that you want to configure and open the **Properties** dialog box.

Selection	Task
To select a single object	• Double-click the object on the form • Right-click the object, and then click **Properties** • Select the object, and then click **Format** > **Properties** • Select the object, and then press `Alt + Enter`
To select multiple objects	You can edit the properties of multiple objects by selecting multiple objects. When you right click an object to open the Properties dialog box, one of the following actions occurs: • If the objects share common properties, the Properties dialog box opens. The Properties dialog box only displays the properties that are shared by all the selected objects. • If the objects do not share any properties, the No Common Properties dialog box opens.
To modify the properties of a grouped object without ungrouping the group	Hold down `Ctrl+Shift`, right-click the object, and then click **Properties**. The Properties dialog box opens.

2. Click the **Paragraph** tab.
3. In the **Spacing** area, complete the following steps:
   a. In the **Before** and **After** boxes, type or select values to specify spacing before and after paragraphs.
   Spacing is measured in points, where one inch equals 72 points. The average, single-space paragraph is separated by 12 points.
   b. In the **Line Spacing** list, click one of the spacing options.
      - **Single**—Lines are spacing according to the default font definition.
      - **1.5 lines**—Lines are spaced at one and a half times the default single spacing.
      - **Double**—Lines are spaced at twice the single line spacing.
      - **At least**—The vertical spacing is never less than the specified value. This setting can accommodate large characters without making the rest of the text unreadable.
      - **Exactly**—Every line is spaced at exactly the same distance.

        Note: Exact line spacing creates precise lines of text, but if your text includes characters of differing sizes, this option might be problematic.

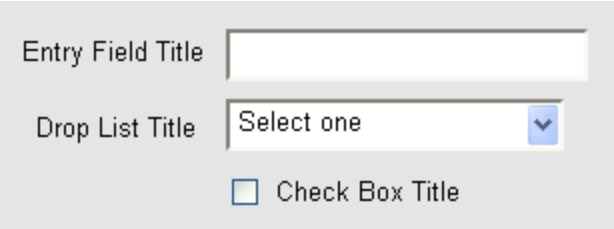
      - **Relative**—This option allows you to define a custom line spacing based on the default font definition. For example, if you use a relative spacing of 300%, a 10-point font has a vertical spacing of 30 points.
      This option can provide very fine control over the vertical spacing of lines. You can also use it when you are unsure of exactly how many points you want to separate

the text lines. Simply change the percentage settings until the text has the desired appearance.

c. If you select **At least**, **Exactly**, or **Relative**, type or select a custom value in the box.

3.7 Configuring titles for objects

A title is a text box that is associated with a form field. Many of the objects available in Form Designer have a title by default. A title indicates to the respondent the information that is required by the field.



The default titles created by Form Designer provide a basic description of an object, for example, “List 3”. You can change the title to match the function of the field, for example, “Telephone Number” or “Postal Code”.

To configure a title:

1. Select the object(s) that you want to configure and open the **Properties** dialog box.

Selection	Task
To select a single object	• Double-click the object on the form • Right-click the object, and then click **Properties** • Select the object, and then click **Format** > **Properties** • Select the object, and then press `Alt + Enter`
To select multiple objects	You can edit the properties of multiple objects by selecting multiple objects. When you right click an object to open the Properties dialog box, one of the following actions occurs: • If the objects share common properties, the Properties dialog box opens. The Properties dialog box only displays the properties that are shared by all the selected objects. • If the objects do not share any properties, the No Common Properties dialog box opens.
To modify the properties of a grouped object without ungrouping the group	Hold down `Ctrl+Shift`, right-click the object, and then click **Properties**. The Properties dialog box opens.

2. Click the **Title** tab.
3. Choose whether the title is visible on the form:

Task	Description
To make the title of the object visible on the form	Select the **Enable** check box.
To hide the title of the object from the form	Clear the **Enable** check box, and then skip to step 8. **Tip:** Keep in mind that even when a title is not visible on a form, you can still use the title of an object for design purposes to help differentiate between multiple objects by selecting **View > Field Names** from the menu bar.

4. In the **Title** box, enter a title.
5. To change the font used to display the title, click **Change**.
   The **Font** dialog box opens. See "Font dialog box" on page 208.
6. To define the position of the title relative to the object, complete the following steps:
   a. In the **Position** box, select a position for the title relative to the object.

      Tip: Optionally, you can also change the position of most titles manually by clicking and dragging the title to a custom location. You cannot manually change the position of an Entry Field (title inside) object.

      It is not possible to move the title of an Entry Field (title inside) to a custom location. To move the title of an Entry Field (title inside), use the **Properties** dialog box.

   b. In the **Alignment** box, select the alignment of the title.

   Tip: The **Preview** area shows the effect of any changes made to the **Position** and **Alignment** options.

7. In the **Spacing** box, type or select the amount of spacing between the title and the object.
8. Click **OK**.

Related topics:

- "Creating a check box object" on page 133
- "Creating a list or drop list object" on page 159
- "Creating an entry field object" on page 136
- "Creating an ink picture object" on page 158
- "Creating a signature object" on page 170

3.8 Configuring data properties for objects

The **Data** tab determines how to export information from objects that can retain responsdent information. You can configure data export properties for entry fields, lists, drop lists, radio groups, and HTML viewers.

When you export data, you can choose whether to remove template characters, add default values for any fields left blank or unanswered by respondent, and you can specify a custom size for the database column used to store the exported data.

To configure data export properties:

1. Select the object(s) that you want to configure and open the **Properties** dialog box.

Selection	Task
To select a single object	• Double-click the object on the form • Right-click the object, and then click **Properties** • Select the object, and then click **Format** > **Properties** • Select the object, and then press `Alt + Enter`
To select multiple objects	You can edit the properties of multiple objects by selecting multiple objects. When you right click an object to open the Properties dialog box, one of the following actions occurs: • If the objects share common properties, the Properties dialog box opens. The Properties dialog box only displays the properties that are shared by all the selected objects. • If the objects do not share any properties, the No Common Properties dialog box opens.
To modify the properties of a grouped object without ungrouping the group	Hold down `Ctrl+Shift`, right-click the object, and then click **Properties**. The Properties dialog box opens.

2. Click the **Data** tab.
3. To remove template characters from exported data, select the **Strip template characters from data** check box.

   Template characters include characters such as the separators in date and time values. Template characters are exported by default.
   If you select **Strip template characters from data**, and the entry field is linked to a Database Lookup or a Validation, the server-based Connect Agent that performs these functions also provides data that is stripped of template characters
4. In the **Default value** box, type a default value to export from the data entry field, if the field returns empty.
   For example, you can assign the text `None` as the default value. `None` is exported as the value for the field when there is no data. If you do not want to use a default value, leave this field empty.
5. Define the size of the database column that stores exported data.

- For LiquidOffice to calculate the size automatically, click **Default size**.

  Note: LiquidOffice uses a column length that is the greater of:

  - 50 characters
  - the maximum length specified for the field

  Ensure that the database column is large enough to store the values that can be exported from the entry field, otherwise excess data is discarded.

- To specify a custom size, click **Custom size,** and then type or select a value in the box.

6. Click **OK**.

3.9 Creating general shapes (arc, ellipse, line, rectangle)

You can use general shapes to divide forms into sections or to highlight important objects. This section describes the general shapes that are available in Form Designer.

Shape	Description
Arcs	Use the Arc object to add a curved line to your form. Arcs are not supported in HTML forms.
Ellipse	Use the Ellipse object to add an ellipse or circle to your form. Ellipses are not supported in HTML forms. **Tip:** To help draw a perfect circle, use the **Snap to Grid** feature.
Rectangles	Use the Rectangle object to add a rectangle to your form. Rectangles can have either square or rounded corners. You can overlay rectangles with text to create instructions or use them to highlight important form fields.
Lines	Use the line object to add a line (rule) to your form. You can use lines to create a visual separation between sections of a form. HTML forms cannot display diagonal lines. **Tip:** To draw a line so that it is perfectly horizontal or vertical, use the Snap to Grid feature, or hold down `Shift` as you resize a line.

Related topics:

- "Adding an object to a form" on page 93
- "Setting the appearance properties for objects" on page 106

3.10 Creating a barcode object

LiquidOffice forms can include embedded bar codes. The bar code can be populated through an expression, a database lookup, or a script.

You can use bar codes to:

- Print data on LiquidOffice forms to be evaluated by OpenText TeleForm, which has a strong automatic bar code recognition capability
- Hide confidential data on a form (affects previewed/saved and published documents)
- Compress a large amount of data into a relatively small space

This section discusses the following topics:

- "Supported barcode formats" below
- "Barcode technology considerations" on the next page
- "Setting barcode properties" on page 123

Supported barcode formats

LiquidOffice supports many barcode formats. OpenTextTeleForm can automatically evaluate all of these formats. For a list of supported bar code formats and a description of each, see the following table.

For more information on bar code formats, see https://www.gs1.org.

Supported barcode type	Description
Codabar	Variable length code that accepts numbers and additional special characters. The Start/Stop characters (A, B, C and D) must be configured in the barcode options dialog. Examples include `A$15.95A` and `C123456D`.
Code 39 Normal	Variable length code that accepts numbers, special characters(-, ., $, /, +, %, and space) and uppercase alphabetic characters. Start/Stop characters will be automatically added to the bar code value. Examples include `PRICE-15.95` and `CARDIFF`.
Code 39 Full	Variable length code that accepts characters from the 128 character ASCII set. Examples include `$15.95` and `Cardiff`.
Code 93	Variable length code that can contain A-Z, 0-9, -.$/+% and space. Examples include `CARDIFF` and `$15.95`.
Code 128	Variable length alphanumeric code. Examples include `Cardiff123` or `CARDIFF456`.
EAN-13	A 13 digit numeric code. User can input 12 digits and the 13th check digit will be calculated. Examples include `123456789012` or `123456789000`.
EAN-8	An 8 digit numeric code. User can input 7 digits and the 8th check digit will be calculated. Examples include `12345678` and `1234567`.

Supported barcode type	Description
GS1-128 (UCC/EAN-128)	Variable length alphanumeric code. Examples include `Cardiff123` or `CARDIFF456`.
Interleaved 2 of 5	Variable length numeric code. Examples include `12345` and `0123456789`.
PDF417	A high density two dimensional code that allows the entire 255-character ASCII set. Examples include `\nCardiff.\nVista CA`.
UPC-A	A 12 digit numeric code. User can input 11 digits and the 12th check digit will be calculated. Examples include `123456789012` and `12345678901`.
UPC-E	A 7 digit numeric code. User can input 6 digits and the 7th check digit will be calculated. Examples include `123456` or `012345`.

Barcode technology considerations

When generating barcodes, you have the option to select the HTML technology used to generate barcodes to determine whether barcodes are generated using JavaScript technology or using Applet technology. JavaScript technology is recommended so forms with a barcode can be viewed in modern browsers. Support for Applet technology is included for backwards compatibility with previous versions of LiquidOffice but is no longer recommended since most modern browsers no longer provide full support for Applets. In addition, forms using barcodes from previous versions should be modified to use JavaScript where possible.

When selecting the HTML technology used to generate your barcode, keep in mind the following considerations and how they might affect your barcode:

Feature	Applet consideration	JavaScript consideration
Browser support	Applet barcodes are not supported in all browsers. For more information about browser support, see *Administration Guide*.	JavaScript barcodes are supported in all browsers.
Code-128 barcode	For Code-128 barcodes, if you create an Applet barcode where you select a **Character set** of **Set C** (which supports only numeric characters) and the input for the barcode uses an Alpha-numeric source, then the generated barcode ignores any alphabetic characters and will not create a valid barcode.	For Code-128 barcodes, if you create a JavaScript barcode where you select a **Character set** of **Set C** (which supports only numeric characters) and the input for the barcodes uses an Alpha-numeric source, then the generated barcode considers only numeric data and ignores any alphabetic characters or special characters. In the previous scenario, if **Show Text** is also enabled, the same numeric data appears as a label for the generated barcode.
EAN/UPC barcode	—	For UPC/EAN barcodes, if you use both the **JavaScript** option and the **Show Text** option, the barcode lines are rendered differently in Preview and Publish modes due to browser limitations. This rendering difference should not affect the readability of the barcode.
Extended Code 39 barcode	For Extended Code 39 barcodes, if you create an Applet barcode where the height and width are greater than the barcode dimension, then the barcode is cropped within the given dimentions and will be unreadable.	For Extended Code 39 barcodes, if you create a JavaScript barcode where the height and width are greater than the barcode dimensions, then the generated barcode will exceed the dimensions.

Setting barcode properties

To create a barcode:

1. **Note:** To create a barcode, you can use either a Bar Code object or a PDF417 object.

   Select the object(s) that you want to configure and open the **Properties** dialog box.

Selection	Task
To select a single object	• Double-click the object on the form • Right-click the object, and then click **Properties** • Select the object, and then click **Format** > **Properties** • Select the object, and then press `Alt + Enter`
To select multiple objects	You can edit the properties of multiple objects by selecting multiple objects. When you right click an object to open the Properties dialog box, one of the following actions occurs: • If the objects share common properties, the Properties dialog box opens. The Properties dialog box only displays the properties that are shared by all the selected objects. • If the objects do not share any properties, the No Common Properties dialog box opens.
To modify the properties of a grouped object without ungrouping the group	Hold down `Ctrl+Shift`, right-click the object, and then click **Properties**. The Properties dialog box opens.

2. Click the **Bar Code** tab.
3. To define the value of the barcode do one of the following:

Task	Description
To build a simple expression to define the value of the barcode	a. In the **Source Expression** box, click  . b. Define the simple expression as needed. For information about creating a simple expression, see "Simple Expression Builder" on page 224.
To build an advanced expression to define the value of the barcode	a. In the **Source Expression** box, click  . b. Click **Advanced**. c. Define the advanced expression as needed. For information about defining an advanced expression ,see "Advanced Expression Builder" on page 227.

The **Source Expression** box displays the data that the bar code contains. If the bar code is populated by a database lookup or a script, the Source Expression field is blank. See "Database lookup" on page 211.

> **Important:** For Extended Code 39 barcodes, lowercase letters and special characters are automatically encoded in the value (for example a lowercase a is represented as +A in Extended Code 39 barcodes).
>
> For Javascript barcodes, the barcode automatically expands to accommodate extra encoding characters. However, for Applet barcodes, you must make sure that the **Maximum characters allowed** setting for Extended Code 39 barcodes is enough to include any additional encoding characters, otherwise the barcode might be truncated.

4. In the **Maximum characters allowed** box, enter the maximum number of characters that the source data can contain.
   If the source data contains more characters than is allowed in the bar code, the extra characters are discarded.

   Keep in mind the following considerations for this option:

   - For barcode formats that have a fixed size limit, the **Maximum characters allowed** box is unavailable.
   - The **Maximum characters allowed** must be less than or equal to the **Maximum characters available**.
   - For Extended Code 39 barcodes, lowercase letters and special characters are automatically encoded in the value (for example a lowercase a is represented as +A in Extended Code 39 barcodes).

     For Javascript barcodes, the barcode automatically expands to accommodate extra encoding characters. However, for Applet barcodes, you must make sure that the **Maximum characters allowed** setting for Extended Code 39 barcodes is enough to include any additional encoding characters, otherwise the barcode might be truncated.

5. The **Maximum characters available at current size** box is read-only. It shows the maximum number of characters that can be stored by the Bar Code at its current physical dimensions. To increase **Maximum characters available at current size** number, you must resize the Bar Code. See "Moving and resizing objects" on page 96.
6. In the **Symbology** list, click the bar code format to use. See "Supported barcode formats" on page 121.
7. (*Optional*) To configure the options that control the appearance and function of the Bar Code, complete the following steps:
   a. Click **Options**.
   b. In the **Bar Code Options** dialog box, configure the following options as needed:

Option availability	Bar Code option	Description
All barcodes	**Bar Height** box	Set the height of the bar code (not including any text) in thousandths of an inch (0.001 in.)
All barcodes	**Narrow Bar Width** box	Specify the width of the smallest bar in thousandths of an inch (0.001 in.).
All barcodes	**Wide Bar Width** box	Set the width of the widest bar in thousandths of an inch (0.001 in.).
All barcodes	**Show Text** check box	Select the **Show Text** check box to display the value of the bar in plain text below the bar code.  **Important:** For UPC/EAN barcodes, if you use both the **JavaScript** option and the **Show Text** option, the barcode lines are rendered differently in Preview and Publish modes due to browser limitations. This rendering difference should not affect the readability of the barcode.
All barcodes	**Font** box	Click Font to change the font that is used to display the value of the bar code. The **Font** dialog box opens. See "Font dialog box" on page 208.

Code 128 barcodes only	**Character set** list	**Character Set** specifies the character set to use to encode data in the bar code. Valid settings are **Auto**, **Set A**, **Set B**, and **Set C**. The default is **Auto**.
		Important: For Code-128 barcodes, if you create barcode that uses a **Character set** set to **Set C**, uses an input source is Alphanumeric, and uses a label that contains all characters from the given input, then the barcode can behave differently depending on whether it is a JavaScript or Applet barcode.
		• For an Applet barcode in the previous scenario, a valid barcode is not created.
		• For a JavaScript barcode in the previous scenario:
		  • A barcode is generated by considering only digits from the Alpha-numeric input and the label contains only digits from the input.
		  • If **Show Text** is also enabled, the same numeric data appears as a label for the generated barcode.

Option availability	Bar Code option	Description
CodaBar barcodes only	**Start/Stop character**	specifies the start and stop characters to use when encoding the data.
PDF417 barcodes only	**Height to Width Ratio**	Sets the ratio of the bar height to width. The default value is 2.
PDF417 barcodes only	**Narrow Bar Width**	Determines the width of the narrowest bar.
PDF417 barcodes only	**Rows**	Defines how many rows are used to encode the data. A setting of 0 causes the Bar Code to expand downward as data is added. The default value is 0.
PDF417 barcodes only	**Columns**	Defines how many columns are used to encode the data. A setting of 0 causes the bar code to expand to the right as data is added. The default value is 5.
PDF417 barcodes only	**Error Correction Level**	High numbers result in bar codes that are larger and more resistant to errors than lower numbers are. The default value is 2.
PDF417 barcodes only	**Mode**	Choose from **Binary**, **Numeric**, or **Text**.
PDF417 barcodes only	**Truncate**	Defines whether control bars are rendered on the right side of the bar code. **Truncate** is disabled by default. This setting does not control whether LiquidOffice truncates the data to ensure that the rendered bar code fits within the bounds of the bar code object.
UPC-E barcodes only	**System**	Specifies the System to use for the bar code.

c. Click **OK** to return to the **Bar Code** tab.

8. In the **HTML Technology** area, select the technology that is used to generate the barcode in HTML forms. Select from the following options:

> **Important:** JavaScript and Applet barcodes have specific considerations depending on the features that you are using. For more information about considerations for using JavaScript and Applet barcodes, see "Barcode technology considerations" on page 122.

Option	Description
JavaScript	This is the default option.
Applet	This option is commonly used for backward compatibility.

9. (*Optional*) To make Form Designer adjust the height and width of the Bar Code to allow for an unmarked border around the bars, select the **Enable Quiet Zones** check box.
Different bar code formats require different space for Quiet Zones. This space is specified by the bar code format and LiquidOffice cannot adjust it.

10. (*Optional*) To define the color of the bars, click a color in the **Bar Color** list or define a custom color. See "Color Picker" on page 206.
Black is the default color. If you use an alternate color, OpenText recommends that you rigorously test the form to be sure that the bar code evaluates properly.

11. In the **Fill Color** list, specify the color of the area around the bars, including any Quiet

Zones. See "Color Picker" on page 206.
Bar codes have a white fill by default.
If your page uses a background color other than white, consider matching the bar code fill color to the page color.
If the Fill Color does not match the page background color, OpenText recommends that you rigorously test the form to be sure that the bar code evaluates properly.

12. In the **Orientation** list, click one of the following options to specify the orientation of the bar code.

0 degrees	Bars are oriented with their long axis *parallel* to the vertical axis of the form. The first characters in the data string are represented by the bar on the left side of the bar code.	
90 degrees	Bars are oriented with their long axis *perpendicular* to the vertical axis of the form. The first characters in the data string are represented by the bar on the bottom of the bar code.	
180 degrees	Bars are oriented with their long axis *parallel* to the vertical axis of the form. The first characters in the data string are represented by the bar on the right side of the bar code.	
270 degrees	Bars are oriented with their long axis *perpendicular* to the vertical axis of the form. The first characters in the data string are represented by the bar on the top of the bar code.	

13. Click **OK**.

Related topics:
- "Setting the general properties for objects" on page 104

3.11 Creating a button object

Form Designer includes a button object that you use to add buttons to your forms. Users of your forms can click a button to perform an action.

To create a button object:

1. Select the object(s) that you want to configure and open the **Properties** dialog box.

Selection	Task
To select a single object	• Double-click the object on the form • Right-click the object, and then click **Properties** • Select the object, and then click **Format** > **Properties** • Select the object, and then press `Alt + Enter`
To select multiple objects	You can edit the properties of multiple objects by selecting multiple objects. When you right click an object to open the Properties dialog box, one of the following actions occurs: • If the objects share common properties, the Properties dialog box opens. The Properties dialog box only displays the properties that are shared by all the selected objects. • If the objects do not share any properties, the No Common Properties dialog box opens.
To modify the properties of a grouped object without ungrouping the group	Hold down `Ctrl+Shift`, right-click the object, and then click **Properties**. The Properties dialog box opens.

2. Click the **Button** tab.
3. To change the appearance of the button label, complete the following steps as needed:
   a. To edit the text on the face of the button, enter the button text in the **Text** box. The **Text** should describe the function of the button. For example, you can label a hyperlink button `Visit our Web site`. You might need to resize the button to accept the full label text.
   b. To change the font used on the button, in the **Font** area, click **Change**.
   The **Font** dialog box opens. See "Font dialog box" on page 208.
4. To configure the appearance of the button borders and background, complete one of the following sets of steps:

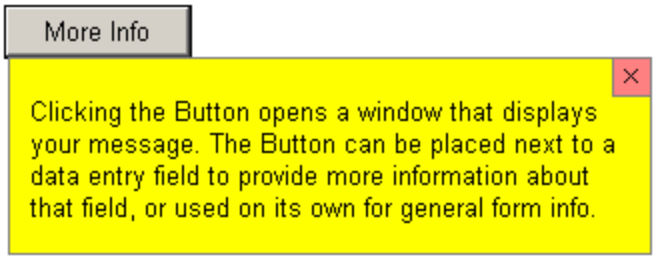
To	Do this	Example
Create a button with hidden borders and background If you add a label to the button, only the label is visible when the button is included in the form. The button area remains clickable whether a label is visible or not.	a. Click **Button has no appearance**. b. For HTML forms, to round the corners of the button: **Note:** Rounded corners are not supported in PDF forms. i. In the **Corners** area, select the **Round Corners** check box. ii. In the **Radius** box, enter the radius of the rounded corner in pixels. The maximum possible radius is equal to half the length of the shortest side of the button. For example, if a button has a height of 100 pixels and a width of 200 pixels, the maximum rounded corner radius is 50 pixels.	
Create a system standard button	a. Click **Standard button**. b. To apply a custom appearance to the standard button, complete the following steps: i. Select the **Custom style** check box. ii. In the **Background Color** box, click a color for the button background. iii. In the **Border color** box, click a color for the button border. c. For HTML forms, to round the corners of the button: **Note:** Rounded corners are not supported in PDF forms. i. In the **Corners** area, select the **Round Corners** check box. ii. In the **Radius** box, enter the radius of the rounded corner in pixels. The maximum possible radius is equal to half the length of the shortest side of the button. For example, if a button has a height of 100 pixels and a width of 200 pixels, the maximum rounded corner radius is 50 pixels.	

To	Do this	Example
Create a flat button **Note:** The **Flat button** style is not supported in PDF forms and is supported only for HTML forms.	a. Click **Flat button**. b. To apply a custom appearance to the flat button, complete the following steps: i. Select the **Custom style** check box. ii. In the **Background Color** box, click a color for the button background. iii. In the **Border color** box, click a color for the button border. c. For HTML forms, to round the corners of the button: **Note:** Rounded corners are not supported in PDF forms. i. In the **Corners** area, select the **Round Corners** check box. ii. In the **Radius** box, enter the radius of the rounded corner in pixels. The maximum possible radius is equal to half the length of the shortest side of the button. For example, if a button has a height of 100 pixels and a width of 200 pixels, the maximum rounded corner radius is 50 pixels.	

To	Do this	Example
Use an image to represent the button If you add a label to the button, the label is not visible when the image is used to represent the button. Any label text that you want to include must be included as a part of the image that you select.	a. Click **Image** . b. In the **Select an image** dialog box, select the image to use. c. Click **Open**. **Tip:** If you later decide to use a different image, click **Select,** and then browse to the new file location. d. For HTML forms, to round the corners of the button: **Note:** Rounded corners are not supported in PDF forms. i. In the **Corners** area, select the **Round Corners** check box. ii. In the **Radius** box, enter the radius of the rounded corner in pixels. The maximum possible radius is equal to half the length of the shortest side of the button. For example, if a button has a height of 100 pixels and a width of 200 pixels, the maximum rounded corner radius is 50 pixels.	

5. To hide the button on previewed, saved, and published documents, select the **Hide button when form is printed** check box.
6. Click the **Action** tab.
7. To configure the action that occurs when a button is clicked, in the **Action** list, click one of the following actions.

Action	Description
Available for lookup or script	The button can trigger a database lookup or script. You must configure the lookup or script. See "Database lookup" on page 211.
Submit form data	The button submits the form. To specify where the button submits the form, complete one of the following steps: • To submit the form to the LiquidOffice server, select **Default**. If routing is enabled, the form routes to the correct user. • To submit the form to an external server, select **External Server** and enter the URL in the **URL** box.
Reset form data	The button clears all of the information on the form.
Hyperlink	The button opens a URL. Type the URL in the URL box.
Display message	The button displays a message box with custom text. Type a message in the Message box.

Action	Description
Manage attachments	The button opens the Form Attachments page where respondents can add or delete attachments before submitting the form.
Add file attachment	The button opens a file browser. In the file browser, users can select and upload a file attachment. To select multiple items, hold `Ctrl` as you click each item.
Delete file attachment	To use this action, you must include a list on the form with the **Control type** of **Listbox, attachments**. For more information about configuring lists, see "Creating a list or drop list object" on page 159. To delete a file attachment, users can select the file attachment from the list and then click the button to delete the selected attachment. To select multiple items, hold `Ctrl` as you click each item.
Open file attachment	To use this action, you must include a list on the form with the **Control type** of **Listbox, attachments**. For more information about configuring lists, see "Creating a list or drop list object" on page 159. To open a file attachment, users can select the file attachment from the list and then click the button to open the selected attachment.
Print	The button opens a dialog box to print the form.
Displays an HTML 'sticky' note	The button displays a note window on the form.  On a published form, a sticky note behaves according to the following conditions. • A respondent can reposition a note by dragging it • Multiple notes are viewable simultaneously • Clicking a note hidden behind another note brings the lower note to the front • Notes change size when the respondent zooms in or out on the form • Notes retain position if the window is resized To customize a button that displays an HTML 'sticky' note: a. In the **Message** box, enter a message. **Note:** HTML tags are stripped from the message. Carriage returns convert to paragraph (`<p>`) tags and URLs convert into hyperlinks. b. To change the background color of the note, click a color in the **Color** list. For more information about choosing colors, see "Color Picker" on page 206. c. In the **Width** box, enter the width of the note. You can increase the width of the note to display long messages.

Action	Description
Display specific page	The button opens a specific page in the form. To specify which page opens when users click the button, select a page in the **Page** list.
Cancel	The button cancels the form submission and discards any changes that have been made.

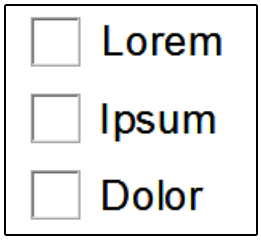
8. Click **OK**.

Related topics:
- "Setting the general properties for objects" on page 104

3.12 Creating a check box object

With a check box, respondents can answer a single question that has only two different outcomes. For example, suppose that you create a check box with the question `Do you want to be notified of promotions like this in the future?`. This check box can be selected to answer `Yes` or cleared to answer `No`.

If you place multiple check boxes on a form, respondents can select as many check boxes as desired. For example, suppose that you use check boxes to create a list of automobile accessories. Check boxes can collect data on which accessories the respondents want. Respondents can select *air conditioning*, *automatic door locks*, *alloy wheels*, and so on.



To configure a check box:

1. Double-click a check box.
2. In the **Properties** dialog box, click the **General** tab, and then define the general properties of the check box, such as the name and general behaviors.

To	Do this
Name the object	In the **Field name** box, enter a name for the object. Keep in mind the following considerations when creating a **Field name**: • A **Field name** can contain alphanumeric characters, and underscores (_). • The first character in a **Field name** must be alphabetic, or an underscore. • The maximum length of a **Field name** is 30 characters. • Each object on a form must have a unique **Field name**.
Describe the object to respondents	In the **Field description** box, enter a description for the object. The description cannot exceed 1000 characters. On a published form, the description appears as a tooltip when a respondent hovers the mouse pointer over the field. Respondents who access the form with a screen reader hear the **Field description**. The field description should help explain the function of an object to respondents.
Make a data entry field read-only and prevent respondents from modifying the value of the field	a. Select the **Read only** check box. b. If you want to make read-only access conditional depending the result of an expression, click f() , and then define an expression.
Make a data entry field required for form submission	a. Select the **Entry required** check box. b. If you want to make requirement conditional depending the result of an expression, click f() , and then define an expression.
Hide the object on the published form	a. Select the **Hidden** check box. The object remains visible in Form Designer, but does not appear on the published form. b. If you want to make an object hidden conditional depending the result of an expression, click f() , and then define an expression.
Specify that a check box should be selected by default	Select the **Initially checked** check box.

3. Click the **Title** tab, and then define the appearance of the title on the check box.

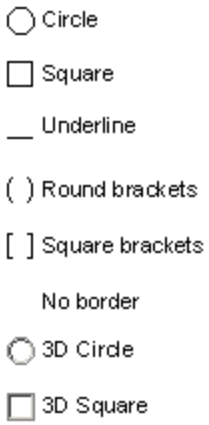
> **Tip:** You can view and approve these settings in the **Preview** area before you apply them to an object.

To	Do this
Include a title with an object	a. Select the **Enable** check box. b. In the **Title** box, enter the title.
Change the title font	Click **Change** and use the **Font** dialog box to adjust the font, font style, size, and effects. For more information about settings on the **Font** dialog box, see "Font dialog box" on page 208.

To	Do this
Define how the title is positioned relative to the object	Select the option that you want from the **Position** and **Alignment** lists.
Change the amount of spacing between the title and the object	In the **Spacing** box, select or enter the amount of spacing.
Remove a title from an object	Clear the **Enable** check box.

4. Click the **Appearance** tab, and then configure the appearance of the check box.

> **Tip:** You can view and approve these settings in the **Preview** area before you apply them to an object.

To	Do this
Change the appearance of borders **Note:** The **Border Shape** setting is not supported in HTML forms	On the **Appearance** tab, select an option in the **Border Shape** list. 
Make a check box transparent so that respondents see the background color of the form through the radio buttons **Note:** The **Transparent** setting is not supported in HTML forms	On the **Appearance** tab, select the **Transparent** check box.
Select a background color to fill the area where the selection mark appears **Note:** The **Fill Color** setting is not supported in HTML forms	On the **Appearance** tab, select a color in the **Fill Color** list. The **Fill Color** option is not available if the **Transparent** check box is selected.

To	Do this
Change the appearance of the selection mark that appears in the check box when it is selected **Note:** The **Check Shape** options are not supported in HTML forms	a. In the **Check Shape** list, select a shape for the selection mark. b. In the **Size** list, select a size for the **Check Shape**. The size options are font size for the Zapf Dingbats font that is used to draw the **Check Shape**. The default choice is **Auto**, which automatically sizes the **Check Shape** to the size of the check box. c. In the **Check Color** list, select the color of the **Check Shape**. The default selection is black.

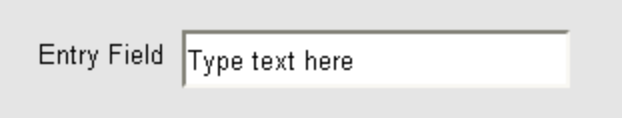
5. Click **OK**.

Related topics:

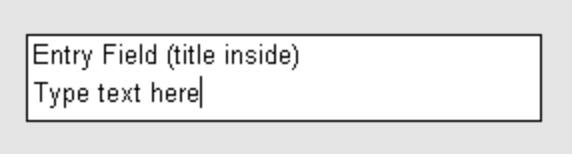
- "Setting the general properties for objects" on page 104
- "Configuring titles for objects" on page 117
- "Converting between radio groups and check boxes" on page 204

3.13 Creating an entry field object

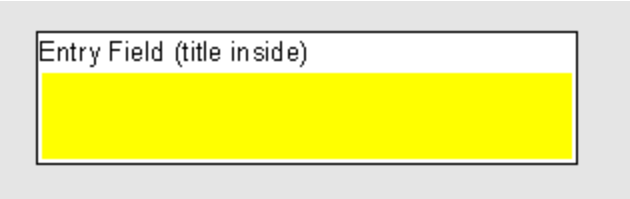
Entry fields enable the respondents to enter text. The following figure shows an entry field on a published form.



An Entry Field (title inside) is an entry field configured to display the field title inside the border of the field itself. These fields are useful for designers of government forms who attempt to build online documents that match the appearance of printed items. Many printed government forms include fields with titles inside the field borders. The following figure shows an entry field (title inside) on a published form.



If you select an Entry Field (title inside) in Form Designer, the space reserved for the entry appears in yellow. You can also view the space reserved for data entry by using the View Fillable Areas command. See "View Fillable Areas" on page 18.



This section discusses the following topics

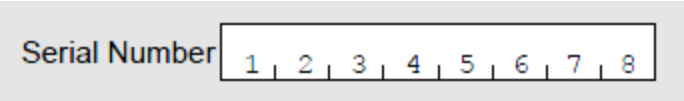
- "Customizing the appearance of entry field combs" below
- "Customizing the format of an entry field" on the next page
- "Configuring data properties for objects" on page 119
- "Customizing the validation of an entry field" on page 148

Related topics:

- "Setting the general properties for objects" on page 104
- "Configuring titles for objects" on page 117
- "Setting the appearance properties for objects" on page 106
- "Configuring data properties for objects" on page 119

3.13.1 Customizing the appearance of entry field combs

You can configure entry fields to display *combs* that show the space allocated for individual characters.



Note: Comb appearance is supported only for PDF forms.

To configure combs

1. Double-click an **Entry Field**.
   The **Properties** dialog box opens.
2. Click the Appearance tab.
3. Click either **None** or **Flat** borders.
4. Click **Comb**

 (below the preview window) to enable Combs.

5. In the Combs area, configure the comb:
   - **Number of combs**—Type or select the number of comb lines to insert into the Entry Field.
   - **Comb height**—Type or select the height of the comb relative to the height of the Entry Field.
   - **Side height**—Type or select the height of the Entry Field end lines. If you select 50%, the end lines of the Entry Field are half the height of the Entry Field.
6. Click **OK**.

Related topics:
- "Setting the appearance properties for objects" on page 106

3.13.2 Customizing the format of an entry field

To improve the accuracy of information collected by entry fields, you can restrict the type of data that respondents can enter.

For example, if you have an entry field for a telephone number, you can specify for the field to accept only numeric characters. If a respondent presses a wrong key, the entry is not accepted, and a prompt to type a valid response appears.

This section discusses the following topics:

Text Entry Fields

The default type of data accepted by an entry field is text.

To format an entry field to accept text values

1. Double-click the Entry Field.
   The **Properties** dialog box opens.
2. Click the **Format** tab.
3. In the **Entry format** list, click **Text**.
4. In the **Allowed characters** list, click one of the following options.
   - **Alpha-Numeric**—Respondents can type both alphabetic and numeric characters.
   - **Alpha**—Respondents can type alphabetic (A–Z) characters.
   - **Numeric**—Respondents can type numeric characters (1–9, 0). The decimal point (.) and minus (–) characters are also allowed.
5. To enable other types of characters, select the following check boxes:
   - **Allow special characters**—Respondents can type common symbol characters that are neither alphabetic nor numeric, such as !, @, #, or $.
   - **Allow spaces**—Respondents can type spaces in a response.
6. The options in the **Fill Behavior** area determine the behavior of text typed in the Entry Field.
   - **Case conversion**—To automatically modify the case of the text that is typed by the respondent, click an option in the **Case conversion** list.
   - **Text alignment**—In the **Text alignment** list, click one of the alignment options.
   - **Multiline**—Select the Multiline check box if your respondents are expected to type lengthy information. If you do not select Multiline and a respondent types a lengthy response, the text scrolls across the field without creating a new line.

     Note: When both **Multiline** and **Read only** are selected and the form is published, respondents can scroll through multiple lines of information even though they cannot change it. However, if the form is printed, only the text that fits in the default viewing area of the Entry Field prints.

   - **Password**—Select the check box to mask the text entered in the field.

     Important: If **Multiline** is enabled, the **Password** check box is unavailable.

- **Spell check (if available)**—Select **Spell check** to spell check the field when the published form is checked for spelling. Misspelled field text appears underlined in red. This feature is available only for PDF forms.
- **Limit text to field size**—Select the check box to restrict the length of the text entered by a respondent to the physical size of the entry field. This function is useful when you publish forms to PDF because excess text does not print. This setting is ignored for HTML forms.

7. Type in the **Initial Value** box to specify the default value of the field when a respondent opens the form. Unless the Entry Field is marked as read-only, the respondent can change this value.

   For information on the **Dynamic Initial Value** function (available by clicking ), see "Dynamic Initial Values" on page 146.

8. You can limit the minimum and maximum lengths of a respondent's entry. Responses that do not meet these constraints are rejected and the respondent receives a prompt to type a valid response.
   - To specify a minimum length, select the **Minimum length** check box, and then type or select a number in the box.
   - To specify a maximum length, select the **Maximum length** check box, and then type or select a number in the box.

9. Click **OK**.

Date Entry Fields

You can configure entry fields to accept date values.

To format an entry field to accept date values

1. Double-click the Entry Field.
   The **Properties** dialog box opens.
2. Click the **Format** tab.
3. In the **Entry format** list, click **Date**.
4. In the **Format** box, type or select a date format.

   The following table shows the available date formats.

Character	Function	Example
M	Month, 1 or 2 digits permitted.	January can be represented by 1 or 01.
MM	Month, 2 digits required.	January is represented by 01.
MMM	Month, 3 letter code. ALL CAPS required.	January is represented by JAN.

Character	Function	Example
D	Day, 1 or 2 digits.	The second day can be represented by 2 or 02.
DD	Day, 2 digits required.	The second day is represented by 02.
YY	Year, 2 digits required.	2011 is represented by 11.
YYYY	Year, 4 digits required.	2011 is represented by 2011.
/ (forward slash)	Separator	The / character can either be typed by respondents or added automatically when they exit the field.
– (dash)	Separator	The dash character can either be typed by respondents or added automatically when they exit the field.
. (period)	Separator	The period character can either be typed by respondents or added automatically when they exit the field.

5. (*Optional*) To display template characters on the published form, select the **Display template characters** check box.
   Template characters can help respondents to understand the allowed format for the Entry Field. See "Display Template Characters" on page 145.
6. Type the **Initial Value** box to specify the default value of the field when a respondent opens the form.
   Unless the Entry Field is read-only, the respondents can change this value.

   For information on the **Dynamic Initial Value** function (available by clicking ), see "Dynamic Initial Values" on page 146.
7. In the **Text alignment** list, click one of the alignment options.
8. (*Optional*) To limit the respondent's entry to a specific date range, select one or more of the check boxes in the **Range** group.
   - Select the **Must be on or after** check box, and then type a date to specify the earliest date the respondent can enter.
   - Select the **Must be on or before** check box, and then type a date to specify the latest date the respondent can enter.
   - Select both check boxes to define a date range.
9. Click **OK**.

Time Entry Fields

You can configure entry fields to accept time values.

To format an entry field to accept date values

1. Double-click the Entry Field.
   The **Properties** dialog box opens.

2. Click the **Format** tab.
3. In the **Entry format** list, click **Time**.
4. In the **Format** box, type or select a time format.

   The following table shows the available time formats.

Character	Function	Example
H	Hours, 1 or 2 digits allowed. 24-hour time.	5 A.M. (05:00) can be represented by 5 or 05. 5 P.M. (17:00) is represented by 17.
HH	Hours, 2 digits required. 24-hour time.	5 A.M. (05:00) is represented by 05. 5 P.M. (17:00) is represented by 17.
h	Hours, 1 or 2 digits allowed. 12-hour time.	5 A.M. (05:00) can be represented by 5 or 05. 5 P.M. (17:00) can be represented by 5 or 05.
hh	Hours, 2 digits required. 12-hour time.	5 A.M. (05:00) is represented by 05. 5 P.M. (17:00) is represented by 05.
mm	Minutes, 2 digits required.	3 minutes is represented by 03.
ss	Seconds, 2 digits required.	44 seconds is represented by 44. 6 seconds is represented by 06.
t	am or pm (lower case)	
T	AM or PM (Upper Case)	
: (colon)	Separator Character	The colon character can either be typed by the respondent or added automatically when respondents exit the field.

5. To display template characters on the form, select the **Display template characters** check box to display the template characters on the published form.
   Template characters can help respondents to understand the allowed format for the Entry Field. See "Display Template Characters" on page 145.
6. Type a time in the **Initial Value** box to specify the default value of the field when a respondent opens the form.
   Unless the Entry Field is read-only, the respondent can change this value.

   For information on the **Dynamic Initial Value** function(available by clicking ), see "Dynamic Initial Values" on page 146.
7. In the **Text alignment** list, click one of the alignment options for a time format.
8. Click **OK**.

Numeric Entry Fields

You can configure entry fields to accept numeric values.

Note: Numeric type entry fields are subject to limitations set by the JavaScript programming language. JavaScript uses double-precision floating-point format numbers and can only safely represent integers between –(253 – 1) and 253 – 1. Accuracy is guaranteed up to 15 digits. The maximum number of decimals is 17, but floating-point arithmetic is not always 100% accurate. For more details, see the language specification: http://www.ecma-international.org/ecma-262/6.0/#sec-terms-and-definitions-number-value

To format an entry field to allow numeric values

1. Double-click the Entry Field.
   The **Properties** dialog box opens.
2. Click the **Format** tab.
3. In the **Entry format** list, click **Numeric**.
4. If the Entry Field is intended to capture a currency value, you can type a **Currency symbol** to be automatically added to the numeric value typed by the respondent.
   Select the **Append** check box to place the currency symbol at the end of the data typed by the respondent.
   Clear the **Append** check box to place the currency symbol at the beginning.
5. In the **Separator/Decimal style** list, click a style option.
   The default setting uses a comma to separate thousands digits and a period for the decimal point. The number typed by the respondent is automatically formatted using the symbols you select.
6. In the **Decimal places** box, type or select the number of decimal places that are required in the entry.
   If you configure the Entry Field to accept two decimal places, and the respondent types `123.456`, the form automatically formats the value as `123.46` after the respondent leaves the Entry Field. If the respondent types `4`, the value is automatically formatted as `4.00`.
7. Type a number in the **Initial value** box to specify the default value of the field when a respondent opens the form.
   Unless you make the entry field read-only, the respondent can change the default value.
   For information on the **Dynamic Initial Value** function (available by clicking ), see "Dynamic Initial Values" on page 146.
8. In the **Text alignment** list, click one of the alignment options.
9. To limit the respondent's entry to a specific range of values, select one or more of the check boxes in the **Range** area.
   - Select the **Minimum value** check box, and then type a number.
     If a respondent types a number that is less than the Minimum value, a prompt to type a

valid number appears.

- Select the **Maximum value** check box, and then type a valid number.
  If a respondent types a number that is more than the Maximum value, a prompt to type a valid number appears.
- Select both of the previous check boxes to define a range rather than a minimum or maximum value.

10. Click **OK**.

Entry Field Templates

An entry field template specifies an exact mix of characters for an entry field. For example, you can define a field as requiring five alphabetic characters, followed by three numeric characters, followed by a slash, followed by two more alphabetic characters.

Templates can be useful to collect information such as part numbers or employee identification information. These values often contain a specific mix of characters. Using an entry field template reduces the chance that a form is submitted with incorrect information.

For examples of how templates are configured in Form Designer, and how they look and function on a published form, see "Entry Field Formats" on the next page. The examples in represent just a few of the possible templates you can define.

For Date and Time templates, see "Date Entry Fields" on page 140 and "Time Entry Fields" on page 141.

To format an entry field to use a template

1. Double-click an entry field.
   The **Properties** dialog box opens.
2. Click the **Format** tab.
3. In the **Entry format** list, click **Template**.
4. In the **Format** box, either type or select a format to define the acceptable entry values.
   For a list of the available LiquidOffice entry field formats, see "Entry Field Formats" on the next page.
5. (*Optional*) To display template characters on the published form, select the **Display template characters** check box.
   Template characters can help respondents to understand the allowed format for the entry field. For more information, see "Display Template Characters" on the next page.
6. Type a value in the **Initial value** box to specify the default value of the field when a respondent opens the form.
7. In the **Text alignment** list, click one of the alignment options.
8. (*Optional*) To remove template characters before the data is exported, click the **Data** tab,

and then select the **Strip template characters from data** check box. Template characters are exported with the data by default.

9. Click **OK**.

Display Template Characters

Template characters divide the data that is entered into an entry field. For example, in the date 01/01/2012, the forward slash is a template character.

To display template characters on the form before the respondent types in the field, enable the Display Template Characters feature. This feature is available only for PDF forms when the exclamation (!) character separates the entry field.

Entry Field Formats

The following tables in this section provide sample entry field formats.

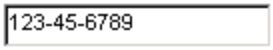
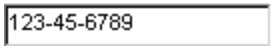
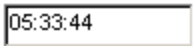
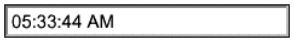
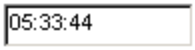
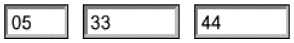
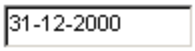
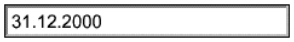
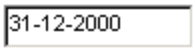
Available entry field formats

Character	Function	Example
A	Any alphabetic character, in upper- or lower-case.	A–Z, a–z
U	Any upper-case alphabetic character.	A–Z
L	Any lower-case alphabetic character.	a–z
X	Any alphanumeric character, in any case.	A–Z, a–z, 0–9
N	Any number.	1–9, 0
S	Any punctuation character or space.	, . ! : ; ? - / \
.	Any character.	Any standard keyboard character.
Number	Repeats the previous character.	N5 requires a five-digit numeric entry. A3 requires a three-character alphabetic entry.
Space character	Literal Character (special case)	A space can either be typed by the respondent or added automatically when the respondent exits the field. The Space character does not need to be preceded by a \ literal character indicator.
\ (backslash)	Literal Character. This character allows only the exact character that immediately follows the \.	MM\-DD\-YYYY allows an entry of 01-01-2013 or 01012013. When the respondent exits the field, it formats as 01-01-2013.

Available entry field formats, continued

Character	Function	Example
! (Exclamation mark)	Field Separator	Separates the entry field at the location of the !. For example: M/!D/!YYYY appears on the form as: 

Entry field template examples

Template	Format	Sample Valid Entry	Appearance on HTML Forms	Appearance on Published Forms
AA\-AA	Template	AB-CD EF-ZX MNop		
N3\-N2\-N4	Template	123456789 123-45-6789		
N3!\-N2!\-N4	Template	123456789 123-45-6789		
HH:mm:ss T	Time	053344 05:33:44		
HH!:mm!:ss	Time	053344 05:33:44		
DD.MM.YYYY	Date	31122000 31-12-2000		
DD!.MM!.YYYY	Date	31122000 31-12-2000		

Dynamic Initial Values

You can configure entry fields to automatically display a unique value when the form opens from the LiquidOffice server. This value is known as a *dynamic initial value*. The available dynamic initial values are:

- **Today**. The date when the form opens.
- **Now**. The time when the form opens.
- **Unique Sequential Number** is a unique number read from the LiquidOffice server. This function is useful to create sequentially numbered forms such as purchase orders. Each time a respondent opens the form, the field fills with a unique number.

  Keep in mind the following considerations:

- To use dynamic initial values, the form must be published to an LiquidOffice server.
- To use unique sequential numbering, you must enable the **Unique Sequential Numbers** option in the form properties. For more information about defining form properties, see "Form properties" on page 53

To populate an entry field with a dynamic initial value:

1. Double-click the entry field.
   The Properties dialog box opens.
2. Click the **Format** tab.
3. In the **Entry Format** list, click **Time**.
4. In the Initial Value box, click  (**function**).
   The Dynamic Initial Values dialog box opens.
5. In the **Select a dynamic initial value** list, click one of the initial values:

   Note: The **Select a dynamic initial value** list displays only the initial values that are compatible with the selected entry field format. For example, you cannot use the **=now ()** initial value with an entry field that is formatted to accept a date value.

   - **=today()** (today's date)
   - **=now()** (current time)
   - **=uniquenum()** (dynamic initial value)
6. Click **OK**.
   The Initial value box updates with the dynamic value.

   Note: You can test these changes only after publishing the form to the LiquidOffice server. Dynamic initial values are not supported in Form Previews.

3.13.3 Customizing profile data for entry fields

Entry fields can be populated automatically with user profile information from the LiquidOffice server. This feature can reduce the amount of time required by a respondent to complete a form, as well as improve accuracy. The respondent must be logged on to the LiquidOffice server for this feature to be available.

LiquidOffice offers many predefined User Profile fields that can link to an entry field. Your LiquidOffice server administrator can create new User Profile fields on the LiquidOffice server.

Example

Your organization acts as a clearinghouse for international education applications. Prospective students from around the world can register with your service and send online applications to hundreds of colleges and universities. While each school asks you to design a somewhat different application form, all of them require that the applicant provide a name, age, country of residence, address, and other personal details.

As you design the forms, you create entry fields for collecting personal information and link them to the User Profile fields saved on the LiquidOffice server. Every form does not have the same configuration of "profile" entry fields, but there is significant overlap. In fact, you save the entry fields in the **Custom** tab in the **Gallery** so that you can reuse them later (see "Customizing profile data for entry fields" on the previous page).

After applicants register with your firm, they can log into the LiquidOffice server and complete the User Profile fields. When they complete an application, the entry fields that link to the Profile fields are automatically populated. Respondents can complete and submit many applications in a short time, and their personal information is always accurate—as long as they typed it accurately when completing the profile.

To link an entry field to a profile field

1. Double-click an entry field.
   The Properties dialog box opens.
2. Click the **Profile** tab.
3. If you are not yet logged on to a LiquidOffice server, you must log on now.
   For instructions, see "Connecting to and disconnecting from the LiquidOffice server" on page 58.
4. Click **Refresh list** to start a new search of the **Profiles** fields on the LiquidOffice server.
5. In the **Map to user profile field** list, click a Profile field on the LiquidOffice server.
   The information from this field automatically populates the entry field when a respondent opens the form. The respondent must be logged on to the LiquidOffice server.
6. Click **OK**.

3.13.4 Customizing the validation of an entry field

Validation compares data entered in an entry field to a database on the LiquidOffice server. Validation can help to ensure that the data collected from an entry field meets certain standards. Validation is available only with entry fields.

Data can be validated using either *matching* or *exclusionary* validation.

- **Matching validation** checks that the data entered *matches* a value in the database.
  For example, you can validate postal codes collected from an entry field against a database of all valid postal codes. If the postal code in the entry field does not match a value in the

database, the respondent receives a prompt to type a different postal code.

- **Exclusionary validation** checks that the data entered *does not match* a value in the database.
  For example, you create a form to collect membership applications for a free, Web-based information service. Exclusionary validation can prevent multiple subscriptions being sent to the same email address. If the respondent enters an email address that is already in the database, the application is rejected.

Important: To use database validation, a connect agent must be configured to connect the LiquidOffice server to a data source. If a connect agent has not been configured, contact your LiquidOffice server administrator for assistance.

To configure validation

1. Connect to the LiquidOffice server.
   See "Connecting to and disconnecting from the LiquidOffice server" on page 58.
2. Double-click an Entry Field.
   The Properties dialog box opens.
3. Click the **Validations** tab.
4. Select the **Enable database validation for this field** check box.
5. Define the data source to use to validate the entry field data.
   a. Click **Change**.
      The Select Data Connect Agent dialog box opens.
   b. In the **Data Connect Agent**, **Table**, and **Column** lists, locate the information against which to validate the entry field.
   c. Click **OK**.
6. In the **Validation settings** area, select a validation method.
   - **Value must exist**: The validation succeeds if the value collected in the entry field matches a value in the database column.
   - **Value must not exist**: The validation succeeds if the value collected in the entry field *does not match* a value in the database column.
7. Select one or more of the check boxes to define when the respondent is notified of a failed validation.
   - **Validate when leaving field (warn)**. When respondents leave the entry field, they are warned that their response is not acceptable. Unless you also select the **Validate when submitting (require)** check box, the respondent can submit the form with an invalid value.
   - **Validate when submitting (require)**. When respondents attempt to submit the form,

they are notified that the response in the entry field is not acceptable.

> **Note:** It might be beneficial to select both the **Validate when leaving field** and **Validate when submitting** check boxes.
>
> - The first option allows respondents to change the value in the entry field while they are still near the field.
> - The second option prevents the form data from being collected when the entry field contains an invalid value.

8. (*Optional*) To provide respondents with automatic suggestions as they type in an entry field, select the **Enable type-ahead** check box.
   Type or select a value in the **Minimum chars** box to set how many characters the user must type before suggestions appear.

   > **Note:** Type-ahead is supported only with HTML forms and string-based database columns. You cannot use the type-ahead feature with PDF forms or numeric database columns (such as `int`).

9. In the **Failure** box, type a message to display to respondents if the validation fails. (for example: `You entered an invalid part number. Please retry.`)
10. Click **OK**.

3.14 Creating a hidden field

Hidden fields are data fields that do not appear on the form. You can use hidden fields to store data that you do not want to appear on the form.

A hidden field can be populated with a dynamic value or profile data from the LiquidOffice server. For example, you can populate a hidden field with an employee's salary code. The salary code is not visible to the respondent, but is collected with other form data.

To create a hidden field

1. On the menu bar, click **Edit > Insert > Hidden Field**.
   The **Field List** tab appears and a hidden field is added to the list.

> **Tip:** To ensure that hidden fields appear in the Field List tab, make sure that the Show hidden fields check box is selected in the Field List tab on the Gallery sidebar.
>
> The **Field List** tab appears at the bottom of the Gallery, and the **Show hidden fields** check box appears at the bottom of the **Fields List** tab.

2. Enter a name for the field, and then press `Enter`.
3. Open the **Properties** dialog box for the hidden field that you want to customize. Do one of the following:
   - Double click the hidden field that you want to edit.
   - Right-click the hidden field, and then click **Properties**.
     The **Properties** dialog box opens.
4. Click the **Initial Value** tab
5. Define the initial value for the field. Do one of the following:

Task	Description
To use a static value	Enter a value in the **Value** box.
To use a dynamic value	a. Click  . The **Dynamic Initial Values** dialog box opens. In the **Select a dynamic initial value list**, select one of the options. • **=today()**—The date when the form opens. • **=now()**—The time when the form opens. • **=uniquenum()**—A unique number read from the LiquidOffice server. This function is useful for creating sequentially numbered forms such as purchase orders. Each time a respondent opens the form, the field is filled with a unique number. b. Click **OK**.
To populate the field with Profile data from the LiquidOffice server	Click **Profile field** and select a profile field from the list.

6. Click **OK**.

Related topics:
- "Setting the general properties for objects" on page 104

3.15 Creating an HTML viewer object

An HTML viewer object enables you to insert custom HTML into a form to enhance the appearance and behavior beyond what might be possible with standard form elements. You can add HTML content during form design, or HTML content can be added or updated using a script (see "Sample Client-Side JavaScript (HTML Viewer)" on page 155).

This section discusses the following topics:

Related topics:

- "Setting the general properties for objects" on page 104
- "Configuring data properties for objects" on page 119
- "Setting the appearance properties for objects" on page 106

Configuring an HTML Viewer

An HTML viewer object enables you to insert custom HTML into a form to enhance the appearance and behavior beyond what might be possible with standard form elements. You can add HTML content during form design, or HTML content can be added or updated using a script (see "Sample Client-Side JavaScript (HTML Viewer)" on page 155).

To configure a HTML Viewer object:

1. Double-click the HTML viewer object.
2. In the **Properties** dialog box, click the **General** tab.

To	Do this
Name the object	In the **Field name** box, enter a name for the object. Keep in mind the following considerations when creating a **Field name**: • A **Field name** can contain alphanumeric characters, and underscores (_). • The first character in a **Field name** must be alphabetic, or an underscore. • The maximum length of a **Field name** is 30 characters. • Each object on a form must have a unique **Field name**.

To	Do this
Describe the object to respondents	In the **Field description** box, enter a description for the object. The description cannot exceed 1000 characters. On a published form, the description appears as a tooltip when a respondent hovers the mouse pointer over the field. Respondents who access the form with a screen reader hear the **Field description**. The field description should help explain the function of an object to respondents.
Hide the object on the published form	a. Select the **Collapsed** check box. The object remains visible in Form Designer, but does not appear on the published form.

3. Click the **Data** tab to define how data is exported from the object.
   a. To remove template characters from exported data (such as separators in date and time values), select the **Strip template characters from data** check box. This option is cleared by default and template characters are exported.

      Important: If you select the **Strip template characters from data** check box and the entry field is linked to a Database Lookup or a Validation, the server-based Connect Agent that performs these functions also provides data that is stripped of template characters.

   b. To allow a field to export a default value if the respondent does not enter data, in the **Default value** box, enter a default value to export from the data entry field.
   For example, you can assign the text None as the default value. None is exported as the value for the field when there is no data. If you do not want to use a default value, leave this field empty.

   c. To define the size of the database column that stores exported data, complete one of the following steps:

To	Do this
Allow LiquidOffice to calculate the size automatically	Click **Default size**. **Note:** LiquidOffice uses a column length that is the greater of 50 characters or the maximum length specified for the field. Ensure that the database column is large enough to store the values that can be exported from the entry field, otherwise excess data is discarded.
Specify a custom size	Click **Custom size**, and then select or enter a value in the box.

4. Click the **Content** tab.
5. Choose whether HTML content should be validated so that it can be included in flattened PDF renditions:

To	Do this
Validate HTML content and ensure that it only includes tags that can be rendered in exported and downloaded PDF forms	Clear the **Include any HTML content** checkbox (this is the default behavior).
Include any HTML content and skip validation	Select the **Include any HTML content** check box.

Caution: HTML content that you include in HTML viewer is automatically included between the body tags (<body></body>) within the form. As a best practice, when you add HTML tags in HTML viewer, include only HTML tags that are normally included within body tags.

Caution: Form designers must ensure that the HTML content added to an HTML viewer object is valid and that it has no adverse impact on other elements in the form (such as the styles of other form elements)

6. To include content in an HTML viewer:
   a. Click **Edit**.
   b. In the **HTML Editor**, enter the HTML content that you want to include.
   c. Click **OK**.
7. Click the **Appearance** tab.
8. To include a border around the HTML viewer, select the **Show HTML Viewer border** check box.
9. Click **OK**.

Related topics:
- "Default Supported HTML Tags" below
- "Adding an object to a form" on page 93
- "Setting the general properties for objects" on page 104
- "Setting the appearance properties for objects" on page 106

Default Supported HTML Tags

This section lists the following supported HTML tags:

- Tags that are supported by default in the HTML viewer.
- Tags that can be rendered in exported and downloaded flattened PDF forms.

Tag	Description	Supported Attributes
span	designates an inline portion of an HTML document as a span element	—
font	sets the font face, color, and size of the text characters	face, size, color
a	anchor tag is most commonly used with the HREF attribute to create a hyperlink	name, href
p	marks the beginning of a paragraph, and is analogous to having both a line break and a carriage return	align
div	designate a block-line portion of an HTML document	align, style
h1,h2,h3,h4,h5,h6	define headings	—
ol	delimits the start and stop of an ordered (for example, numbered) list	—
ul	delimits the start and stop of an unordered (for example, bulleted) list	—
li	marks an item in a list	—
em	provides emphasis (italic) when displaying the enclosed word or phrase	—
b	causes the designated text to appear in bold	—
strong	provides a strong emphasis (bold) when displaying the enclosed word or phrase	—
i	causes the designated text to appear as an italic or oblique font style	—
pre	displays preformatted, monospaced text	—
strike	causes the designated text to appear with a strike-through horizontal line	—
s	causes the designated text to appear with a strike-through horizontal line	—
code	displays computer code in a special font, usually in a monospaced font style (such as Courier)	—
u	underlines (underscores) the designated text	—
sup	inserts superscript into a text	—
sub	inserts subscript into a text	—
hr	renders a horizontal rule (line)	—
table	designates an element as a table	width, bgcolor, bordercolor, columns, cellpadding, cellspacing, borderwidth, align
tr	creates a row in a table element	—
td	creates cells that contain the data, information, or text to display in the table	width, bgcolor, bordercolor, colspan, rowspan, nowrap, align, valign
th	creates a heading cell for the cells in a row in a table element	width, bgcolor, bordercolor, colspan, rowspan, nowrap, align, valign
img	inserts a graphic or photographic image directly into the flow of text and other images	src, alt, width, height, align, before, after, loop, start
br	creates a line break and is analogous to a carriage return	—

Sample Client-Side JavaScript (HTML Viewer)

The following code sample shows how JavaScript can modify the content of a HTML viewer when a form opens or when the value of an entry field changes.

```
function CSForm_OnLoad() {
     var fldHTML = CSForm.getField("HTML_Viewer1");
     fldHTML.setValue( "<b>Hello World!</b>" );
}

function Entry1_OnChange() {
     var fldHTML = CSForm.getField("HTML_Viewer1");
     var fldENTY = CSForm.getField("Entry1");
     fldHTML.setValue( "<b>" + fldENTY.getValue() + "</b>" );
}
```

3.16 Creating a hyperlink object

Forms can include hyperlinks to locations on the Internet or an intranet. Hyperlinks can also be added to a form as button objects. To configure a button as a hyperlink, see "Creating a button object" on page 128.

To configure a hyperlink:

1. Double-click the hyperlink.
   The **Properties** dialog box opens.
2. In the **Display** box, type the text to appear on the form.
   For example, `Click here for more information`.
3. In the **Target URL** box, type the location of the page to open when the respondent clicks the hyperlink.
   The URL must begin with `http://`
4. To change the font used for the hyperlink, click **Change**.
   The **Font** dialog box opens (see "Font dialog box" on page 208).
5. To change the appearance properties for the hyperlink, click the **Appearance** tab. See "Setting the appearance properties for objects" on page 106.
6. To change the properties of the text box that contains the hyperlink, click the **Text** tab. See "Configuring text properties for objects" on page 111.
7. Click **OK**.

Related topics:

- "Setting the appearance properties for objects" on page 106
- "Configuring text properties for objects" on page 111

3.17 Creating an image viewer object

The Image Viewer is an object that you can embed in a HTML form to allow users to dynamically view the images attached to the form.

The Image Viewer supports the following image formats.

- JPEG (`.jpg`, `.jpeg`)
- CompuServe Graphics Interchange Format (`.GIF`)
- Portable Network Graphic (`.PNG`)

The Image Viewer can be populated through a client-side script.

For information about writing scripts for LiquidOffice, see *Programming Guide*.

Note: When you place an Image Viewer object on a form, also place a Button to add attachments/images to the form. For information about adding buttons, see "Creating a button object" on page 128.

When published, the form should have attachments enabled. See "Publishing Wizard: Routing Settings (in Form Designer)" on page 69.

Note: When you place an Image Viewer object on a form, also place a Button to add attachments/images to the form. For information about adding buttons, see "Creating a button object" on page 128.

When published, the form should have attachments enabled. See "Publishing Wizard: Routing Settings (in Form Designer)" on page 69.

To configure an Image Viewer:

1. Double-click the Image Viewer object.
   The Properties dialog box opens.
2. Type a **Field Name** and **FieldDescription** for the Image Viewer. See "Setting the general properties for objects" on page 104.
3. Click the **Image Viewer** tab, and then select the **Show Toolbar** check box.
   The Image Viewer toolbar includes a list of attached images, as well as a **Controls** button. When clicked, the Controls button displays:
   - Zoom and pan options that allow users to adjust their view of the image
   - Page navigation options that allow users to move between images, if multiple images are attached

4. (*Optional*) Select the **Do not automatically show attached images** check box if you plan to write script to initialize the list of images the Image Viewer will display. This setting is clear by default.
5. Click **OK**.

Related topics:
- "Setting the general properties for objects" on page 104

3.18 Creating an ink picture object

An Ink Picture is an entry field that captures a free-form drawing, such as information drawn by a mouse or another pointing device. An Ink Picture can let a respondent draw a picture, circle an area on an image, or draw a signature.

Keep in mind the following considerations before using an ink picture object:

Consideration	Description
Consider whether you are using the best object for your needs.	Ink picture objects and signature objects are similar but have different functions and different behaviors. An Ink Picture differs from a Signature Object in the following ways: • An Ink Picture captures a representation of a handwritten signature or other mouse or pointing device movement. It does not allow "digital signing," where respondents use a password to confirm their identities. • There is no authentication for Ink Pictures. • An Ink Picture cannot be used to lock fields on a form unless a script is written for that purpose. You can configure an LiquidOffice Signature Object to prevent the editing of specified fields after the form is "signed."
To link an ink picture to a signing device requires scripting.	For detailed information about writing scripts for LiquidOffice, see *Programming Guide*.
Ink pictures can be published on PDF forms; they are read-only in this format.	—
Multiple ink pictures require specific settings for use in an offline HTML form	To use multiple ink pictures on offline HTML forms, the page view must be set to *Continuous*. If the page view is set to *Paged*, the ink picture does not function correctly. To configure the page view, see "Form properties" on page 53 and "Configuring Publishing settings" on page 25.
If an Ink Picture is shared between multiple forms in a process, a signature placed in one form also appears in the other forms	Because of this behavior, OpenText recommends that ink picture objects should not be shared between multiple forms in a process. Instead, it is a best practice to use a separate ink picture object for each form.

To configure an Ink Picture:

1. Double-click an ink picture.
   The Properties dialog box opens.

2. Click the **Appearance** tab.
3. In the **Ink** area, use the color picker to choose a color for the lines drawn in the ink picture field.
   OpenText recommends to use a strong color, such as black. Otherwise, ensure the Ink Color contrasts strongly with the Fill Color.
   If you change the Ink Color after publication of a form, the change only affects ink drawn after that point, not existing ink.
4. In the **Width** box, type or select a value to set the weight of the line drawn in the ink picture field. The Ink Width is restricted to 1 or 2 pixels.
5. (*Optional*) To show a horizontal line across the bottom of the ink picture field (as a guide for a signature), select the select the **Show writing guide** check box.
6. (*Optional*) To use a background image in the ink picture field, select the **Enable background image** check box.
   Respondents can draw on top of background images.
   The Select image dialog box opens.
   Alternatively, click **Browse**  to browse for an image.
   a. Select an image, and then click **Open**.
7. Click **OK**.

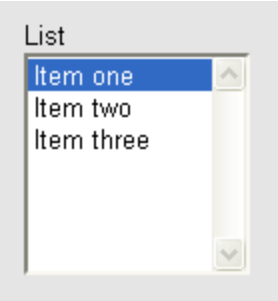
Related topics:

- “Setting the general properties for objects” on page 104
- “Configuring titles for objects” on page 117
- “Setting the appearance properties for objects” on page 106

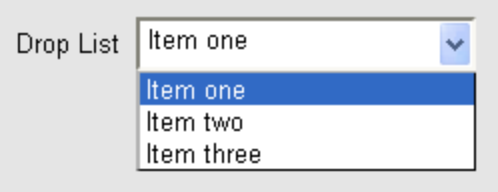
3.19 Creating a list or drop list object

Lists allow respondents to select a choice from a large number of possible options. A list is a fixed-size list box that can be configured to accept one or more selections.

Form Designer includes two types of list object: lists and drop lists.



A *drop list* is a drop-down list box. It can be configured to allow respondents to type a response.



Lists let you provide options or choices that respondents can select from a list. Depending on the type of content you want to appear in the list, you can either provide specific source data (which can be entered manually or imported from a comma separated file), populate from a database, or display a list of the form's attachments.

List entries that appear on the form are called *display names*. The data that is exported from a list is its *value.*

A *display name* and its corresponding *value* do not need to match. The *display name* can show a common name for a product, while the *value* might be a specific part number used by your company for inventory control, shipping, and pricing.

To create a list or drop list object:

Note: When creating forms to publish to PDF, do not place a drop list too close to the bottom edge of the page. For them to appear properly, drop lists require space to expand downward.

1. Select the object(s) that you want to configure and open the **Properties** dialog box.

Selection	Task
To select a single object	• Double-click the object on the form • Right-click the object, and then click **Properties** • Select the object, and then click **Format** > **Properties** • Select the object, and then press `Alt + Enter`
To select multiple objects	You can edit the properties of multiple objects by selecting multiple objects. When you right click an object to open the Properties dialog box, one of the following actions occurs: • If the objects share common properties, the Properties dialog box opens. The Properties dialog box only displays the properties that are shared by all the selected objects. • If the objects do not share any properties, the No Common Properties dialog box opens.
To modify the properties of a grouped object without ungrouping the group	Hold down `Ctrl+Shift`, right-click the object, and then click **Properties**. The Properties dialog box opens.

2. Click the **List** tab
3. In the **Control type** list, select the type of control to use:
   - **Drop-list**—Allows a respondent to select a choice from a list that drops down. Respondents cannot type their own responses.
   - **Drop-list, allow free entry**—A drop-list that allows respondents to type a response. If you select this control type, you might want to provide instructions on the form to explain how to type a free response.
   - **Listbox, attachments**—Displays a list of file attachments that are attached to the form. You can only add one list of this type to a form. If you select this option, skip to step 6.

     Note: The **Listbox, attachments** type is supported only in HTML forms.

   - **Listbox, single selection**—Allows respondents to select a single choice from a list.
   - **Listbox, multiple selection**—Allows respondents to select multiple choices from a list.
4. If you select the **Control Type** of **Drop-list, allow free entry** (which allows respondents to enter their own values) and you want to check these values for spelling errors, select the **Spell check (if available)** check box.

   Note: The Spell Check feature is available only for PDF forms.

5. If you want the list source to be defined during the form design, complete the following steps:

a. From the **List source** list, select **Fixed list**.

b. To define the contents of the list, complete one of the following:

To	Do this
Type the list entries.	i. Double-click the first cell in the **Display** column. ii. Type a *display name* for the first item in the list. iii. Press `Tab` or use the mouse to move the cursor to the **Value** column. iv. Type a *value* for the first item in the list. v. Press `Enter`. vi. Repeat these steps for the remaining items in the list.
Import list entries from a file.	i. Click **Import**  . The **Open** dialog box opens. ii. Browse to the Comma Separated Value (`*.CSV`) file to import. iii. Click **Open**. The items in the CSV file are added to the Display and Value columns.

c. To organize your list, complete the following steps as needed:

- To change the sequence of the items in the list, click **Sort**  .
- To remove an item from the list, click **Delete**  .

> **Tip: Remove All Items from a List**.
>
> Click **Remove All**  to remove all the items in the list. This command is useful when you import a new list from a CSV file and want to clear the existing contents. It can also be useful when you have a very long list that you need to shorten considerably. Retyping the new choices might be easier than deleting the old choices one at a time.

d. To define the initial value for a list entry, select the **Chk** check box.
The initial value is selected when a respondent opens the form. `Select One` is selected by default.

> **Note:** If you select **List box, multiple selection** as the **Control type**, you can define multiple initial values for the list.

> **Note:** If you configured the list to use the **Entry required** constraint, respondents must select a choice other than the initial value. For this reason, set up an initial value that is instructional (such as, `Select One`, `Choose One`, or `Available Colors`) rather than meaningful (a choice that corresponds to a value that would be useful to you).

e. Skip to step 6.

6. If you want the list populated from a database, complete the following steps:

   a. In the **List source** list, click **Dynamic (from database)**.

   > **Note:** By default, any dynamic list on a form published in LiquidOffice 5.0 repopulates with a completely new set of values upon triggering the lookup. This behavior differs from how previous versions of LiquidOffice handled dynamic lists on HTML forms. See "Configuring Publishing settings" on page 25 for information on using the older, "Legacy" behavior for dynamic lists on HTML forms.

   b. Click **Display Column**.
   If you are not already connected to the Form Server, you receive a prompt to log in.
   The **Select Display Column** dialog box opens.

   c. In the **Data Connect Agent** list, click the connect agent to use to connect to the external database.

   d. In the **Table** list, click the database table you want to use.

   e. In the **Column** list, click the column you want to display in the list or drop list.

   f. Click **OK**.
   The **Select Display Column** dialog box closes.

   g. If you want the display column to be different to the storage column, click **Storage Column**.
   The **Select Storage Column** dialog box opens.

   h. In the **Column** list, click another column.

   i. To limit the number of items that appear in the list, select the **Max prefill items** check box, and then type a number.

   j. To specify the order of items in the list, click an option in the **Prefill item sort order** list.

   - **Natural** (the order the items appear in the database)
   - **Ascending**
   - **Descending**

k. To edit the key fields, click **Edit Lookup**.
The **Lookup Mappings** dialog box opens.

i. In the **Column** list, click **<None>** for the first field to fill with information from the database lookup. A list appears, allowing you to choose the database column that will fill that data entry field on the form.

ii. In the **Field Name** list, click a Key Field, and then click **Set as Key**.

> **Note:** Click **Reset** to return the field names and columns to their default state.

iii. Click a **Trigger** option.

- **OnLoad**—When the form opens, fields connected to the database lookup automatically fill with the applicable data. There are various ways to make this work, including using a hidden field as your key field (for example, `LF__User` and `LF__FormID`) or by prefilling your key field with the applicable data before publishing the form. For the hidden field or prepopulated field to work as a key field, the data must exactly match the data in one of the fields of the selected database column.
- **OnTabout**—The lookup triggers after a respondent fills and exits the key field, either by pressing `Tab` or by using the mouse. This function is not available if a hidden field is the key field.

iv. Click **OK.**

l. Set the initial value to appear in the list or drop list when a respondent opens the form.

m. Click **OK** to save your changes.

7. Click **OK**.

3.20 Adding a picture to a form

You can add images (such as, a company logo) to a form. Form Designer supports many image formats, including:

- Windows Bitmap (`.bmp`, `.dib`, `.rle`)
- CompuServe Graphics Interchange Format (`.GIF`)
- JPEG (`.JPG`, `.JPEG`)
- Portable Network Graphic (`.PNG`)

- Tagged Image File Format (`.TIF`, `.TIFF`), except those that use LZW compression
- Windows MetaFile (`.WMF`, `.EMF`)

Tip: For the best browser support for form images, use `.jpg`, `.png`, or `.gif` image file formats.

You can add a static image to a form without opening the picture in another application. This function is useful if you do not have a powerful graphics editing program from which you can open, copy, and paste the picture.

To add a picture to a form:

1. On the menu bar select **Edit > Insert > Picture**.
   The **Select Image** dialog box opens.
2. Select an image and click **Open**.
   The image is added to the form.
3. Select the object(s) that you want to configure and open the **Properties** dialog box.

Selection	Task
To select a single object	• Double-click the object on the form • Right-click the object, and then click **Properties** • Select the object, and then click **Format** > **Properties** • Select the object, and then press `Alt + Enter`
To select multiple objects	You can edit the properties of multiple objects by selecting multiple objects. When you right click an object to open the Properties dialog box, one of the following actions occurs: • If the objects share common properties, the Properties dialog box opens. The Properties dialog box only displays the properties that are shared by all the selected objects. • If the objects do not share any properties, the No Common Properties dialog box opens.
To modify the properties of a grouped object without ungrouping the group	Hold down `Ctrl+Shift`, right-click the object, and then click **Properties**. The Properties dialog box opens.

4. Change the settings in the **Display options** area as required.

Task	Description
To change the width or height of an image independently of the other dimension	Select the **Stretch image to fit boundaries** radio button. Keep in mind that this option can distort the image.
To maintain the proportion between the width and height of the picture	Select the **Fit image within the boundaries (maintain aspect ratio)** radio button. Keep in mind that while this option prevents an image from being distorted, the image might not fill the container.

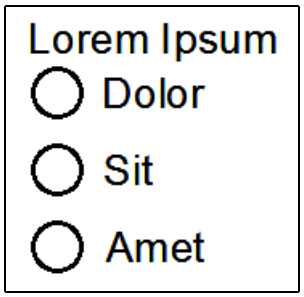
5. In the **Alternate text** box, enter a description of the image.
   If a person views a form using a compatible, screen-reading tool, the tool reads the

Alternate text aloud.

6. Click **OK**.

3.21 Creating a radio group object

With a radio group, respondents are presented with a group of buttons from which respondents can select only one option.



To configure a radio group:

1. Double-click the radio group.
2. In the **Properties** dialog box, click the **General** tab, and then define the general properties of the radio group, such as the name and general behaviors.

To	Do this
Name the object	In the **Field name** box, enter a name for the object. Keep in mind the following considerations when creating a **Field name**: • A **Field name** can contain alphanumeric characters, and underscores (_). • The first character in a **Field name** must be alphabetic, or an underscore. • The maximum length of a **Field name** is 30 characters. • Each object on a form must have a unique **Field name**.
Describe the object to respondents	In the **Field description** box, enter a description for the object. The description cannot exceed 1000 characters. On a published form, the description appears as a tooltip when a respondent hovers the mouse pointer over the field. Respondents who access the form with a screen reader hear the **Field description**. The field description should help explain the function of an object to respondents.
Make a data entry field read-only and prevent respondents from modifying the value of the field	a. Select the **Read only** check box. b. If you want to make read-only access conditional depending the result of an expression, click f() , and then define an expression.

To	Do this
Make a data entry field required for form submission	a. Select the **Entry required** check box. b. If you want to make requirement conditional depending the result of an expression, click f() , and then define an expression.
Hide the object on the published form	a. Select the **Hidden** check box. The object remains visible in Form Designer, but does not appear on the published form. b. If you want to make an object hidden conditional depending the result of an expression, click f() , and then define an expression.

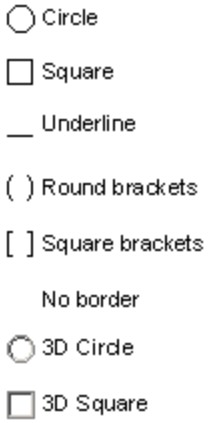
3. Click the **Title** tab, and then define the appearance of the title on the radio group.

> **Tip:** You can view and approve these settings in the **Preview** area before you apply them to an object.

To	Do this
Include a title with an object	a. Select the **Enable** check box. b. In the **Title** box, enter the title.
Change the title font	Click **Change** and use the **Font** dialog box to adjust the font, font style, size, and effects. For more information about settings on the **Font** dialog box, see "Font dialog box" on page 208.
Define how the title is positioned relative to the object	Select the option that you want from the **Position** and **Alignment** lists.
Change the amount of spacing between the title and the object	In the **Spacing** box, select or enter the amount of spacing.
Remove a title from an object	Clear the **Enable** check box.

4. Click the **Appearance** tab, and then configure the appearance of the radio group.

> **Tip:** You can view and approve these settings in the **Preview** area before you apply them to an object.

To	Do this
Change the appearance of borders **Note:** The **Border Shape** setting is not supported in HTML forms	On the **Appearance** tab, select an option in the **Border Shape** list. 
Make a radio group button transparent so that respondents see the background color of the form through the radio buttons **Note:** The **Transparent** setting is not supported in HTML forms	On the **Appearance** tab, select the **Transparent** check box.
Select a background color to fill the area where the selection mark appears **Note:** The **Fill Color** setting is not supported in HTML forms	On the **Appearance** tab, select a color in the **Fill Color** list. The **Fill Color** option is not available if the **Transparent** check box is selected.
Change the appearance of the selection mark that appears in the radio group button when it is selected **Note:** The **Check Shape** options are not supported in HTML forms	a. In the **Check Shape** list, select a shape for the selection mark. b. In the **Size** list, select a size for the **Check Shape**. The size options are font size for the Zapf Dingbats font that is used to draw the **Check Shape**. The default choice is **Auto**, which automatically sizes the **Check Shape** to the size of the radio group button. c. In the **Check Color** list, select the color of the **Check Shape**. The default selection is black.
Define the appearance of labels on radio group buttons	a. To specify the position of the labels relative to radio group buttons, in the **Position** list, select a positon for the radio group button labels. b. To specify the alignment of the labels relative to the radio group buttons, in the **Alignment** list, select an alignment option. Keep in mind that your selection might not have a noticeable effect unless you increase the size of the buttons.

To	Do this
Specify how radio buttons are arranged within the group	In the **Layout marks** list, select a layout option. If you select **Manual**, you can move each button and its label individually by holding down `Ctrl + Shift` and dragging the individual button or label. Otherwise, Form Designer automatically arranges the radio group buttons based on the option that you select.

5. Click the **Values** tab, and then configure the radio group buttons.

   The **Display** name for a radio group is the label that appears to respondents on the form. The **Value** for a radio group is the data that is exported from the radio group. The display name and corresponding value do not need to match. For example, the display name might show a common name for a product, while the value might be a specific part number that is used by your company for inventory control, shipping, and pricing.

   To configure the values of radio group buttons:

   a. To define the radio group display name and value, complete one of the following sets of steps:

To	Do this
Enter values manually	For each item in the list, in the **Display** column, enter a name and in the **Value** column, enter the value for the item. Additional rows appear as the empty row is filled.
Import a list to define the values	i. Click **Import**  . The **Open** dialog box opens. ii. Browse to the Comma Separated Value (`*.CSV`) file you want to import. iii. Click **Open**. The items in the CSV file are added to the Display and Value columns on the **Values** tab.

   b. To organize the radio group, complete the following steps as needed:

To	Do this
Change the order of items in the radio group	Select the item and click  as needed.
Remove an item from the radio group	Select the item and click  .

   c. To specify that a radio button should be automatically selected when the respondent opens the form, select the **Chk** check box next to the radio button that you want to select.
   To configure the value exported from the radio group if the respondent does not make a selection, see "Configuring data properties for objects" on page 119

6. Click the **Data** tab, and then configure the data exported from the radio group.
   a. To remove template characters from exported data (such as separators in date and

time values), select the **Strip template characters from data** check box. This option is cleared by default and template characters are exported.

> **Important:** If you select the **Strip template characters from data** check box and the entry field is linked to a Database Lookup or a Validation, the server-based Connect Agent that performs these functions also provides data that is stripped of template characters.

b. To allow a field to export a default value if the respondent does not enter data, in the **Default value** box, enter a default value to export from the data entry field.
For example, you can assign the text None as the default value. None is exported as the value for the field when there is no data. If you do not want to use a default value, leave this field empty.

c. To define the size of the database column that stores exported data, complete one of the following steps:

To	Do this
Allow LiquidOffice to calculate the size automatically	Click **Default size**. **Note:** LiquidOffice uses a column length that is the greater of 50 characters or the maximum length specified for the field. Ensure that the database column is large enough to store the values that can be exported from the entry field, otherwise excess data is discarded.
Specify a custom size	Click **Custom size**, and then select or enter a value in the box.

7. Click **OK**.

Related topics:

- "Setting the general properties for objects" on page 104
- "Configuring titles for objects" on page 117
- "Configuring data properties for objects" on page 119
- "Converting between radio groups and check boxes" on page 204

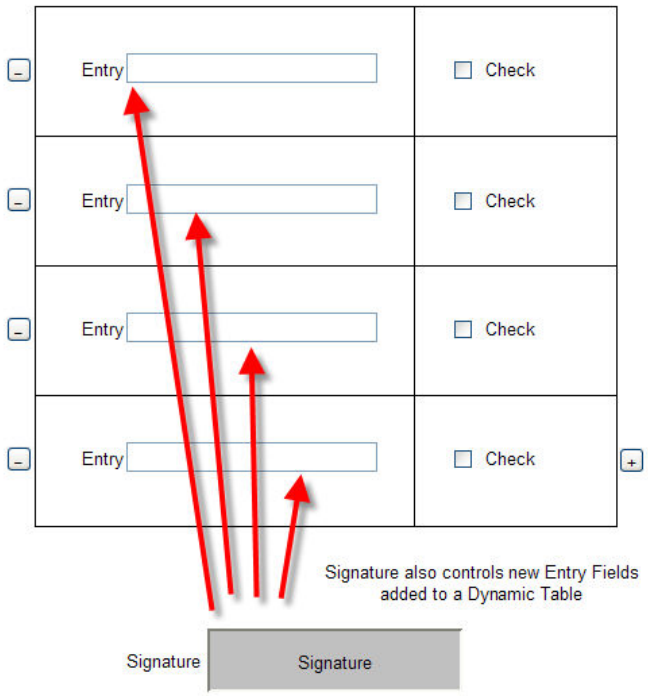
3.22 Creating a signature object

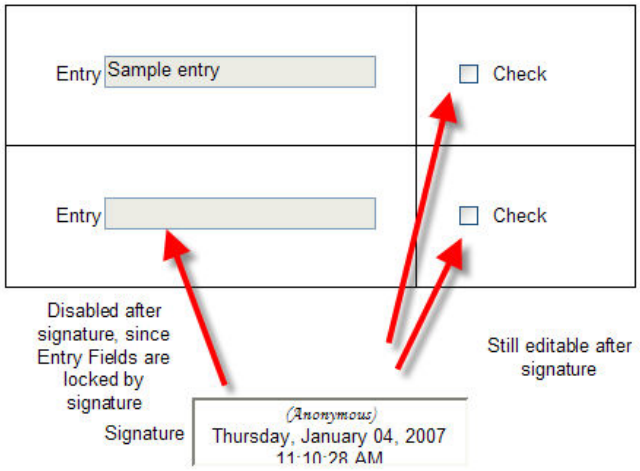
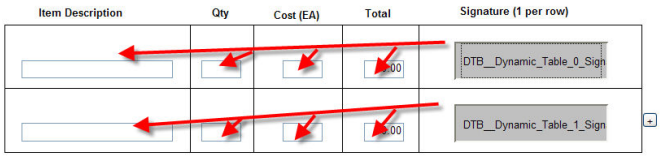
A Signature Object allows respondents to digitally certify their responses on a form.

After a signature object is signed, form fields can be locked so that the information they contain cannot be modified.

Keep in mind the following considerations before creating a signature object:

Design	Consideration
Signature Objects and Repetitive Tables	If a signature object inside a repetitive table controls a field located outside the table, that field becomes locked when the heading row signature object, or any duplicated signature object, is signed by a respondent.

Design	Consideration
Signature Objects outside a Dynamic Table	If you use a signature object outside a dynamic table to control one or more fields inside a dynamic table, the following behavior applies. • The signature object controls the original and duplicated fields in a dynamic table. Respondents can add or remove rows before signing the form.  • Signature objects disable dynamic table behavior. After a respondent signs a Signature Object that controls any field in a dynamic table, the respondent cannot add or remove rows. Dynamic behavior is disabled so that a respondent cannot add or delete information that has been signed. • Any fields that are in the table when the Signature object is signed, and that are not controlled by the Signature Object, can still be modified.

Design	Consideration
	 • If you use multiple Signature Objects to control fields within a dynamic table, dynamic behavior is disabled unless each Signature Object is unsigned. **Tip:** You might want to include information about the behavior of Signature objects and Dynamic tables on the form so that respondents understand why the fields are locked.
Signature Objects inside a Dynamic Table	A signature object can be added to the heading cell of a dynamic table and can be duplicated to the other cells in that column. The following behavior applies when a signature object is inside a dynamic table. • The only table fields that are controlled by the signature object are the fields in the same row as the signature object. A duplicated signature object controls the duplicated fields in its own row. • Signing a signature object does not prevent further rows being added to the table, because each new row is provided with its own Signature Object. • The Allow Row Removal feature is not available when a Signature Object is placed in a dynamic table. To enable row removal, you must remove the Signature Object. • If a Signature Object inside a table controls a field located outside the table, that field is locked when the respondent signs the original or any duplicated Signature Object. The duplicated Signature Objects can be present in the table when the form is opened (the default rows) or added dynamically. 

Design	Consideration
Multiple Signature Objects	If a form meets the following conditions, you must write a script to allow the form to be submitted. • Contains multiple Signature Objects • At least two Signature Objects use an LiquidOffice Password Authentication method. For a list of available authentication methods, see "Creating a signature object" on page 170. • At least two Signature Objects use the Entry Required validation If a form contains multiple Signature Objects, revoking the signature from any one of those objects only unlocks the fields that are locked solely by that Signature Object. If a field is locked by two or more Signature Objects, it is not unlocked unless all of the signatures that lock it are revoked.

To configure a signature object

1. Select the object(s) that you want to configure and open the **Properties** dialog box.

Selection	Task
To select a single object	• Double-click the object on the form • Right-click the object, and then click **Properties** • Select the object, and then click **Format** > **Properties** • Select the object, and then press `Alt + Enter`
To select multiple objects	You can edit the properties of multiple objects by selecting multiple objects. When you right click an object to open the Properties dialog box, one of the following actions occurs: • If the objects share common properties, the Properties dialog box opens. The Properties dialog box only displays the properties that are shared by all the selected objects. • If the objects do not share any properties, the No Common Properties dialog box opens.
To modify the properties of a grouped object without ungrouping the group	Hold down `Ctrl+Shift`, right-click the object, and then click **Properties**. The Properties dialog box opens.

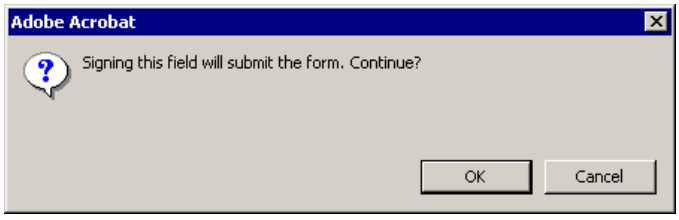
2. Click the **Signature** tab
3. To specify what fields users are allowed to modify after the respondent has signed the form, In the **Fields covered by this signature** area do the following:

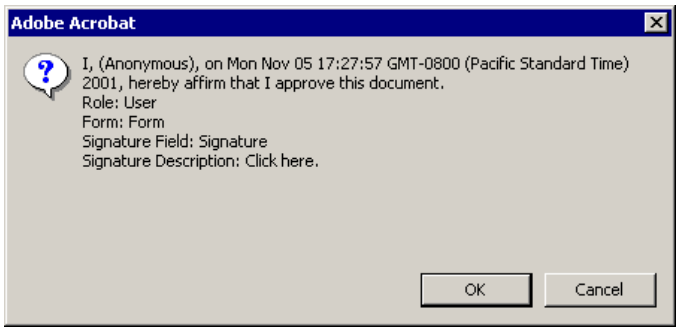
Task	Description
To prevent respondents from modifying any field after respondents have signed the form	In the drop-down list, select **None**.
To allow respondents to modify any field after respondents have signed the form	In the drop-down list, select **All**.
To allow respondents to modify any fields with the exception of the fields that you specify after respondents have signed the form	In the drop-down list select **All, except these**. In the list, select the fields that you do not want respondents to modify after respondents have signed the form.

Task	Description
To allow respondents to edit only the fields that you have specified after respondents have signed the form	In the drop-down list, select **Only these**. In the list, select any fields that respondents are allowed to modify after the respondents have signed the form. If you do not select any field, every field on the form locks.

Note: To prevent a signature from being cleared, include the signature object in the locked fields.

4. To specify the purpose of the signature, click an option in the **Signature Affirms** list or enter your own declaration (up to 255 characters).
5. In the **Role** list, click the **Role** of the person who should sign the form, or type your own text (up to 54 characters).
   The Role is required. The default role is `User`. The role is for descriptive purposes only and is not verified by the LiquidOffice server.
6. In the **Authenticate Using** list, click an authentication method.

Authentication Method	Description	Result
OpenText LiquidOffice Certify (Automatic submit)	The signature field appears on the form. To authenticate the form, the user clicks the field.	Users are asked if they want to approve and submit the form. If they click **OK**, they are asked to type a password. 

Authentication Method	Description	Result
Click-through (on Client)	This is the default authentication method, and is the least secure method of authentication. The signature field appears on the form. To authenticate the form, the user clicks the field. If the user is logged on to the LiquidOffice server, the user can approve the form without typing a password.	The user clicks **OK** to approve the form. 
Certificate (requires Adobe Acrobat)	This is the most secure method to authenticate a form with a digital signature. This method is not supported for HTML forms.	The user receives a prompt to type a password. The password unlocks a locally stored key. Acrobat uses the key to validate the signature. Acrobat ensures that the signature certificate information is captured along with the data on the form. Acrobat includes a signature tool, however, your respondents might have other signature tools to use. For a current list of supported signature tools, see http://www.adobe.com/products/catalog.html.

For information about legal signatures in the US and Canada, see "Legal signature considerations and form requirements" on the next page.

7. In the **Clicking on a signed control** list, select an "unlocking" option.
When a respondent clicks a Signature Field that is already signed, the selected action takes place.

   - **Does Nothing** (default)—Clicking a signed Signature Object has no effect.
   - **Clears signature (for any user)**—Clicking a signed Signature Object clears the signature and unlocks any fields locked by the original signature. This option is unavailable if the Signature Object itself is selected in the **Fields covered by this signature** list.
   - **Clears signature (for signer only)**—Only the respondent who signed the Signature Object can click it, and thereby unlock any fields locked by the original signature. This option is unavailable if the Signature Object itself is selected in the **Fields covered by this signature** list.
   - **Verifies signed data**—This option is only available if you select **LiquidOffice Certify** in the **Authenticate Using** list. This option is unavailable if the Signature Object itself is

selected in the **Fields covered by this signature** list. This option is also unavailable if **None** is selected in the **Fields covered by this signature** list.

8. Click **OK** to save your changes.

Related topics:

- "Setting the general properties for objects" on page 104
- "Configuring titles for objects" on page 117
- "Setting the appearance properties for objects" on page 106

3.22.1 Legal signature considerations and form requirements

Important: OpenText cannot guarantee that electronic signatures added to LiquidOffice documents will meet legal requirements in all jurisdictions, however, signatures that are authenticated through the LiquidOffice Certify and Certificate (Adobe Acrobat) methods can meet the legal requirements for a binding signature in the United States and Canada.

According to US and Canadian laws, an electronic signature is not legally binding unless it meets all of the following requirements.

- It must be unique to the holder
- It must be usable only by the holder
- It must relate the holder to the transaction
- It must provide testable integrity that the signed data is as it was when signed

Keep in mind the following considerations creating signatures and forms that must meet legal requirements:

Design area	Consideration
Server Requirements	The LiquidOffice server maintains all the information needed to allow respondents to electronically sign documents in a legally binding manner. You should configure your server to offer the maximum security and storage space for signature data.
Secure SSL Connection	To ensure the integrity of digital signatures, your LiquidOffice forms should be published to a secure site (`https://`) rather than to a standard site (`http://`). HTTPS is configured for end-to-end operations, which provides the security required for legally-binding signatures.

Design area	Consideration
Retention of Data	If you collect electronic signature data, the LiquidOffice servers should be configured to retain data for a relatively long time. **Important:** OpenText recommends that you develop procedures for archiving data well before it is automatically deleted to provide traceability for signatures. If the retention period is shortened, the LiquidOffice system administrator is warned that a loss of signature data is possible.

To customize a signature object to meet legal requirements:

1. Select the object(s) that you want to configure and open the **Properties** dialog box.

Selection	Task
To select a single object	• Double-click the object on the form • Right-click the object, and then click **Properties** • Select the object, and then click **Format** > **Properties** • Select the object, and then press `Alt + Enter`
To select multiple objects	You can edit the properties of multiple objects by selecting multiple objects. When you right click an object to open the Properties dialog box, one of the following actions occurs: • If the objects share common properties, the Properties dialog box opens. The Properties dialog box only displays the properties that are shared by all the selected objects. • If the objects do not share any properties, the No Common Properties dialog box opens.
To modify the properties of a grouped object without ungrouping the group	Hold down `Ctrl+Shift`, right-click the object, and then click **Properties**. The Properties dialog box opens.

2. Click the **Signature** tab.
3. In the **Authenticate Using** list, click **LiquidOffice Certify**.
4. In the **Clicking on a signed control** list, click **Verifies signed data**.
   A respondent does not need to “click verify” a form after signing it for the signature to be valid, but the ability to verify the data must be supported.
5. Click **OK**.

Related topics:
“Creating a signature object” on page 170

3.23 Creating a smart text object

Smart Text objects display automatically-generated information on the form. You can use the Smart Text object to display information that can change from page to page. For example, you can place a page number at the bottom of each form page. This number increments automatically if you add or delete pages in the form.

Note: All Smart Text values are assigned when you publish the form or save it as a PDF.

To configure a Smart Text object:

1. Select the object(s) that you want to configure and open the **Properties** dialog box.

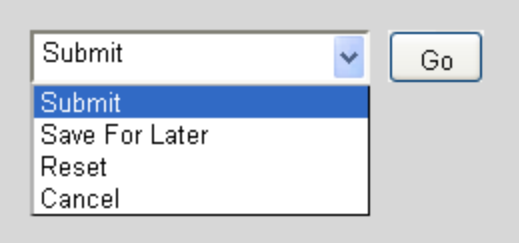
Selection	Task
To select a single object	• Double-click the object on the form • Right-click the object, and then click **Properties** • Select the object, and then click **Format** > **Properties** • Select the object, and then press `Alt + Enter`
To select multiple objects	You can edit the properties of multiple objects by selecting multiple objects. When you right click an object to open the Properties dialog box, one of the following actions occurs: • If the objects share common properties, the Properties dialog box opens. The Properties dialog box only displays the properties that are shared by all the selected objects. • If the objects do not share any properties, the No Common Properties dialog box opens.
To modify the properties of a grouped object without ungrouping the group	Hold down `Ctrl+Shift`, right-click the object, and then click **Properties**. The Properties dialog box opens.

2. Click the **Smart Text** tab.
3. In the **Smart item** list, click the Smart text that you want to include on the form.
4. To modify the font used for the Smart Text object, click **Font**.
   The **Font** dialog box opens. See "Font dialog box" on page 208.
5. Click **OK**.

3.24 Creating a submit action object

After respondents completes a form, they can click the Submit Action object to submit the form. The Submit Action object is available only when you publish forms to an LiquidOffice server.

Tip: As an alternative to creating a submit action button, you can also create a Submit button (which is a button object that uses the **Submit form data** action). For more information about defining a button object, see "Creating a button object" on page 128.



The Submit Action object provides respondents with the following list of options which can vary depending on the location of the form in the routing process defined when you publish the form:

Option	Description
Submit	Submits the form to the LiquidOffice server. If routing is enabled, the form routes to the correct user.
Save for Later	Saves the form to your inbox on the LiquidOffice server for completion later.
Transfer	Routes the form to another person who can approve the form.
Reset	Resets the fields on the form to their default settings.
Approve	Approves the form. The user approving the form can choose to route it to another person, or in some cases complete the route.
Reject	Rejects the form and sends it back to the prior user, where it appears in the inbox on Portal or Web Desktop.

To create a submit action object:

Note: Keep in mind that a form can include only one submit action object.

1. Select the object(s) that you want to configure and open the **Properties** dialog box.

Selection	Task
To select a single object	• Double-click the object on the form • Right-click the object, and then click **Properties** • Select the object, and then click **Format** > **Properties** • Select the object, and then press `Alt + Enter`
To select multiple objects	You can edit the properties of multiple objects by selecting multiple objects. When you right click an object to open the Properties dialog box, one of the following actions occurs: • If the objects share common properties, the Properties dialog box opens. The Properties dialog box only displays the properties that are shared by all the selected objects. • If the objects do not share any properties, the No Common Properties dialog box opens.
To modify the properties of a grouped object without ungrouping the group	Hold down `Ctrl+Shift`, right-click the object, and then click **Properties**. The Properties dialog box opens.

2. In the **Field description** box, type a description that explains function of the object.
   This Field description appears when the user hovers the mouse pointer over the object on the published form. Respondents who access the form with a screen reader hear the field description. It cannot exceed 1000 characters.
3. In the **Label** box, type a label that explains the function of the Button.
   The default label is `Go`.
4. The submit action is hidden when printing the form.
   To show the button when the form is printed, clear the **Hide button when form is printed** check box.
5. Click **OK**.

3.25 Creating a table object

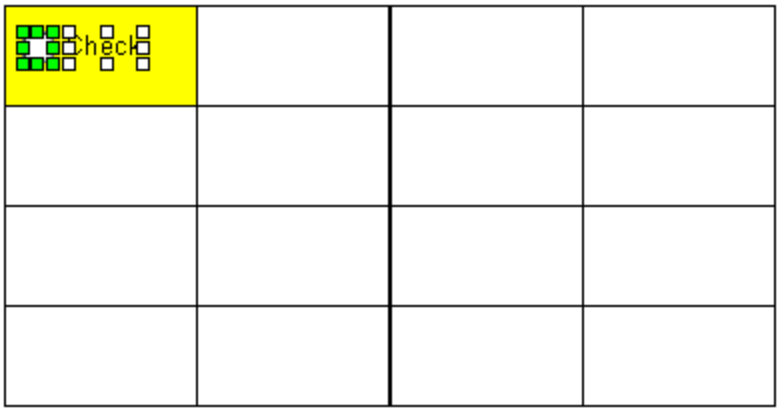
Form Designer has several types of tables.

- **Repetitive tables** quickly create repetitive rows of data entry fields and other objects. Any objects placed in the heading (top) row of a repetitive table are automatically duplicated in the lower cells of that column.
- **Dynamic tables** are an extension of repetitive tables. Additional rows of data entry fields can be added to a dynamic table by the respondent.
- **Organizational tables** provide an organizational structure for objects on a form.

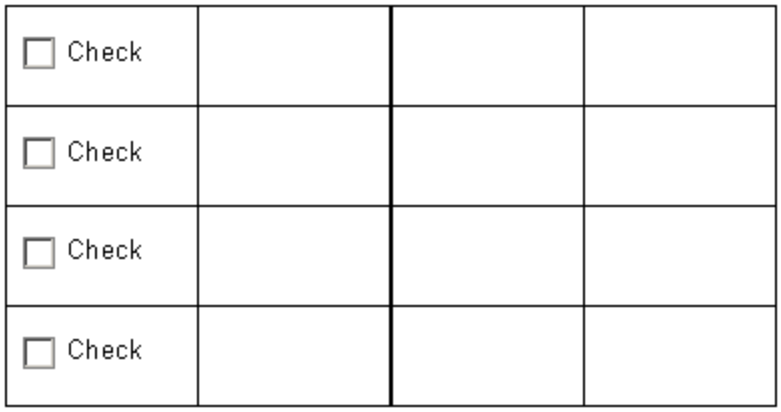
This section describes the types of tables that you can use on forms:

3.25.1 Adding an modifying objects in tables

You can drag objects into the heading row of a repetitive table from the Gallery or from elsewhere on the form. When you drag an object onto the heading row, the target cell is highlighted. The target cell is the cell that contains the object.



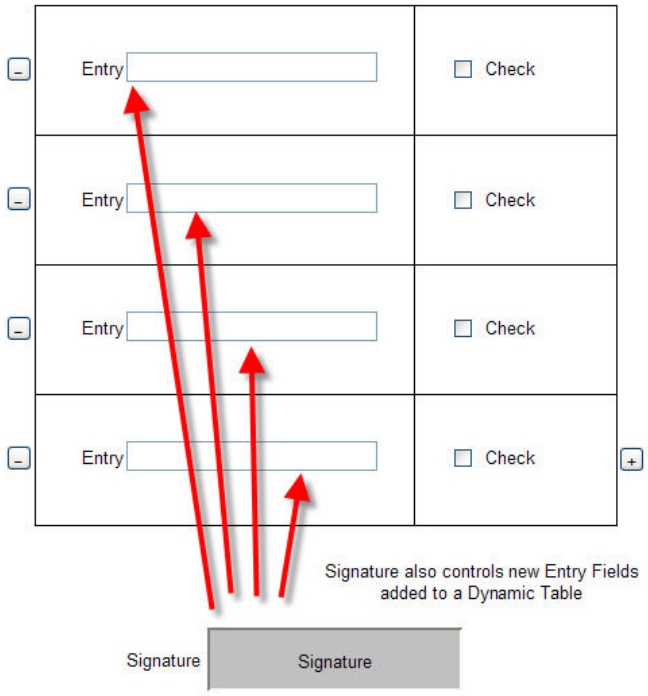
When you add an object to the heading row of a repetitive table, it automatically duplicates to the other cells of that column.

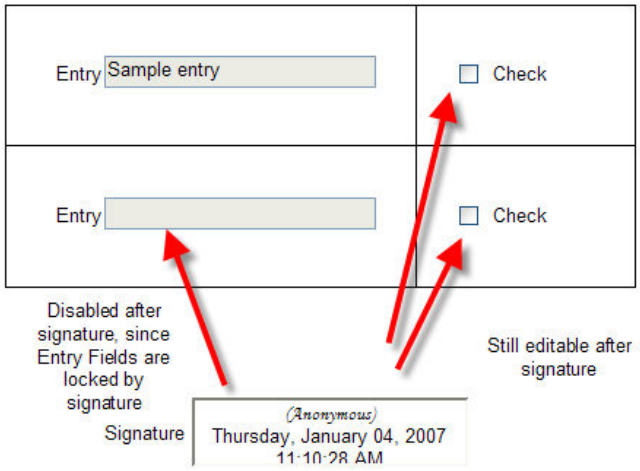
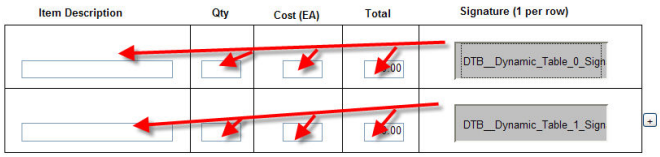


Keep in mind the following considerations for modifying objects in tables:

Design area	Consideration
Objects supported in tables	You cannot add the following objects to a table: • Submit Action objects because a form can have only one submit action object • HTML viewers • Other tables

Design area	Consideration
Changing duplicated object properties	Duplicated objects have the same properties as the original object. Any changes made to an object in the heading row propagate to the objects in other rows. This makes duplicated objects easy to manage. Note that the duplicated objects have different Field IDs than the original objects.
Aligning objects in a table	Duplicated objects automatically align in the same position within their cells as the original object within its cell. Using Accept Dropped Objects to duplicate data entry fields results in precise positioning and attractive forms.
Adding and deleting rows that contain duplicated objects	If you add or remove rows from a repetitive table, duplicated objects are automatically either created or deleted. When you insert a new row into a table, any objects in the heading row automatically replicate in the new row.
Repetitive tables and signature objects	Signature objects can be used to lock form fields. If a signature object is placed in a repetitive table, it is duplicated. Every duplicated signature object has the same properties and locks the same field. If a Signature Object inside a repetitive table controls a field located outside the table, that field is locked when the original or any duplicated Signature Object is signed by a respondent.

Design area	Consideration
Signature objects outside a dynamic table	**Caution:** Errors can occur if a client script overrides the Allow Row Addition and Allow Row Removal settings of a dynamic table that is locked by a signature object. If a client script overrides the Allow Row Addition and Allow Row Removal properties of a dynamic table, OpenText recommends to rigorously test the form before deployment in a production environment. If you use a signature object outside a dynamic table to control one or more fields inside a dynamic table, the following behavior applies. • The signature object controls the original and duplicated fields in a dynamic table. Respondents can add or remove rows before signing the form.  • Signature objects disable dynamic table behavior. After a respondent signs a Signature Object that controls any field in a dynamic table, the respondent cannot add or remove rows. Dynamic behavior is disabled so that a respondent cannot add or delete information that has been signed. • Any fields that are in the table when the Signature object is signed, and that are not controlled by the Signature Object, can still be modified.

Design area	Consideration
	 • If you use multiple Signature Objects to control fields within a dynamic table, dynamic behavior is disabled unless each Signature Object is unsigned. **Tip:** You might want to include information about the behavior of Signature objects and Dynamic tables on the form so that respondents understand why the fields are locked.
Signature objects inside a dynamic table	A signature object can be added to the heading cell of a dynamic table and can be duplicated to the other cells in that column. The following behavior applies when a signature object is inside a dynamic table. • The only table fields that are controlled by the signature object are the fields in the same row as the signature object. A duplicated signature object controls the duplicated fields in its own row. • Signing a signature object does not prevent further rows being added to the table, because each new row is provided with its own Signature Object. • The Allow Row Removal feature is not available when a Signature Object is placed in a dynamic table. To enable row removal, you must remove the Signature Object. • If a Signature Object inside a table controls a field located outside the table, that field is locked when the respondent signs the original or any duplicated Signature Object. The duplicated Signature Objects can be present in the table when the form is opened (the default rows) or added dynamically. 

3.25.2 Changing whether a table accepts dropped objects

The **Accept Dropped Objects** feature determines how a table functions.

- When **Accept Dropped Objects** is enabled in a table, it becomes a repetitive table. Any object dragged into a cell in the heading (top) row automatically duplicates in the other cells of that column.
- When **Accept Dropped Objects** is disabled, the table becomes an organizational table. Objects dragged into the heading row are not duplicated and the table serves as an organizational device that can contain many different types of objects within any column.

Note: Accept Dropped Objects is enabled by default for all new tables.

However, keep in mind that when you change the setting of the **Accept Dropped Objects** feature, the setting does not apply to the table retroactively.

For example, suppose that the **Accept Dropped Objects** is enabled on the table and you add an object to the table's heading row. The object is duplicated in all the rows of the table. If you then disable the **Accept Dropped Objects** feature, modifications to the original object are still reflected in the duplicated objects. If a row is deleted, the repetitive objects in that row are also deleted.

Similarly, suppose that **Accept Dropped Objects** is disabled when you add objects to the heading row and you later enable the **Accept Dropped Objects** option. This change does not cause those objects in the header row to be duplicated. Deleting a row that contains non-duplicated objects does not cause those objects to be deleted.

The fact that **Accept Dropped Objects** is not retroactive gives you a great deal of design flexibility.

For example suppose that you need to create several repetitive rows of data entry fields, but each row of fields might require different explanatory text or a different graphic, such as a logo. You can enable **Accept Dropped Objects**, and then create the data entry fields, dragging them into the heading row cells and allowing Form Designer to automatically duplicate each field. If you leave one column blank, you can then disable **Accept Dropped Objects** and create unique text boxes or graphics in the cells of the empty column.

Related topics:
- “Creating a repetitive table” on page 192

To enable or disable the Accept Dropped Objects feature:

1. Right-click a table, and then click **Properties**.
   The Properties dialog box opens.
2. Click the **Table** tab.
3. Select or clear the **Accept dropped objects** check box.
   - To make the table a repetitive or dynamic table, select the **Accept dropped objects** check box.

- To make the table an organizational table, clear the **Accept dropped objects** check box.

4. Specify how the table is to handle objects that are larger than the cells into which they are added by clicking one of the following options.
   - **Resize object to fit cell**. The object reduces in size to fit the cell, however, Form Designer cannot shrink objects indefinitely. You might need to manually resize the table or the object even when this option is selected.
   - **Resize cell to fit object**. The cell enlarges to accommodate the object. This option is enabled by default.
5. Click **OK**.

3.25.3 Resizing a table

You can resize an entire table or an individual column.

Task	Description
Resize a Table	To resize a table, select the table and drag its grab handles The minimum size of a table is limited by the objects it contains. You cannot shrink a table if cells become too small to accommodate the objects within them.
Resize a Row	All rows are the same height. To resize the rows, you must resize the table.
Resize a Column	To resize a table column: 1. Select the table. 2. Position the cursor over a column line. The cursor changes to a double-arrow. 3. Drag the column line in the desired direction. The minimum width of a column is limited by any objects it contains.

3.25.4 Configuring table rows and columns

After you place a table on your form, you can add or delete rows. If the table is a repetitive table:

- New rows are automatically filled with copies of the objects in the heading row
- Objects in deleted rows are deleted

To configure rows and columns

1. Select the object(s) that you want to configure and open the **Properties** dialog box.

Selection	Task
To select a single object	• Double-click the object on the form • Right-click the object, and then click **Properties** • Select the object, and then click **Format** > **Properties** • Select the object, and then press `Alt + Enter`
To select multiple objects	You can edit the properties of multiple objects by selecting multiple objects. When you right click an object to open the Properties dialog box, one of the following actions occurs: • If the objects share common properties, the Properties dialog box opens. The Properties dialog box only displays the properties that are shared by all the selected objects. • If the objects do not share any properties, the No Common Properties dialog box opens.
To modify the properties of a grouped object without ungrouping the group	Hold down `Ctrl+Shift`, right-click the object, and then click **Properties**. The Properties dialog box opens.

2. Click the **Table** tab.
   The Number of rows box shows the current number of rows in the table.
3. Enter or select a new value to add or delete rows.
   Rows are added to, or removed from, the bottom of the table.
   The Number of columns box shows the current number of columns in the table.
4. Type or select a new value to add or delete columns.
   Columns are added to, or removed from, the right of the table.
5. Click **OK**.

Tip: To add or remove columns from the center of a table, right-click inside a table column, and then click either:

- **Table** > **Insert column before**
- **Table** > **Insert column after**
- **Table** > **Delete column**

Related topics:
"Creating a table object" on page 181

3.25.5 Collapsing a table

Form Designer allows you to collapse (hide) a table. A table can be collapsed by default or based on the result of an expression. You can also write script to show and hide tables. This

feature can hide parts of your form. You can place a group of form fields inside a table, and then show or hide the table as specific conditions are met.

To collapse a table

1. Right-click the table, and then click **Properties**.
   The Properties dialog box opens.
2. Click the **General** tab.
3. Collapse the table.
   - To collapse the table by default, select the **Collapsed** check box.
   - To collapse the table based on the result of an expression, click  and define an expression.
4. Click **OK**.

Related topics:
- "Setting the general properties for objects" on page 104
- "Build a Conditional Expression with the Simple Expression Builder" on page 225
- "Build a Conditional Expression with the Advanced Expression Builder" on page 228

3.25.6 Table tab order

Tables have an internal tab order that is separate from the other objects on the form. When a respondent selects a field in a table, the table tab order controls the field visitation sequence. When a respondent exits the table, the form tab order again becomes the controlling sequence. For information about the form tab order, see "Setting the tab order of objects on a form" on page 47.

The default table tab order is defined using the Auto Rows method.

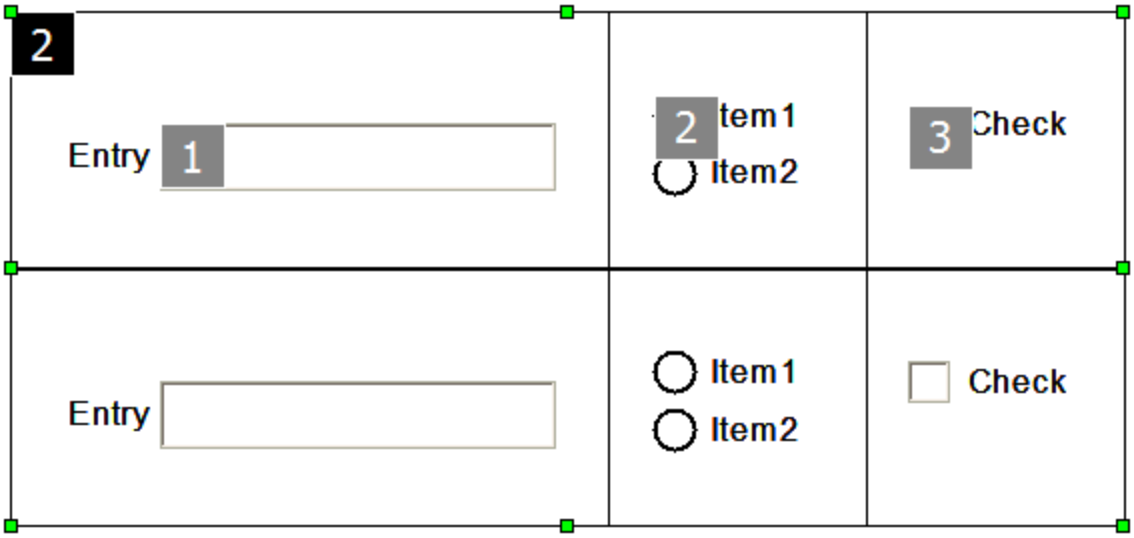
The table tab order does not prevent respondents from using the mouse to select data entry fields in another sequence. They can also use the Tab key to skip the fields that are automatically selected. If any of the fields use the Entry Required constraint, users cannot submit the form until they type data in those fields.

This section discusses the following topics:

Viewing the tab order

To view the table tab order:

- Right-click the table, and then click **Table Tab Order** > **Show Tab Order**.
  The data entry fields in the table display a numbered box indicating their place within the table tab order. These boxes do not appear on the published version of your form. They are present only as a design aid.



Set the table tab order manually

To set the table tab order manually:

1. Right-click the table, and then click **Table Tab Order** > **Set Tab Order**.
   This action sets the table tab order process to manual.
   The mouse pointer changes to the Set Tab Order pointer.
   The fields in the table each display a numbered box indicating their place within the table tab order.
2. Click a field in the table.
   The item you click becomes the first item in the table tab order.
3. Continue to click table fields in the desired sequence.
   For example, the second field you click becomes the second item in the table tab order.
   Do not skip an object in the table tab order, even if it appears to be in the right place. If you skip an object, the next object you click takes that object's place in the table tab order.
4. To stop setting the tab order, press `Esc` or click an empty area of the form.

Set the table tab order automatically

The tab order of objects in a table can be set automatically using the auto row or auto column tab order.

Task	Description
Use Auto Row Tab Order	With autoa row tab order, the tab order starts from the left-most field in the first row of the table. The order proceeds from left to right through objects in the first row, and then from left to right through each remaining row. To use the auto-row table tab order, right-click the table, and then click **Table Tab Order** > **Auto Rows**
Auto Column Tab Order	With auto column tab order, the tab order starts from the uppermost cell in the first column of the table. The order proceeds from the top to the bottom of the first column, and then from the top to the bottom of the remaining columns. To use the auto-column table tab order, right-click the table, and then click **Table Tab Order** > **Auto Columns**.

3.25.7 Creating a basic or organizational table

Organizational tables provide an organizational structure for objects on a form. Unlike repetitive tables, organizational tables do not duplicate objects dropped onto them.

Tables are created as repetitive tables by default. To create an organizational table, you must clear the **Accept Dropped Objects** check box that enables the automatic duplication of objects dragged into a heading row cell.

To create an organizational table

1. Select the object(s) that you want to configure and open the **Properties** dialog box.

Selection	Task
To select a single object	• Double-click the object on the form • Right-click the object, and then click **Properties** • Select the object, and then click **Format** > **Properties** • Select the object, and then press `Alt + Enter`
To select multiple objects	You can edit the properties of multiple objects by selecting multiple objects. When you right click an object to open the Properties dialog box, one of the following actions occurs: • If the objects share common properties, the Properties dialog box opens. The Properties dialog box only displays the properties that are shared by all the selected objects. • If the objects do not share any properties, the No Common Properties dialog box opens.
To modify the properties of a grouped object without ungrouping the group	Hold down `Ctrl+Shift`, right-click the object, and then click **Properties**. The Properties dialog box opens.

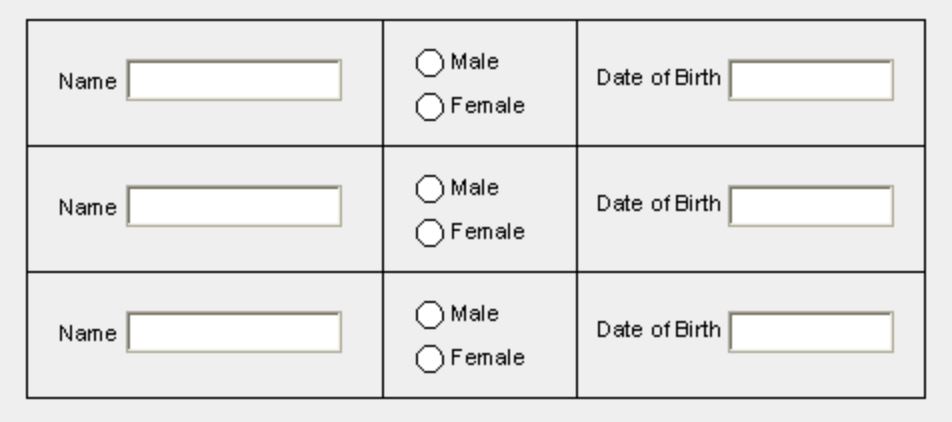
2. Click the **Table** tab.

3. Clear the **Accept dropped objects** check box.
4. Click **OK**.

Related topics:
- "Creating a table object" on page 181

3.25.8 Creating a repetitive table

Repetitive tables are used to create large numbers of repetitive objects, such as the following rows of data entry fields:



When you place an object in the heading (top) row of a repetitive table, the object is duplicated in all the cells in that column. In the previous example, only the fields in the top row were created manually. When the "Name" entry field was dragged into the left cell of the heading row, it was automatically duplicated in the remaining cells of the column. The same duplication took place for the other fields.

A table configured to duplicate objects in the heading row can duplicate any object, including graphic objects, pictures, hyperlinks, text boxes, and so on.

The feature that enables duplication is called **Accept dropped objects**. New tables are created with **Accept dropped objects** enabled by default.

To enable "Accept dropped objects" for an existing table, and to make the table a repetitive table:

1. Right-click a table, and then click **Properties**.
   The Properties dialog box opens.
2. Click the **Table** tab.
3. Select the **Accept dropped objects** check box.
4. Click **OK**.

Related topics:
- "Creating a table object" on page 181
- "Using expressions with repetitive tables" below

Using expressions with repetitive tables

Note: This section applies only to repetitive tables. Organizational tables do not "own" any data entry fields that are placed within a cell. There are no special requirements for expressions that target data entry fields placed in organizational tables.

You can use expressions with the data entry fields in repetitive tables.

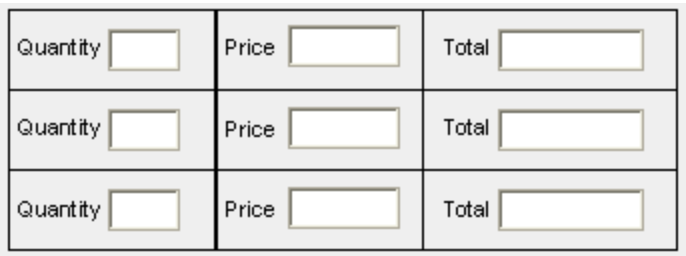
Keep in mind the following considerations when using expressions with repetitive tables:

- Any expression applied to a data entry field in the heading row of a repetitive table automatically copies to the duplicated objects in the other cells of that column. For an example, see "Example of applying an expression to a repetitive table" below
- Only the original (not duplicated) data entry fields are shown in the Expression Builder. Duplicated objects have the same properties as the original object, so it is not possible to created unique expressions for duplicated objects. For more information about table fields in the expression builder, see "Table Fields in the Expression Builder" on the next page.
- Expressions that target a data entry field that is not located in a table can reference fields within a table. For more information about targeting repetitive fields, see "Target Repetitive Fields" on page 195

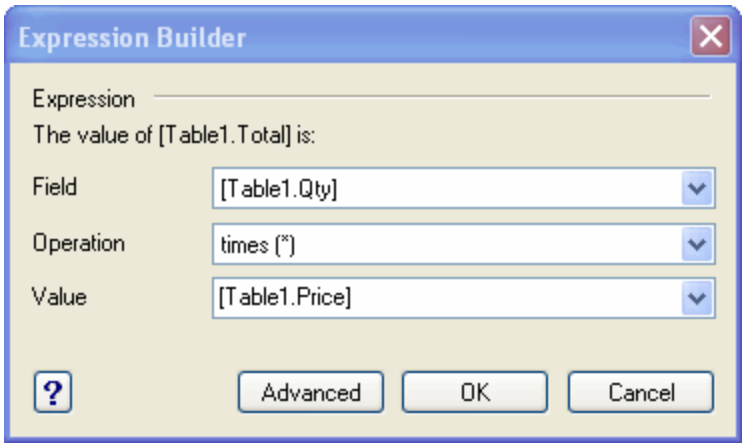
Example of applying an expression to a repetitive table

Any expression applied to a field in the heading row of a repetitive table automatically copies to the duplicated objects.

For example, suppose that you create the following table for collecting product order information.



The **Total** field in the heading row is made the target of this expression:



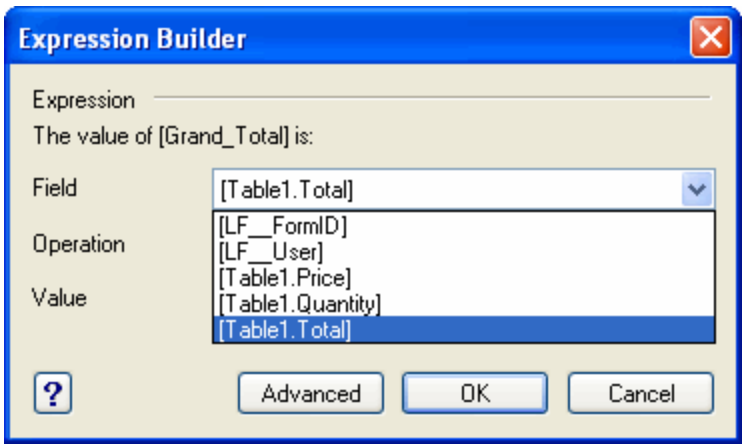
The expression automatically copies to the two other “Total” fields in the table, with appropriate modifications. The expression for the second row’s “Total” field calculates the result of multiplying the second row “Qty” and “Price” fields. The expression for the third row’s “Total” field also updates automatically.

Table Fields in the Expression Builder

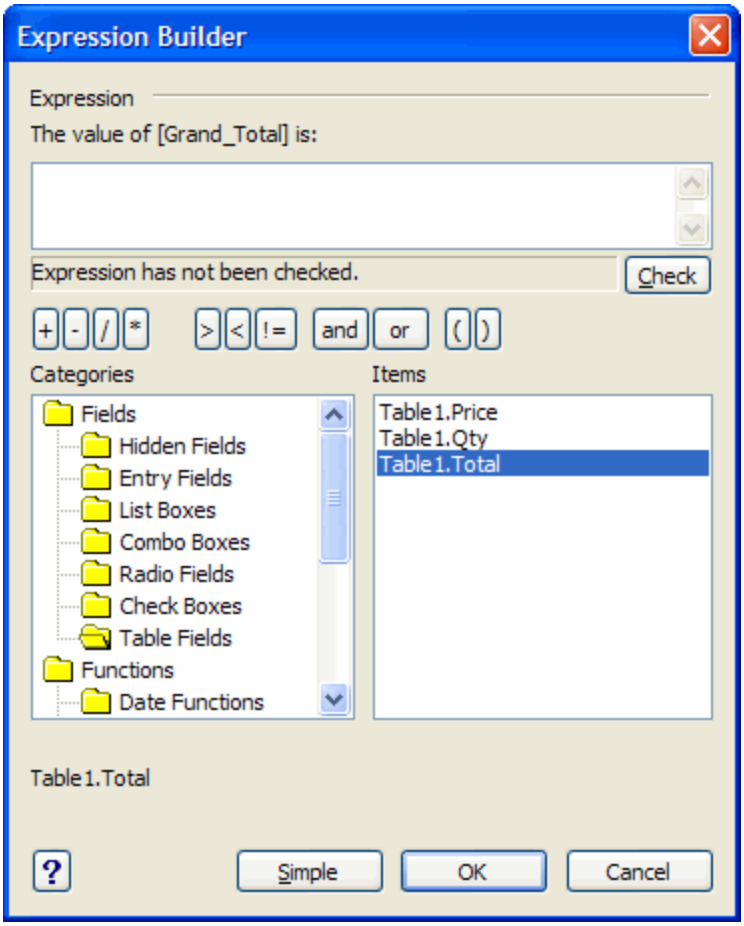
Table fields are identified in the Expression Builder with a unique `Table` prefix. The fields in the first table on your form are given names that start with `Table1`. Fields in other tables are given names that start with `Table2`, `Table3`, and so on.

In a Repetitive table, only the objects in the heading row of the table are listed in the Expression Builder.

- **Simple Expression Builder**. In the Simple Expression Builder, data entry fields in the heading row of repetitive tables are listed in the **Field** and **Value** lists. For more information about the Simple Expression Builder, see “Simple Expression Builder” on page 224.

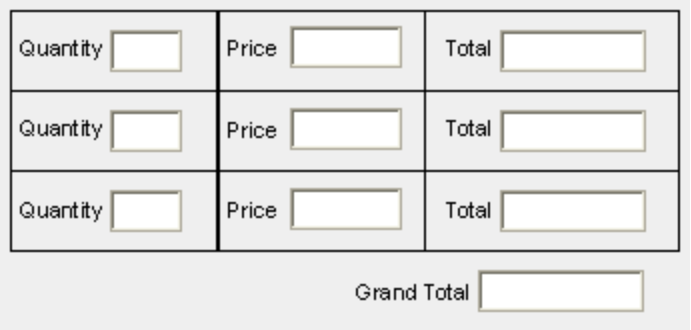


- **Advanced Expression Builder**. In the Advanced Expression Builder, click the **Fields** > **Table Fields** folder in the **Categories** tree. The Items list displays a list of all data entry fields in the heading row repetitive tables of all the tables on the form. The duplicated copies of those fields are not shown in the Items list, because any expression applied to the original field automatically copies to the duplicated objects.
  For more information about the Advanced Expression Builder, see "Advanced Expression Builder" on page 227.



Target Repetitive Fields

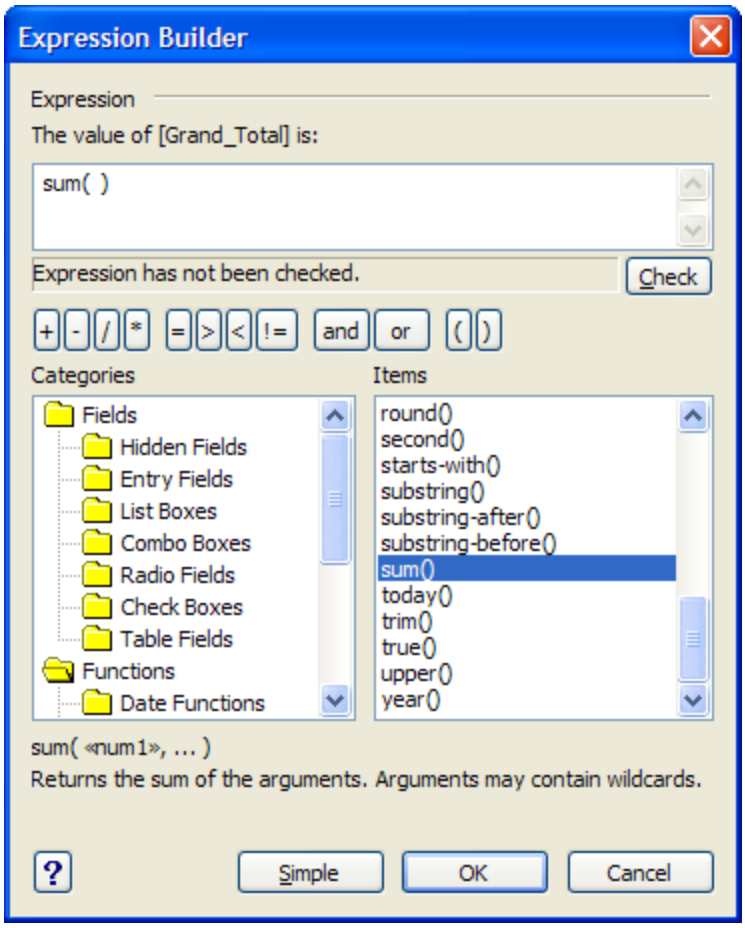
Expressions that target a data entry field outside a table can reference fields in a repetitive table. For example, a Grand Total field can calculate the sum of the Total fields in the following table.



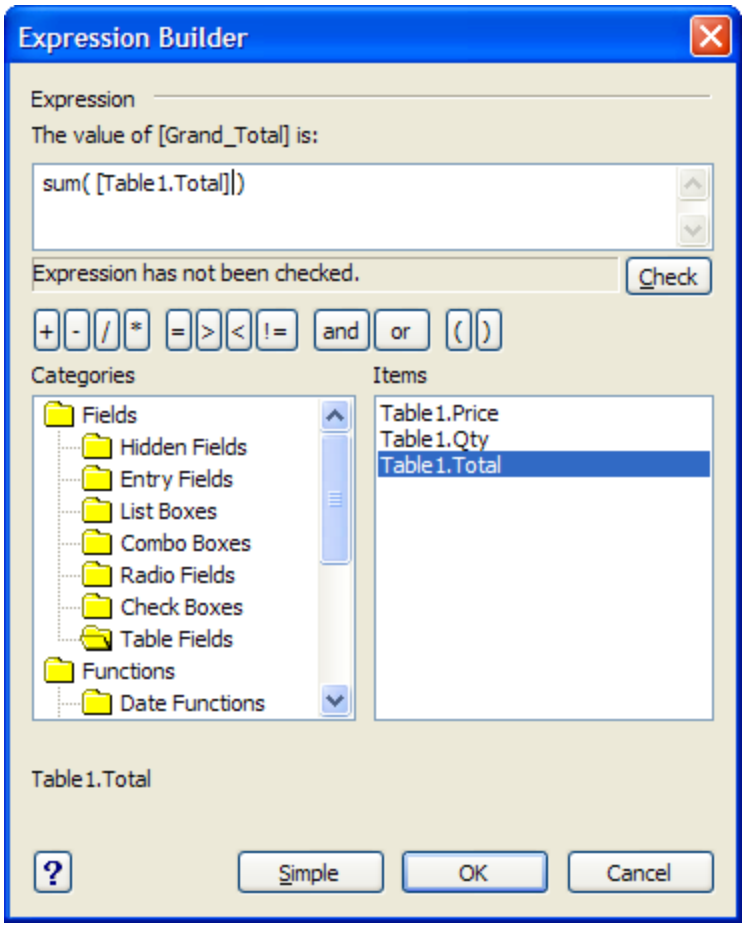
Duplicated fields in a table are not listed in the Expression Builder. To calculate the total of the fields inside the table, use an *aggregate* expression.

To create an aggregate expression

1. Right-click the `Grand Total` field, and then click **Expression Builder**.
   The Expression Builder dialog box opens.
   You can use the Advanced Expression Builder to create an aggregate expression. If the Simple interface opens, click **Advanced**.
2. In the **Categories** tree, click **Functions** > **Numeric Functions**.
   All of the available numeric functions appear in the Items window.
3. In the **Items** list, double-click the **sum()** function.
   Then *sum ()* appears in the Expression box.



4. Click between the parentheses in the **Expression** box.
5. In the **Categories** list, click **Fields** > **Table Fields**.
   The fields in the heading row of the table appear in the **Items** list.
6. Double-click **Table1.Total** in the **Items** list.
   `[Table1.Total]` is added to the expression.



7. Click **OK**.
   This expression calculates the sum of all the “Total” fields in the table.

3.25.9 Creating a dynamic table

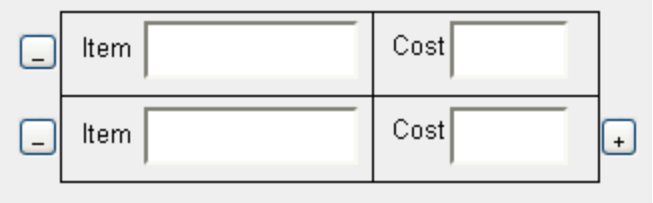
Tables that include rows of repetitive data entry fields are useful for collecting data, however, you might find that a table does not contain enough rows to collect all of the data that some respondents need to submit. A three-row table on a Purchase Order form might be adequate for many respondents, but not if a customer wants to order five different items.

Creating a table with a large number of rows can complicate the layout of a form. A large table might require adding pages to the form or compromising other design elements.

Dynamic tables can resolve this issue. When dynamic behavior is enabled, a respondent can add rows of data entry fields to a table on a published form. The table itself fits easily on the form, simplifying the layout process. You can also permit a respondent to remove rows that were added dynamically, but that were not needed.

Note: Dynamic tables are supported only in HTML forms.

When a dynamic table appears on a published form, it includes buttons to add or remove rows.



- You can enable or disable row addition and removal.
- The respondents cannot delete more rows than they add. If a table contains three rows when the form opens, a respondent cannot delete so many rows that it has fewer than three. A respondent can delete the original rows, as long as the table still contains at least the default number of rows.
- If a respondent clicks (remove row) and the table contains only the minimum number of rows, the data in that row is cleared, but the row is not removed.

To create and configure a dynamic table:

Tip: You might want to include instructions on your form to explain how rows can be added and removed from a dynamic table. A text box or a message button can be used for explanatory instructions. See "Creating a text box object" on page 204 and "Creating a button object" on page 128.

1. Drag a **Table** object from the **Gallery** onto the form.
2. Double-click the table.
   The Properties dialog box opens.
3. Click the **Table** tab.
4. In the **Number of rows** box, type or select the default number of rows in the table.
   This value specifies how many rows are available when the form first opens. It is also the minimum number of rows that the table can contain.
5. Select the **Enable dynamic behavior** check box.
6. Select the **Allow row addition** check box to allow a respondent to add rows of data entry fields to the table.
   a. Type or select a number in the **Maximum rows** box.
      This value specifies the total number of rows that the table can contain, including the default rows and the dynamic rows.
      For example, if the table contains 2 rows by default and the Maximum Rows setting is

3, a user can add only 1 dynamic row.

b. Type or select a number in the **Shadow rows** box.
Published forms automatically shift other form items downward when a respondent adds rows to a dynamic table. You can use Shadow rows to keep the expansion area clear of other form items so that redrawing is not necessary. See "Shadow Rows" below.

7. Select the **Allow row removal** check box to allow respondents to remove rows that were added by the dynamic function.
This ability is useful if a respondent adds more rows than were needed.
The respondent cannot delete more rows than were added to the table. That is, the respondent cannot reduce the number of rows below the number specified in the Number of Rows box.
Rows that can be deleted are indicated by a Remove button to the left of the row, both in Form Designer and on the published form. If the table is already at its smallest size (as specified in the Number of Rows box), the Remove button clears all data from the fields in the row, but does not delete the row.
8. Click **OK**.
The Add and Remove row buttons appear in Form Designer, but they are not functional until the form is published. They are shown so that other form elements are not accidentally overlaid on the area required for those buttons on the published form.
9. Add objects to the heading row. For more information, see "Adding an modifying objects in tables" on page 182.

Dynamic tables and form layout

A published form automatically redraws when rows are added to a dynamic table. If objects are placed below the table, they automatically move down the page to accommodate the new table rows. If rows are removed from a dynamic table, form elements below the table automatically move up into the free space.

Space on the form can be reserved for dynamic table rows using the using the shadow rows feature. If a dynamic table expands into an area reserved by shadow rows, form elements below the table do not move (unless the respondent adds more rows than were reserved).

Shadow Rows

Shadow rows are an optional design aid for dynamic tables. They indicate the area that can be occupied by dynamically added rows. You can use shadow rows to reserve an area of the form, so that the published form does not need to redraw when a respondent adds rows to a table.

When the form is published, the area reserved by shadow rows is empty (that is, the shadow rows do not appear).

Shadow rows are a visual design aid. They do not prevent you from adding other form objects to the reserved area. Any objects overlaid on the shadow rows do not move when a respondent adds or removes rows from a dynamic table.

Print Pages

If a respondent adds so many rows to a table that the table (or objects below it), moves beyond the lower margin of the published page, a Print Page is added to the form to accommodate the additional rows and relocated objects.

The Print Page is a new page on the form. Objects on following pages are not pushed down if rows are added to a dynamic table. The Print Page is inserted between the page on which the table is located and the next page of the form. A blue, dashed line indicates the location of the page break.

Managing multiple dynamic tables on a single page

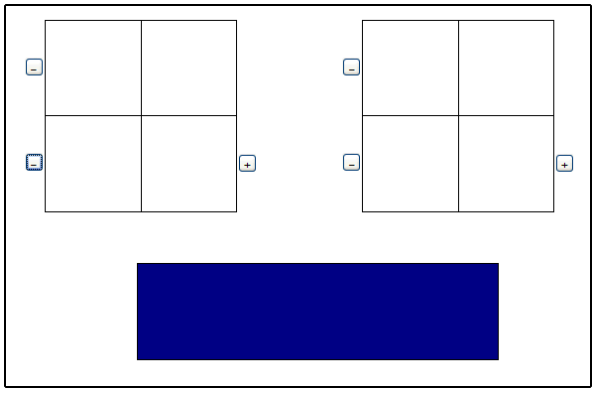
Adding rows to a dynamic table can push form elements down a page. This means that you should carefully consider the design impact of using multiple dynamic tables on a single page.

You can arrange dynamic tables vertically (that is, one table below the other). In this case, the main concern is the overall length of the form, which can be rather large if many rows are added to the tables.

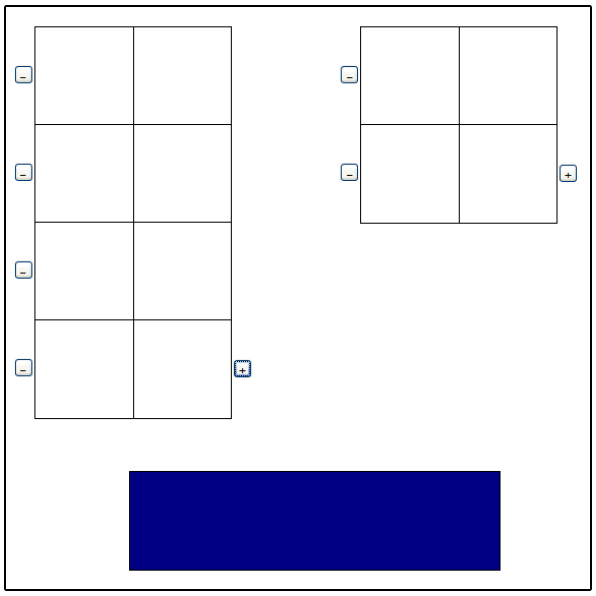
Example of common issues with multiple dynamic tables on a single page

The main complication with multiple dynamic tables occurs when two dynamic tables are placed side by side. In this case, adding rows to both tables can cause items below them to be pushed too far down the page. Without proper configuration, items below the tables are pushed each time a row is added to either table, which leads to a large, useless space between the bottom of the tables and the next form element.

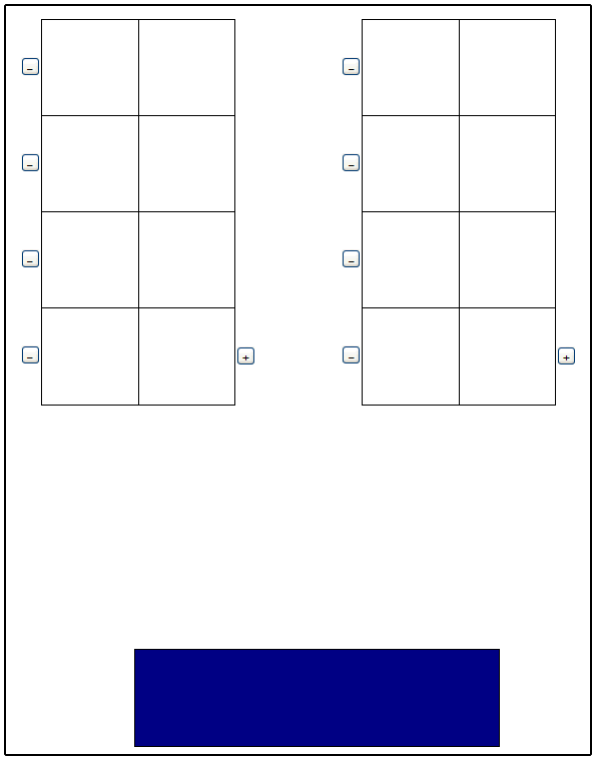
When a respondent opens the published form, the blue rectangle is drawn directly below both tables.



The respondent adds two rows to the first dynamic table, which moves the blue rectangle down the page.



When the respondent adds two rows to the second dynamic table, the blue rectangle is pushed further down the page. This occurs even though the new rows do not require any more space.



Best practices for side by multiple dynamic tables on a single page

To prevent unexpected behavior, it is a best practice to either place the dynamic tables at the bottom of the page or use Shadow Rows to reserve space on the form.

Best practice	Description
Place Tables at Bottom of the Page	To resolve this issue, place dynamic tables side-by-side at the bottom of a page. If there are no objects below the tables, adding additional rows only lengthens the page. Be sure to place the dynamic tables below any other form objects, including the Submit Action button.
Use Shadow Rows with the Maximum Rows Setting	Shadow rows reserve an area on the form for rows that are added dynamically to a table. If you include enough Shadow Rows in both side-by-side tables, the objects below the tables do not move as rows are added. To completely prevent objects being pushed too far down the page, include a number of shadow rows equal to the difference between the Maximum Rows and the default Number of Rows for the table. For example, if the table contains three rows by default and allows a maximum of eight rows, use five shadow rows. The shadow rows settings for the two side-by-side tables do not need to match. One table can include seven shadow rows while the second table has only five. If both settings are correct for the individual tables, double-pushing does not occur. **Related topics:** • "Shadow Rows" on page 200

3.26 Creating a text box object

You use the Text Box object to add formatted text to a form.

To edit the text in a Text Box

1. Start editing the text by selecting either:
   - Double-clicking the Text Box, and then begin typing
   - Right-clicking the text box, and then click **Edit**
   - Selecting the Text Box, and then pressing `F2`
2. After you edit the text, click outside the Text Box or press `Esc`. (Pressing `Enter` adds a new paragraph).

Related topics:
- "Setting the appearance properties for objects" on page 106
- "Configuring text properties for objects" on page 111
- "Configure paragraph properties for objects" on page 112

3.27 Converting between radio groups and check boxes

Before you convert objects, keep in mind that check boxes and radio groups have different intents and different behaviors. Each check box is a discrete data entry field, separate from all other fields on the form. Even if a number of check boxes are aligned and grouped together, each check box exports its data to a separate database column. By contrast, a radio group exports its data to a single database column, regardless of how many choices the radio group provides.

For more information about these objects, see "Creating a radio group object" on page 166 and "Creating a check box object" on page 133.

To convert between radio groups and check boxes, complete the following steps as needed:

To	Do this	Notes
Convert multiple check boxes to a single radio group	1. Select all the check boxes that you want to become part of the new radio group. 2. Right-click the selected check boxes. 3. Click **Convert to Radio Group**. A radio group replaces the check boxes. The titles of the check boxes become the display values of the radio group. For information about configuring a radio group, see "Creating a radio group object" on page 166.	Converting check boxes into a radio group can be useful if you decide that the choices defined by the check boxes are exclusive of each other.
Convert a radio group to separate check boxes	1. Right-click the radio group that you want to split into multiple check boxes. 2. Click **Convert to Check Boxes**. Check boxes replace the radio group. For information about configuring a check box, see "Creating a check box object" on page 133.	Converting a radio group into separate check boxes can be useful if you decide that the choices defined by the radio group are not exclusive of each other.

4 Form Designer tools

This section provides information about the tools that are available in Form Designer.

4.1 Color Picker

You use the Color Picker to change the color of forms, objects, and text. The standard Color Picker tool allows you to select from a palette of predefined colors.

You can click **Other** to define a custom color that is not in the standard color palette.

To use the color picker:

This task assumes that you have previously clicked a color well on a specific option in the UI and opened the color picker as a drop-down.

1. In the Color Picker tool, click **Other**.
   The **Color** dialog box opens.
2. Do one of the following to select a color:

Task	Description
To select a standard color	Click the **Standard** tab. In the **Colors** area, select a color. Click **OK**.
To create a custom color	a. Click the **Custom** tab. b. Do one of the following: • In the **Colors** area, select a color that is close to the custom color you want to create. • Adjust the color information as needed in the **Hue/Saturation/Luminence** and **Red/Green/Blue** boxes. The selected color appears in the **New** box in contrast to the **Current** box.
To select a color from your design	a. Click the **Custom** tab. b. Click  . c. The cursor changes. d. Use the cursor to click the color in the design that you want to use. The selected color appears in the **New** box in contrast to the **Current** box.

3. Click **OK**.

   The color is applied to the previously selected color well.

Related topics:

- "Configuring the global page setup" on page 23
- "Defining the page setup and margins of a form" on page 51
- "Form properties" on page 53
- "Setting the appearance properties for objects" on page 106
- "Creating a barcode object" on page 121
- "Creating a button object" on page 128
- "Changing the text font" on page 110

4.2 Font dialog box

You can use the **Font** dialog box with many of the objects in Form Designer to change the type, size, and style of text.

To configure a font, change any of the following options on the **Font** dialog box:

This task assumes that you have previously opened the **Font** dialog box from another location in the UI.

Option	Description
Font	Click a font. You can select any font that is installed on your workstation.
Font style	Click a font weight or emphasis.
Size	Enter or select a font size.
Underline	Select to add an underline effect to the text.
Strikeout	Select to add a strikeout effect to the text.
Text Color	Click a text color, or define a custom color using the Color Picker. For more information about using the color picker, see "Color Picker" on page 206

The **Preview** window shows the effect of your changes.

4.3 Spelling Checker

The Check Spelling tool compares every word on your form to a dictionary. When it finds a word that appears to be misspelled, it displays a list of possible corrections. You can accept one of these corrections, or type a correction.

For words that are not misspelled, that are not in the dictionary, you can add them to the dictionary file so that they are not treated as misspelled in the future.

Form Designer can spell check forms in many languages. For more information about setting the language for a form, see "Setting the language for a form" on page 56.

To spell check your form

1. Open the Spell Checker by using any of the following methods.
   - On the menu bar, click **Tools > Check Spelling**.
   - Press F7

   If a suspected word is found, the Check Spelling dialog box opens, and the suspect word appears in the box at the bottom of the **Check Spelling** dialog box.

2. Click one of the correction options.
   - **Ignore**—Ignore a single instance of the suspect word.
   - **Ignore All**—Ignore all instances of the suspect word.
   - **Add**—Add the suspect word to the dictionary.
   - **Change**—Replace a single (currently selected) instance of the suspect word. Either select a word in the **Suggestions** list, or enter a correction in the adjacent box, and then click **Change**.
   - **Change All**—Replace all instances of suspect word. Either select a word in the **Suggestions** list, or enter a correction in the adjacent box, and then click **Change All**.
   - **Auto-Correct**—All instances of the suspect word found on the current form, as well as all instances of the suspect word found in any future spell checks (even on different forms), are replaced by the word in the suggestions list or enter a correction in the adjacent box. This option saves the suspect word and the correction into the Spell Checking dictionary. You never receive another prompt to confirm that correction.
3. To close the **Check Spelling** dialog box at any time, even before the form is completely checked, click **Close**.

Related topics:
- “Configuring Global Spell Check settings” on page 25

4.4 Find and replace

You can use the Find feature to search for text on a form or in the properties of form objects.

The Find feature can search the field names, descriptions, and stored values for most objects, with the following exceptions.

Note: The Field Name and Field Description of bar codes are tables are not searched.

Variables in smart text objects are not searched. For example, if a Smart Text object reads “Page 1 of 3,” the Find function can locate “Page” and “of,” but not “1” or “3.”

This section discusses the following topics:

Find Text

To find text:

1. On the menu bar, click **Edit > Find**.
   The **Find** dialog box opens.
2. In the **Find what** box, enter the search text or select a previous search term from the list.
   The **Find what** box retains the last 20 search terms. The list clears when you close Form Designer.
3. (*Optional*) To improve the accuracy of your search, select the check boxes for any of the following filters.
   - **Match whole word only**—Limits the search to the entire text string in the **Find what** box. Partial matches are ignored.
   - **Match case**—Requires that the text on the form have the same combination of upper- and lower-case letters as the search term. Searching for `ComPany` does not find the word, `Company`.
   - **Match visible text only**—Limits the search to text that is visible on the form, ignoring object properties that do not appear on the form. These properties include: *Field descriptions*, *Storage values*, *Action text* (buttons), and so on.
4. Choose where to search.
   - **Direction**—determines the initial search direction from the current selection on the form.
   - **Find on**—determines the total search area. You can search the current page or the entire form.
5. (*Optional*) Click **Find Next**.
   When matching text is found, it appears in the **Search Results** box.

   Tip: To see the **Properties** dialog box for the object that currently appears in the Search Results field, click **Field Properties**.

Find and Replace Text

To replace text in Form Designer:

1. On the menu bar, click **Edit > Replace**.
   The **Replace** dialog box opens.
2. In the **Find what** box, enter the search text or select a previous search term from the list.
3. In the Replace with box, enter the replacement text. This text replaces the text in the **Find**

what box.

4. (*Optional*) To improve the accuracy of your search, select the check boxes for any of the following filters:
   - **Match whole word only**—Limits the search to the entire text string in the **Find what** box. Partial matches are ignored.
   - **Match case**—Requires that the text on the form have the same combination of upper- and lower-case letters as the search term. Searching for `ComPany` does not find the word, `Company`.
   - **Match visible text only**—Limits the search to text that is visible on the form, ignoring object properties that do not appear on the form. These objects include: *Field descriptions*, *Storage values*, *Action text* (Buttons), and so on.
5. Choose where to search.
   - **Direction** determines the initial search direction from the current selection on the form.
   - **Find on** determines the total search area. You can search the current page or the entire form.
6. Click **Find Next**.
   When matching text is found, it appears in the **Search Results** box.
7. To replace the text, click the appropriate replacement option.
   - **Find Next**—Ignores the current search result and finds the next occurrence.
   - **Replace**—Changes only the currently selected text. The next instance of the **Find what** text (if any) is then selected.
   - **Replace All**—Changes the currently selected text and all other matching text in the search area (the current page or entire form).

> **Tip:** To see the Properties dialog box for the object that is currently selected in the Search Results field, click **Field Properties**.
>
> To reverse a Replace All command that was too extensive or otherwise incorrect, click **Undo**.

4.5 Database lookup

A database lookup fills form fields with information from a database. A database lookup can reduce the number of keystrokes needed to complete a form and can increase the accuracy of the collected data.

You can run a database lookup either when a form loads, or when a respondent clicks a button or completes a field.

Before you set up a database lookup, you must meet the following prerequisites:

- You must be connected to an LiquidOffice server to create a database lookup.
- You must be assigned the Form Publisher role. If you do not have Form Publisher rights, contact your LiquidOffice administrator.
- Respondents must connect to an LiquidOffice server to enable database lookup to fill forms.

Tip: To view the database lookups on a form, click **View > Database Lookups**.

This section discusses the following topics:

Key fields

When a database lookup is activated, the data that fills the target fields on the form is identified by its relation to one or more key fields.

A key field contains data that, either alone or in combination with other key fields, can be used to identify a record in the database. A key field can be a data entry field or a hidden field on the form. When the lookup is triggered, the database searches for records that match the key fields. When a match is found, the target fields fill with the appropriate information.

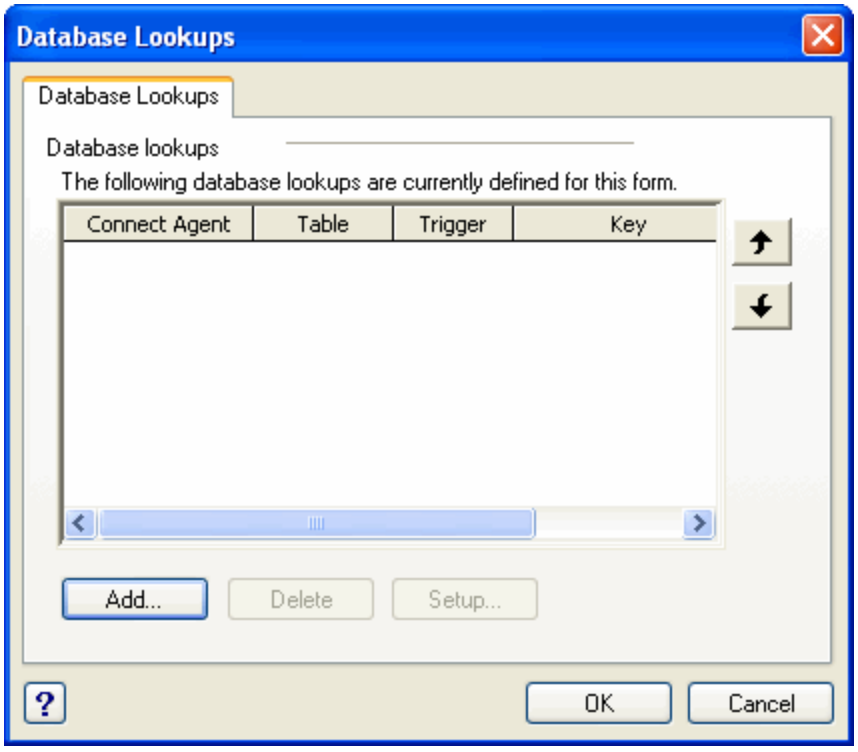
Keep in mind the following considerations based on the number of key fields that you use:

Key fields	Considerations
Single Key Fields	If you use a single key field for a database lookup, the key field should collect unique data for every respondent. The key field is used to find the correct information in the database, which then automatically fills the defined data entry fields. Examples of good key field are unique user names and employee numbers.

Key fields	Considerations
Multiple Key Fields	If you create a database lookup with multiple key fields, the individual key fields do not need to be unique. For example, a large organization might have six different employees named `Jane Smith`. To ensure that the database lookup finds the right data for each of these employees, you can use three key fields: • `First Name` • `Last Name` • `Birthday` No employees have the same name and birthday, so this combination of key fields results in accurate database lookups. **Note:** Remember that respondents must manually each key field to trigger the lookup. Using a large number of key fields reduces the automation effect of the database lookup.

Database Lookups dialog box

The Database Lookups dialog box displays a list of database lookups available for your current form.



The list includes the following columns.

- **Connect Agent** column identifies the Connect Agent to use for each database lookup.
- **Table** column identifies the database table that is used to fill the data entry fields on the

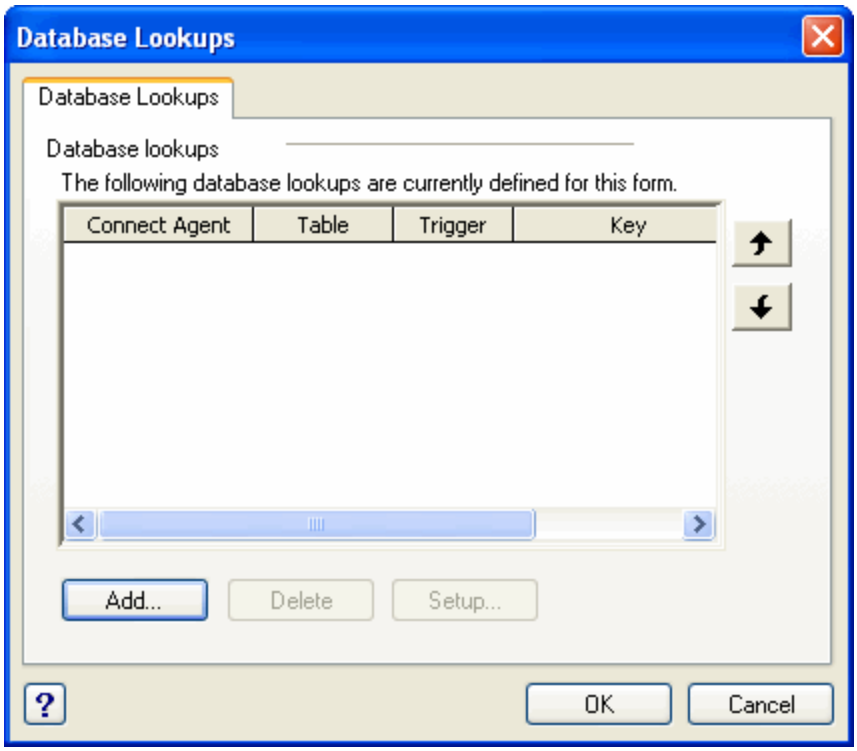
form.

- **Trigger** column shows how the database lookup is triggered.
  - **OnLoad**. When the form open, fields connected to the database lookup automatically fill with data. The Key Field must be populated with unique information as soon as the form opens.
  - **OnTabout**. The lookup runs after a respondent completes and exits the key field, either by pressing Tab or by using the mouse.
  - **OnClick*Button Name***. The lookup runs when a user clicks a button on the form.
- **Key**. This column identifies which data entry fields on the form act as key fields. The key field is used to identify the information in the database to add to the data entry fields.

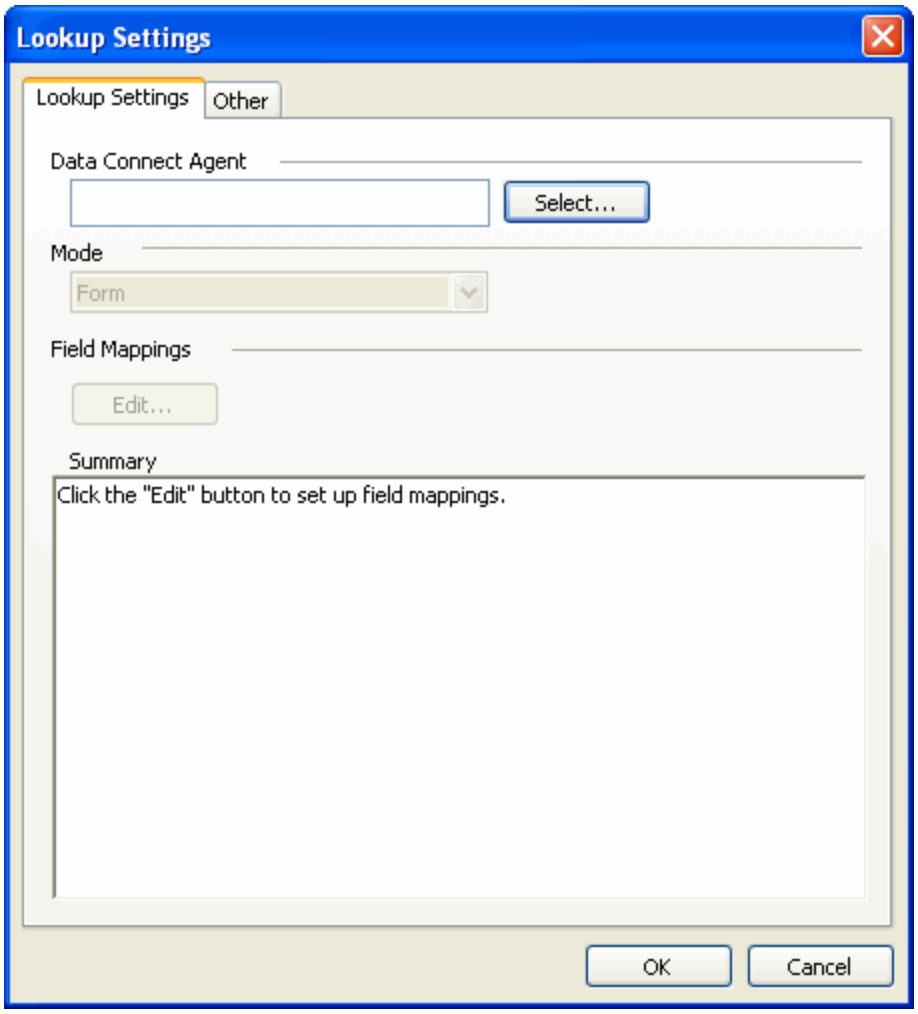
Configuring a database lookup

To configure a database lookup:

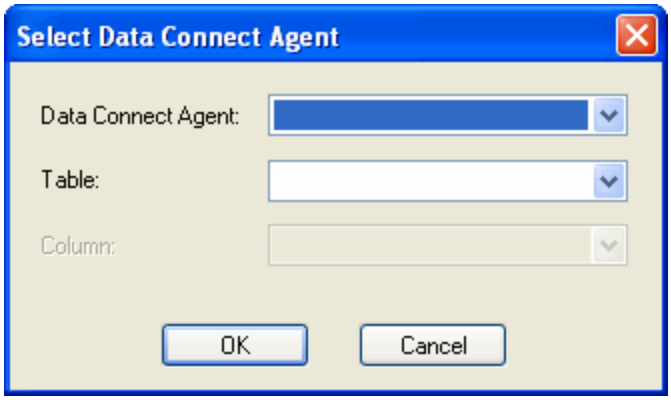
1. Connect to the LiquidOffice server. See "Connecting to and disconnecting from the LiquidOffice server" on page 58.
2. On the menu bar, click **Tools > Database Lookups**.
   The **Database Lookups** dialog box opens.



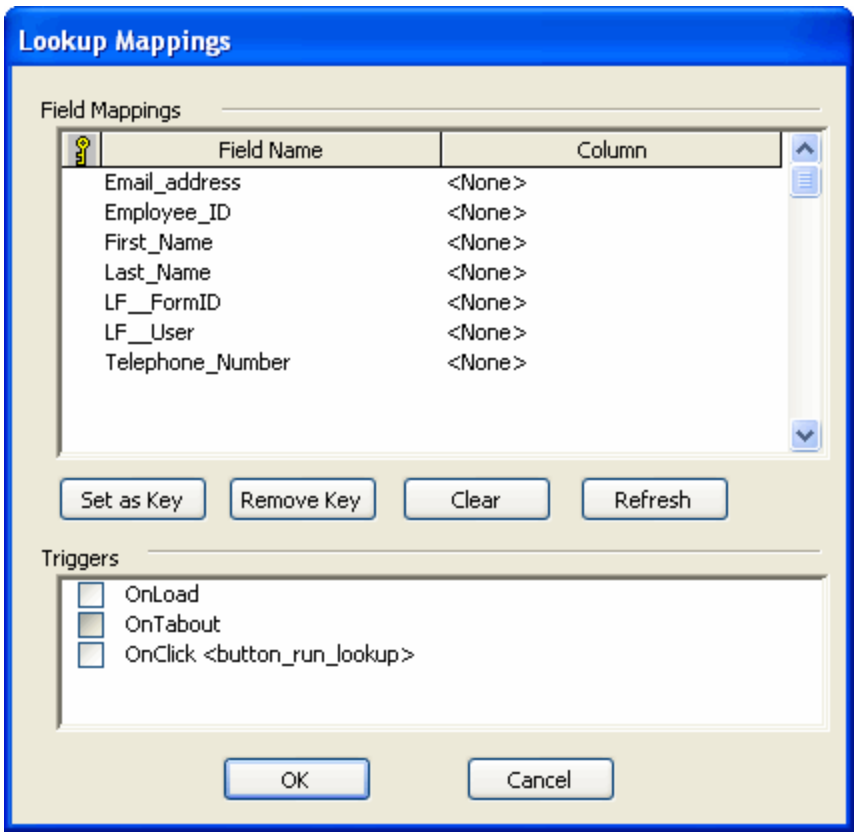
3. Click **Add**.
   The Lookup Settings dialog box opens.



4. Click **Select**.
   The Select Data Connect Agent dialog box opens.



5. In the **Data Connect Agent** list, click the connect agent to use.
   If the connect agent that you want to use does not appear, contact your LiquidOffice server administrator.
6. In the **Table** list, click the **Table** that contains the lookup information.
7. Click **OK**.
8. In the **Mode** list, select the data import mode:
   - To populate a dynamic table with a database lookup, click the name of the table
   - Otherwise, click **Form**
9. Click **Edit**.
   The Lookup Mappings dialog box opens. The Field Mappings list displays a list of fields on the form.



10. Configure the key fields.
    a. In the **Field Mappings** list, select the database columns that contain the data in the key fields.
       For example, if you use the entry field `Employee_ID` as a key field, and the employee

ID numbers are in a database column called *ID*, select *ID* as the database column for the `Employee_ID` field.

b. Click each field to use as a key field, and then click **Set as Key**.

11. In the **Field Mappings** list, select the database column to use to populate each field. **<None>** indicates that the field is not to be populated with data.

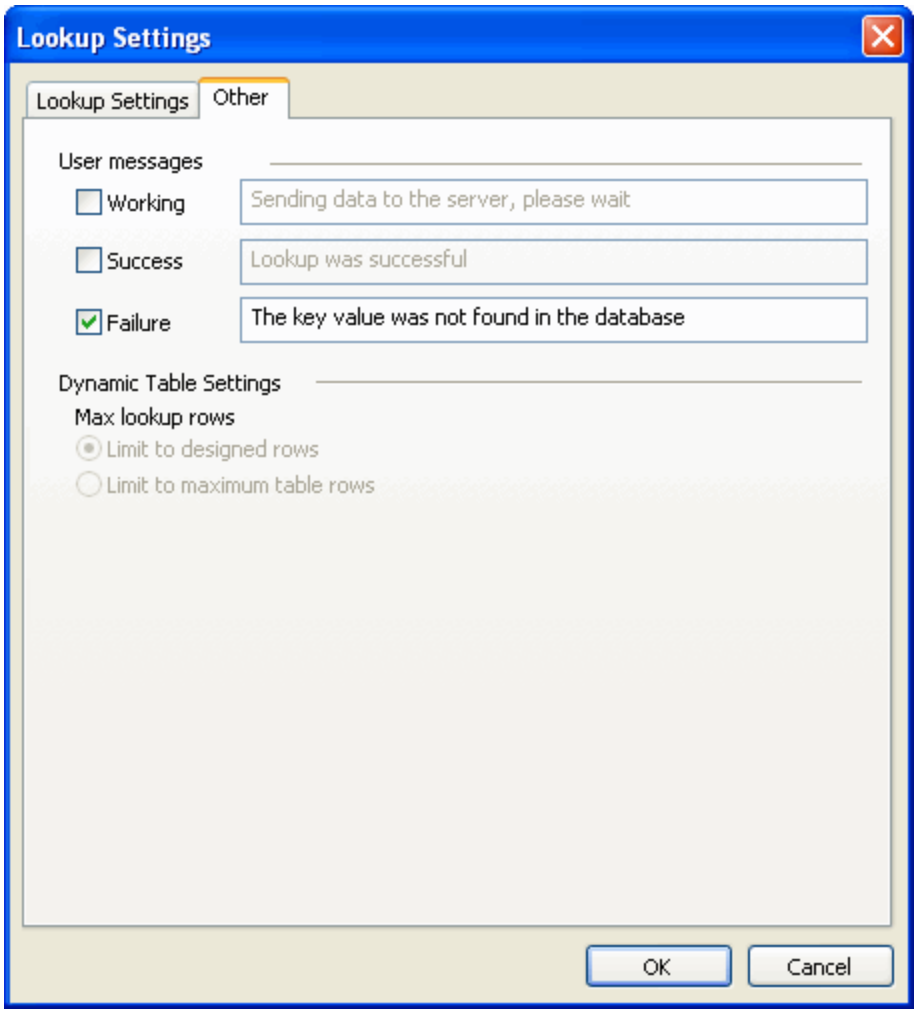
> **Important:** Ensure that the data entry fields can handle the information in the linked database columns.
>
> Avoid attempting to fill an Entry Field that can accommodate only 10 characters with a value that is 30 characters long.
>
> Only link radio groups, lists, and check boxes to data that exactly matches the values in those data entry fields.

> **Tip:** To clear all of the selected columns, click **Clear**.

12. In the **Triggers** area, select one or more check boxes to choose how to trigger the database lookup.

- **OnLoad**. The database lookup triggers when the form opens.
  To run a database lookup when the form opens, the key fields must be populated with data before the form opens. You can use hidden fields (for example, `LF__User` and `LF__FormID`) as key fields, or a key field can be filled with data before the form is published.
- **OnTabout**. The lookup triggers when a respondent fills and exits the key field, either by pressing `Tab` or by using a mouse. This option is not available if a hidden field is the key field.
- **OnClick** *Button Name*. The database lookup triggers when the respondent clicks a button. You must configure a button to use for a database lookup. See "Creating a button object" on page 128.

13. Click **OK**.
14. Click the **Other** tab.



15. (*Optional*) To display messages that indicate the status of the database lookup, select the check boxes in the **User Messages** area, and then type a message in the box.
Database lookups are normally fast and reliable, but you might want to provide some information to respondents to explain what is happening during the brief period required to run the lookup.
    - **Working**. This message appears while LiquidOffice communicates with the server.
    - **Success**. This message appears after the Database Lookup completes successfully.
    - **Failure**. This message appears if LiquidOffice fails to locate the applicable data.

16. The **Dynamic Table Settings** are only available when the form contains at least one dynamic table and you select a dynamic table in the **Mode** list at the top of the **Setup Database Lookup** dialog box.
Click one of the options to configure how the database lookup populates the dynamic table.

- **Limit to designed rows**. The database lookup populates only as many rows as are originally present when the form opens.
- **Limit to maximum table rows**. The lookup populates up to the maximum number of table rows as defined by the **Maximum rows** setting on the **Table** tab of the table **Properties** dialog box.

17. Click **OK**.
    The Lookup Settings dialog box closes.
18. Click **OK**.

> **Note:** You can only test these changes when the form is published to the server. Database lookups are not supported in form previews.

Changing the order of database lookups

If a form uses multiple database lookups, they are performed in sequence. You can specify the sequence in the Database Lookups dialog box.

To change the order of lookups

1. On the menu bar, click **Tools > Database Lookups**.
   The **Database Lookups** dialog box opens.
2. In the **Database Lookups** list, click the lookup that you want to move.
3. Click **up**  and **down**  to move the selected lookup in the sequence of the database lookups.
4. Save the change by clicking **OK**.

Deleting a database lookup

You can delete database lookups from the form by using the next procedure.

To delete a lookup

1. On the menu bar, click **Tools > Database Lookups**.
   The Database Lookups dialog box opens.
2. In the **Database Lookups** list, click the lookup to delete.
3. Click **Delete**.

Editing a database lookup

You can modify an existing database lookup.

To edit a database lookup

1. On the menu bar, click **Tools > Database Lookups**.
   The Database Lookups dialog box opens.
2. In the **Database Lookups** list, click the lookup to edit, and then click **Setup**.
3. Configure the database lookup. For more information, see "Configuring a database lookup" on page 214.
4. When you are finished, click **OK**.

Creating a custom database lookup

The default LiquidOffice connect agents for database lookups use the JDBC protocol, however, you can also use custom lookups created through the Connect Agent API.

A custom lookup connect agent is present in Form Designer as:

- **Required Key Fields** in the database lookup are identified by a combination of a key icon and red asterisk.
- **Optional Key Fields** in the database lookup are identified by a key icon.

4.6 Script editor

Form Designer includes a script editor so that you can write custom script for your forms. A basic understanding of scripting languages, JavaScript, and programming concepts is useful to program with the script editor.

OpenText recommends that whenever possible, you use the LiquidOffice graphical user interface, and avoid building custom script. Form Designer includes the following features to customize forms without using script.

- Expression Builder
- Field properties for Read only, Entry required, and Hidden conditions
- Field constraints (for example, maximum length)
- Database validation of form fields
- Database lookups to populate form fields
- Access to User Profile Information on the LiquidOffice server to populate form fields

For information on writing custom script, see *Programming Guide*.

This section discusses the following topics:

Opening the script editor

To open the script editor

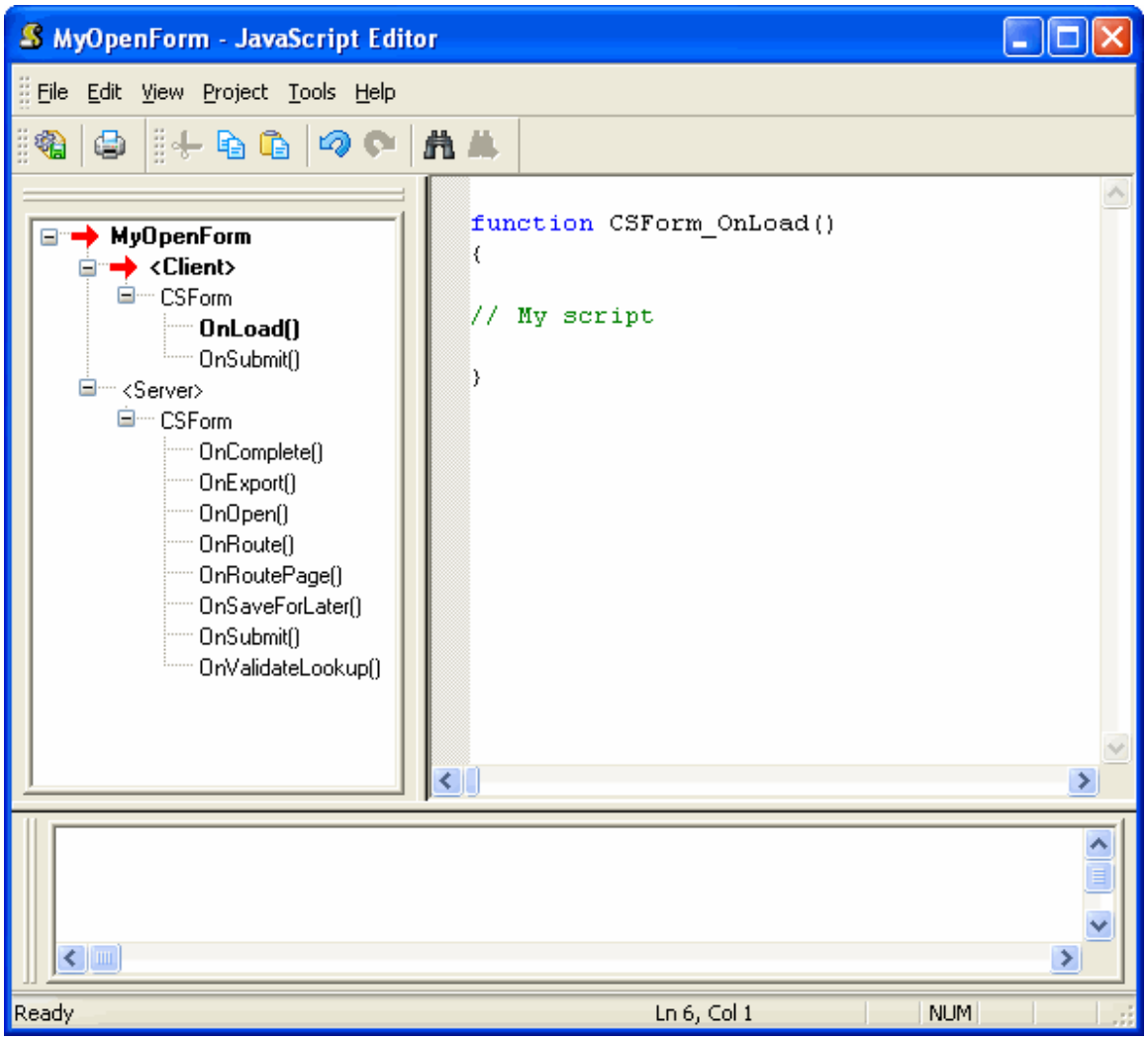
1. Log on to the LiquidOffice server. See "Connecting to and disconnecting from the LiquidOffice server" on page 58.

   Note: It is important to log on to the LiquidOffice server so that the script editor is provided with a list of Server-Side JavaScript Entry Points.

2. On the menu bar, click **Tools > Script Editor**.

Using the script editor

The following figure shows the script editor user interface.



The navigation pane shows the open forms and the entry points that are available for custom script.

To write custom script

1. In the navigation pane, double-click an entry point to display the script for that event in the main window.
   If no script exists for the event, an empty function is added to the main window.
2. Type your script.
   For information about writing custom script, see *Programming Guide*.

> **Tip:** You can toggle the appearance of whitespace characters in the script editor by pressing `CTRL + SHIFT + *`.

3. On the menu bar, click **Project > Compile**.
   The script compiles. Any errors appear in the output pane at the bottom of the script editor window.
4. To save the script, on the menu bar, click **File > Save**.
   The script is saved to memory.
   To save the script to disk, save the form. See "Saving a form in Form Designer" on page 43.
5. To close the script editor, on the menu bar, click **File > Close**.

Choosing an object model for the script editor

You can choose which object model to use for writing script. For more information about Object Models, see *Programming Guide*.

To choose an object model

1. In the script editor, click **Project** > **Settings**.
   The Project Settings dialog box opens.
2. Click the object model that you want to use, and then click **OK**.

4.7 OpenText LiquidOffice Expression Builder

The Expression Builder allows you to create mathematical relationships between data entry fields, conditional functions, and potentially complex field calculations. In many cases the Expression Builder can save you from writing custom scripts.

You can use the Expression builder to build the following types of expression.

- A *value* expression fills a data entry field with the result of a calculation. Use this type of expression with entry fields, hidden fields, and drop lists.
- A *conditional* expression controls the behavior of a data entry field based on the result of an expression. Conditional expressions can control whether a field is read-only, hidden, or required for form submission. Conditional expressions evaluate to either *true* or *false*. When they evaluate to *true*, the specified condition (read-only, hidden, entry-required) is enforced.

The Expression Builder has both simple and advanced user interfaces.

- The simple user interface provides an easy way to build simple expression without using the LiquidOffice Expression language. See "Simple Expression Builder" below.
- The Advanced Expression Builder can build more complex expressions. See "Advanced Expression Builder" on page 227.

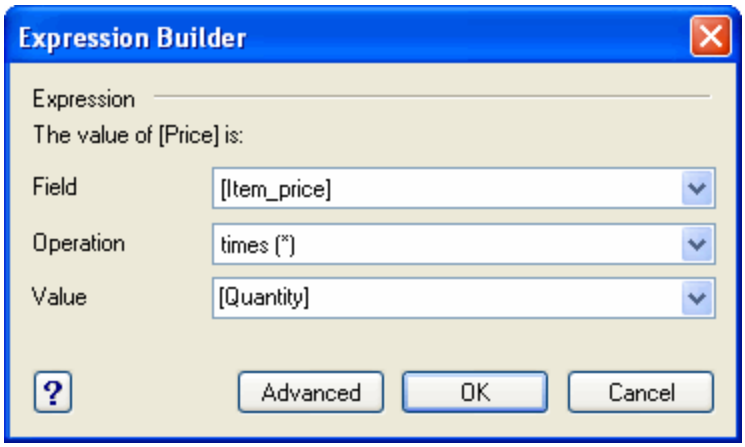
> **Note:** Field expressions are executed after user scripts.

This section discusses the following topics:

4.7.1 Simple Expression Builder

The simple Expression Builder allows you to quickly build sophisticated conditional and mathematical expressions. The simple user interface does not require that you understand the LiquidOffice Expression Language.

The next figure shows the simple Expression Builder.



This section discusses the following topics:

Build a Value Expression with the Simple Expression Builder

To configure a simple value expression using the simple Expression Builder:

1. Select a single entry field, drop list, or hidden field on an open form.
   The Expression Builder is unavailable when more than one object is selected. You cannot link other data entry fields to a value expression.
2. Open the expression builder:
   - On the menu bar, click **Tools > Expression Builder**.
   - Right-click the selected field, and then click **Expression Builder**.

   The **Expression Builder** dialog box opens. If the **Advanced user interface** appears, click **Simple**.
   The Expression text reads `The value of [selected field] is:`
3. In the **Field** list, click one of the other data entry fields on the form.
4. In the **Operation** list, click one of the operations.

   > **Tip:** The *concatenate* function joins two strings of text characters together.

5. In the **Value** box, either type a value, or select another data entry field.
6. Click **OK**.

This example automatically populates a numeric, entry field named `Kilometers` by converting the typed value in a numeric entry field named `Miles`.

1. Right-click the `Kilometers` entry field, and then click **Expression Builder**.
   The Expression Builder dialog box opens.
   If the Advanced user interface appears, click **Simple**.
2. In the **Field** list, click the **Miles** entry field.
3. In the **Operation** list, click **times**.
4. In the **Value** box, type `1.609`, and then click **OK**.

When a respondent types a value in the `Miles` field, it is multiplied by the conversion factor of `1.609` and the result fills the `Kilometers` field.

Build a Conditional Expression with the Simple Expression Builder

To build a simple conditional expression using the simple Expression Builder:

1. Right-click a form object (such as a data entry field or table), and then click **Properties**.
   The Properties dialog box opens.

> **Note:** The Expression Builder is unavailable when more than one object is selected.

2. Click the **General** tab.
3. Click **Build Expression**  for one of the properties (**Read only**, **Entry Required**, **Hidden**, or **Collapsed**).

   > **Note:** Do not select the **Read only**, **Entry required**, **Hidden** or **Collapsed** check box.
   >
   > Selecting these properties overrides the result of the conditional expression and the field becomes read-only, required, or hidden by default (even if the expression evaluates to false).

4. In the **Field** list, select one of the other data entry fields on the form.
5. In the **Operation** list, click one of the operators.
6. In the **Value** box, type a numeric value or select another data entry field.
7. Click **OK**.

For example, you are building a *Retirement Planning* form. If a respondent is married, you want the respondent to provide the spouse's name because a spouse has certain legal benefits under the retirement plan.

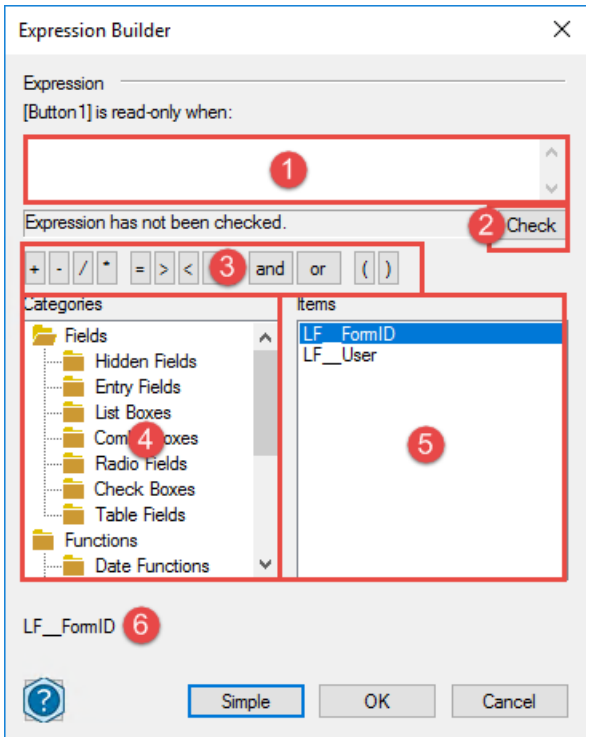
1. Configure the `Marital Status` radio button with the following choices:
   - `Single` (value of `1`)
   - `Married` (value of `2`)
   - `Divorced` (value of `3`)
2. Open the **Properties** dialog box for the `Name of Spouse` entry field by double-clicking the field.
3. Click the **General** tab.
4. Click **Build Expression**  for the **Entry required** property.
   The Expression Builder dialog box opens. If the Advanced user interface is displayed, click **Simple**.
5. In the **Field** list, click the **Marital Status** radio button.
6. In the **Operation** list, click **equals**.
7. In the **Value** field, type `2`.

8. Click **OK**.
   When a respondent selects **Married** from the **Marital Status** radio button, the respondent can only submit the form after the “Name of Spouse” field contains a value.

4.7.2 Advanced Expression Builder

The advanced Expression Builder allows you to build more complex expressions than are possible with the simple interface. To use the Advanced Expression Builder, you must understand the LiquidOffice Expression Language.

The following figure shows the Advanced Expression builder user interface.



1	The **Expression box** shows the expression in its current state. You can create or modify an expression.
2	**Check button**. Click **Check** to check the current expression for validity. Any syntax errors appear. The expression is checked automatically when you click **OK**.
3	**Operator buttons**. Click a button to insert the operator into the expression at the current insertion point. Clicking a button is equivalent to typing the operator directly into the **Expression** box.
4	**Categories tree** displays a tree of folders. Each folder contains elements that you can insert into expressions. Click a folder to display a list of items in the **Items** list. Double-click a folder in the structure to show or hide its subfolders. • **Fields** folder contains subfolders for the data entry fields and hidden fields on the form. • **Functions** folder contains subfolders for the functions defined by the Expression Language. • **Operators** folder contains subfolders for the operators defined by the Expression Language.

5	**Items list** displays the expression elements in the folder selected in the **Categories** tree. Double-click an element to insert it into the expression at the current insertion point. The effect is the same as if you type the element into the expression box.
6	**Description area** is located below the **Categories** and **Items** lists. Descriptive text appears for the item selected in the **Items** list.

Related topics:
- "Simple Expression Builder" on page 224
- "OpenText LiquidOffice Expression Language" on the next page

This section discusses the following topics:

Build a Value Expression with the Advanced Expression Builder

To build a value expression with the advanced Expression Builder:

1. Select a single entry field, drop list, or hidden field.
   The Expression Builder is unavailable when more than one object is selected. You cannot link other data entry fields to a value expression.
2. On the menu bar, click **Tools > Expression Builder**.
   Alternatively, right-click the field, and then click **Expression Builder**.
   The Expression Builder dialog box opens.
   If the Simple user interface appears, click **Advanced**.
3. Use the Expression Language to define the expression.
4. Click **OK**.

Related topics:
- "OpenText LiquidOffice Expression Language" on the next page

Build a Conditional Expression with the Advanced Expression Builder

To build a conditional expression with the Advanced Expression builder:

1. Right-click a form object (such as a data entry field or table), and then click **Properties**.
   The Properties dialog box opens.

   Note: The Expression Builder is unavailable when more than one object is selected.

2. Click the **General** tab.

3. Click **Build Expression**  for one of the properties (**Read only**, **Entry Required**, **Hidden**, or **Collapsed**).

   Note: Do not select the **Read only**, **Entry required**, **Hidden** or **Collapsed** check box.

   Selecting these properties overrides the result of the conditional expression and the field becomes read-only, required, or hidden by default (even if the expression evaluates to false).

4. Use the LiquidOffice Expression Language to define the expression.
   When the expression evaluates to *true*, the entry field becomes read-only, required, or hidden.
5. Click **OK**.

Related topics:
- "OpenText LiquidOffice Expression Language" below

4.8 OpenText LiquidOffice Expression Language

This section describes the LiquidOffice Expression Language.

4.8.1 Supported Functions and Operators

Supported operators in LiquidOffice Expression Language

Operator Category	Description
Grouping Operator	"Grouping Operator" on page 235
Logical Operators	"Logical Operators" on page 235
Arithmetic Operators	"Arithmetic Operators" on page 235
Comparison Operators	"Comparison Operators" on page 236
Selection Operator	"Selection Operator" on page 236
String Concatenation Operator	"String Concatenation Operator" on page 237

Supported functions in LiquidOffice Expression Language

Function Category	Description
Boolean	"Boolean Functions" on page 237
Date	"Date Functions" on page 238
Time	"Time Functions" on page 238
String	"String Functions" on page 238
Numeric	"Numeric Functions" on page 239

4.8.2 Expression Language Data Types

The data type constructors described in the following sections take the format <**function name**> (<*argument types*>).

The data types supported by the Expression Language are:

- String
- Number
- Date
- Time
- Boolean

String Data Type

The string data type represents a sequence of Unicode characters.

String Data Type	Description
string `(number)`	The argument converts as follows. • NaN (not a number) converts to "NaN" • Positive 0 and Negative 0 converts to "0" • Positive Infinity converts to "Infinity". Negative Infinity converts to "–Infinity" • Integers are represented in base-10 form without a decimal point, without leading zeros, and preceded by a minus sign (–) if the number is negative. • Floating point numbers are represented in base-10 form with a decimal point, with at least one digit before the decimal, and at least one digit after the decimal. If preceded by a minus sign (–) the number is negative. There must be no leading zeros, unless the leading zero is the only digit before the decimal point. There must be only as many digits after the decimal as are required to uniquely distinguish the number from all other IEEE 754 numeric values.
string `(date)`	Returns the argument formatted as `CCYY-MM-DD`.
string `(time)`	Returns the argument formatted as `HH:MM:SS` (24-hour)
string `(boolean)`	Returns `true` if the argument is true, `false` otherwise.

Number Data Type

Represents an integer or decimal number.

Numeric literals have an optional sign (+ or –) followed by zero or more digits, followed by an optional decimal point, and one or more digits. For example:
`-1.02`. At evaluation time, incorrectly formatted numeric literals are treated as NaN (not a number).

Number Data Type	Description
number `(string)`	The argument is interpreted according to the rules for numeric literals.
number `(date)`	Returns the number of days since 1/1/1970.
number `(time)`	Returns the number of seconds since midnight.
number `(boolean)`	Returns `1` if the argument is true; `0` otherwise.

Date Data Type

Represents a specific day.

Date Data Type	Description
date `(string)`	Argument must be in the form `CCYY-MM-DD`. If the argument is not formatted correctly, returns **`date(0)`**.
date `(number)`	The integral portion of the argument is interpreted as specifying a number of days before or after 1/1/1970.
date `(time)`	Returns **`date(0)`**.
date `(boolean)`	Returns **`date(1)`** if argument is true, otherwise returns **`date(0)`**.

Time Data Type

Represents a time during a single day.

Time Data Type	Description
time (string)	Argument must be in the form HH:MM:SS. HH = number of hours (24-hour clock), MM = number of minutes, SS = number of seconds. If the string is not formatted correctly, returns **time**(0).
time (number)	The integral portion of the argument is interpreted as the number of seconds since midnight. If the argument is negative, returns **time**(0).
time (date)	Returns **time**(0).
time (boolean)	Returns **time**(1) if argument is true, otherwise returns **time**(0).

Boolean Data Type

Boolean items have one of two values: *true* or *false*. Boolean literals are not allowed. The use the functions **true**() and **false**().

Boolean Data Type	Description
boolean (string)	Returns true only if the string argument is non-empty. This means that the expression, boolean(string(false())) returns true. That is, round-tripping from Boolean to string and back is not symmetric.
boolean (number)	Returns *false* if the number argument is +0, −0 or not a number, otherwise returns true.
boolean (date)	Returns **boolean**(**number**(date)).
boolean (time)	Returns **boolean**(**number**(time)).

4.8.3 Field References

Field references return the value of an entry field on a form. For example, [Entry1] returns the value of field Entry1.

References and Values

Field references are always treated as string values with the following exceptions:

- Numeric format entry fields are treated as number values. See “Number Data Type” on the previous page.
- Date format entry fields are treated as date values. See “Date Data Type” on the previous page.
- Time format entry fields are treated as time values. See “Time Data Type” on the previous page.
- Check boxes are treated as Boolean values. See “Boolean Data Type” above.

If the referenced field is renamed, the expression updates to reflect the name change.

Delete a Referenced Field

If the referenced field is deleted, the following results occur.

- At the time of deletion, Form Designer warns you that the field is used in one or more expressions, and lists the affected expressions. You can cancel the deletion, or continue and then repair the expressions later.
- If there are any invalid expressions on a form, error messages appear.
- If you attempt to publish a form that contains invalid expressions, Form Designer displays an error message that lists the invalid expressions and prevents the form from being published.

Copy/Paste and Gallery Items

When objects are copied to the clipboard, Form Designer checks for any expressions that are completely contained by the selected objects (that is, expressions for which the target field and all referenced fields are included in the selection). If any such expressions are found, the expressions are copied to the clipboard with the selected entities.

Note that wildcard references are *not* considered to be dependencies for this purpose.

Any wildcard reference is copied "as is." For more information about wildcard references, see "Wildcard References" on the next page.

If these objects are then pasted onto a form, the accompanying expressions are added to the form. If any operand or target fields are renamed, the expressions update accordingly.

These rules also apply when objects are saved to a Gallery item or are added from a Gallery item.

4.8.4 Literal Values

The Expression Language supports two literal values.

- String
- Numeric

There is no direct support for date or time literals. Use the functions **`date()`** and **`time()`** to convert string or number literals to the desired data type.

Example: `date( "2002-10-23" )` or `time( 60 )`

There is no direct support for Boolean literals. Use the functions **`true()`** and **`false()`**.

String Literals

String literals are text delimited by double-quotes (for example, "`A String Literal`"). The double-quote character can be included in a string literal by preceding it with a backslash. For

example, “`This double-quote character \” is included in the string literal`”.

For more information, see “String Data Type” on page 230. String literals can contain XML-style numbered entities (for example, `&#x4042;`). Numbered entities convert to Unicode characters upon parsing the expression.

Numeric Literals

Numeric literals must conform to the format specified in “Number Data Type” on page 231.

4.8.5 Wildcard References

Certain functions operate on multiple values (for example, `sum`). For example, you might need to sum multiple fields and place the result in another field. Rather than typing each field name, you can use (*) and (?) as wildcard characters in field references.

- Asterisk (`*`) matches zero or more characters. Example: `[ExtPrice_*]` matches all fields whose names begin with `ExtPrice_`
- Question mark (?) matches exactly one character. Example: `[Item?]` matches [`Item1`], [`Item2`], but not `[Item]` or `[Item34]`.

Multiple Wildcard Characters

Wildcard characters can be used multiple times in a field reference (for example, `*Price*` is a valid field reference that selects all fields in which `Price` appears anywhere in the name). If multiple * characters appear next to each other, they are treated as though there were only a single * character (for example, `Ext***Price` selects the same fields as `Ext*Price`).

Publish

During publishing, wildcard references are replaced automatically with a list of fields.

Delete Fields

You can rename or delete a field that is referenced in an expression using a wildcard character. When the form is published, the field is ignored.

For example: A form contains three fields; `Fld1`, `Fld2` & `Fld3`. The expression `sum ([Fld*])`expands to `sum([Fld1], [Fld2], [Fld3])`. If `Fld2` is deleted and `Fld3` is renamed to `Total`, the expression expands to `sum([Fld1])`.

4.8.6 Expression Language Operators

The LiquidOffice Expression language includes a range of operators.

Grouping Operator

You can use parentheses ( ) to group parts of an expression. The grouping operator overrides the built-in precedence rules to affect the order of evaluation in an expression. See the operator descriptions in this section for more information about precedence rules.

Logical Operators

All logical operators evaluate to Boolean values.

Operator	Description
not	Evaluates to *true* only if its operand is false. `Not` has the highest precedence of the logical operators. It takes a single Boolean operand. The operand is implicitly converted to a Boolean as if by a call to `boolean()`. `NOT` associates with the operand to its right.
`and`	Evaluates to `true` only if *both* of its operands are true. It takes two Boolean operands. The operands are implicitly converted to `Boolean` values as if by a call to **`boolean()`**.
`or`	Evaluates to `true` if *either* of its operands are true. `OR` has the lowest precedence of the logical operators. It takes two Boolean operands. The operands are implicitly converted to `Boolean` values as if by a call to **`boolean()`**.

Arithmetic Operators

The Expression Language uses the following arithmetic operators.

Operator	Description	Type
*	multiply	Multiplicative operator
/	divide	Multiplicative operator
+	add	Additive operator
–	subtract	Additive operator

- Multiplicative operators have higher precedence than additive operators. Therfore, additive operators have lower precedence than the multiplicative operators.
- Arithmetic operators with same precedence are evaluated from left to right.
- Arithmetic operators always convert their operands to a number as if by a call to **`number()`**.
- Arithmetic operators always evaluate to a number.

Comparison Operators

The Expression Language uses the following comparison operators:

Operator	Description	Type
=	equal	Equality operator
!=	not-equal	Equality operator
<	less than	Relational operator
<=	less than or equal to	Relational operator
>	greater than	Relational operator
>=	greater than or equal to	Relational operator

- Equality operators have higher precedence than relational operators.
- All equality and relational operators with the same precedence are evaluated from left to right.
- All equality and relational operators evaluate to Boolean values.
- If the left operand is a `string` value, the right operand implicitly converts to a `string` value and the strings are compared lexicographically.

  Otherwise, the operands implicitly convert to `number`, and are then compared.

Selection Operator

The selection operator `if` takes three operands. The first operand implicitly converts to *Boolean* as if by a call to `Boolean()`. If this operand evaluates to `true`, the operator returns the value of its second operand, otherwise it returns the value of its third operand.

The selection operator evaluates to the type of the second operand (the third operand is implicitly converted to the type of the second operand).

For example

```
if([AGI] < 64000, [AGI] * 0.076, 4864)
```

This means if the expression `[AGI] < 64000` is true, return the result of `[AGI] * 0.076`, otherwise return the value `4864`.

String Concatenation Operator

The string concatenation operator (&) evaluates to a string.

The string concatenation operator implicitly converts each of its arguments to string as if by a call to **`string()`**.

The expression `string & string` is equivalent to calling the function **`concat()`**, that is, `concat(string,string)`.

4.8.7 Expression Language Functions

Every function has a well-defined prototype that defines its return type and the number and types of arguments that it takes. An asterisk (*) following an argument indicates that there can be zero or more instances of the argument.

All functions implicitly convert their arguments to the required type as if by a call to the appropriate type conversion function.

- "Boolean Functions" below
- "Date Functions" on the next page
- "Time Functions" on the next page
- "String Functions" on the next page
- "Numeric Functions" on page 239
- "Task Functions" on page 240

Boolean Functions

The Expression Language uses the following Boolean functions.

Function	Description
`boolean` **`true`**`()`	Returns the Boolean value `true`.
`boolean` **`false`**`()`	Returns the Boolean value `false`.
`boolean` **`not`**`(boolean` *`b`*`)`	Returns the logical negation of *b*. `Not` evaluates to `true` if and only if b is `false`. Takes a single Boolean operand. The operand implicitly converts to a Boolean as if by a call to `Boolean`().

Date Functions

The Expression Language uses the following date functions.

Function	Description
`date` **today**`()`	Returns the current date
`number` **year**`(date` *d*`)`	Returns a number representing the year component of d.
`numbermonth(dated)`	Returns a number representing the month component of d.
`number` **day**`(date` *d*`)`	Returns a number representing the day component of d.

Time Functions

The Expression Language uses the following time functions.

Function	Description
`time` **now**`()`	Returns the current time.
`number` **hour**`(time` *t*`)`	Returns a number representing the hour component of t (0–23).
`number` **minute**`(time` *t*`)`	Returns a number representing the minutes component of *t* (0–59).
`number` **second**`(time` *t*`)`	Returns a number representing the seconds component of *t* (0–59)

String Functions

The Expression Language uses the following string functions.

Function	Description
`number` **length**`(string S)`	Returns the length (number of characters) of S.
`string` **trim**`(string S)`	Removes any leading and trailing white-space from S, while S itself is not modified.
`string` **normalize-space**`(string S)`	Removes any leading and trailing white-space from *S*, and replaces sequences of space characters with single-space characters. S itself is not modified.
`string` **left**`(string S, number` *N*`)`	Returns the first *N* characters from S, and S itself is not modified.
`string` **right**`(string S,number` *N*`)`	Returns the last *N* characters from S, and S itself is not modified.
`string` **substring**`(string S,number` *start*`,number` *count*`)`	Returns *count* characters, starting at position *start* in S. S itself is not modified.
`string` **upper**`(string S)`	Converts S to upper case. S itself is not modified.
`string` **lower**`(string S)`	Converts S to lower case. S itself is not modified.
`string` **concat**`(string, string*)`	Returns a string produced by concatenating the arguments. Can take wildcard field references.
`boolean` **contains**`(string` *str*`, string` *sub*`)`	Returns `true` if `str` contains `sub`; otherwise returns `false`.

Function	Description
`boolean` **starts-with** `(string` *str*`, string` *prefix*`)`	Returns `true` if *str* starts with `prefix`; otherwise returns `false`.
`string` **substring-before**`(string` *str*`, string` *sub*`)`	Returns the substring of *str* that precedes the first occurrence of *sub* in *str*, or an empty string if *str* does not contain *sub*. For example, `substring-before("1999/04/01","/")` returns `1999`.
`string` **substring-after** `(string` *str*`, string` *sub*`)`	Returns the substring of *str* that follows the first occurrence of *sub* in *str*, or an empty string if *str* does not contain *sub*. For example, `substring-after("1999/04/01","/")` returns `04/01`, and `substring-after("1999/04/01","19")` returns `99/04/01`.

Numeric Functions

The Expression Language uses the following numeric functions.

Function	Description
`number` **uniquenum**`()`	Returns a unique number each time an instance of the form opens from the LiquidOffice server.
`number` **sum**`(`*number*`,` *number*`*)`	Returns the sum of the arguments. Can take wildcard field references.
`number` **avg**`(`*number*`,` *number*`*)`	Returns the average of the arguments. Can take wildcard field references.
`number` **min**`(`*number*`,` *number*`*)`	Returns the minimum of the arguments. Can take wildcard field references.
`number` **max**`(`*number*`,` *number*`*)`	Returns the maximum of the arguments. Can take wildcard field references.
number **count-non-empty** (*string*, *string**)	Returns the number of non-empty fields. Can take wildcard field references.
number **floor**(*numberN*)	Returns the largest (closest to positive infinity) integer that is not greater than *N*.
boolean **is-number**(*string*)	Returns `true` if *data* contains a valid number. If `string` is empty, the function returns `false`.
number **ceiling**(*numberN*)	Returns the smallest (closest to negative infinity) integer that is not less than *N*.
number **round**(*numberN*)	Returns the integer that is closest to N. If there are two such numbers, the one that is closest to positive infinity returns. If *N* is NaN, then NaN returns. If *N* is positive infinity, then positive infinity returns. If *N* is negative infinity, then negative infinity returns. If *N* is positive zero, then positive zero returns. If *N* is negative zero, then negative zero returns. If *N* is less than zero, but greater than or equal to –0.5, then negative zero returns. The result of calling the round function is not the same as the result of adding 0.5 and then calling the `floor` function.

Task Functions

The Expression Language uses the following task functions.

Function	Description
`string` **selected-submit-action**`(taskID)`	Used in Process Studio. Retrieves the value component (as a string) of the selected submit action for the given task. The `taskId` parameter must refer to a scoped task identifier on the current process template. Returns an empty string if the task identifier is invalid or if the selected submit action is not set. For example: `selected-submit-action( 12 )` returns the submit action value of the task with scoped task identifier of 12.

5 Appendices

This section provides additional information about Form Designer that is not necessary for regular use of the application.

5.1 Enable the Gallery Network tab

If your organization includes multiple designers of forms, you can use a shared network folder for form objects. This folder can appear as a tab in the Form Designer **Gallery**. The tab has the same functionality as the other **Gallery** tabs. Designers can add objects to the tab, delete objects from the tab, and change the properties of objects in the tab.

This section describes how to create a configuration file to enable the **Network** tab in the **Form Designer Gallery**.

If the file is incorrectly formatted or points to a missing folder, Form Designer does not display error messages or otherwise indicate an error. The **Network** tab just does not appear.

To enable the Network Tab

1. Create a shared network folder.
2. Create at least one subfolder in the shared folder.
   The subfolder represents a drawer in the Form Designer **Network** tab.
3. Using a text editor such as Notepad, create a new plain text file with the extension `.GALLERYTAB`. (For example, `Network.GALLERYTAB`).
4. In the `.GALLERYTAB` file, type:

```
[gallerytab]
name=YourTabName
directory=\\server\share\path\to\shared\directory\
```

1. Save the `.GALLERYTAB` file to the following location.

   `C:\ProgramData\LiquidOffice\Form Designer\(Numeric Language Folder)\Gallery`

2. Repeat this procedure for each workstation that requires access to the shared folder.

Related topics:
- "Sharing form objects with multiple designers" on page 13

5.2 Numeric language codes

Many of the directories used by Form Designer include numeric language codes. For example:

Language	Locale ID (Numeric language code)
English	1033
French	1036
German	1031
Japanese	1041
Portuguese (Brazil)	1046
Spanish	1034

For more information and a comprehensive list of language codes, go to the following URL: https://msdn.microsoft.com/en-us/library/cc233982.aspx.

5.3 Use picas and points

Form Designer supports multiple types of units, including picas and points.

A pica is 12 points (1/6th of an inch) (4.23 mm). A point is 1/72nd of an inch (0.35 mm).

Form Designer displays and accepts measurements in one of the following formats:

- XXpYY
- YY

where:

XX	The number of picas.
YY	The number of points.

The values are always normalized so that YY is less than 12. If the total measurement is less than 12 points, the measurement appears as YY.

You can type a decimal value for the points part of the measurement. Any decimals typed for the pica portion are ignored.

For example:

Points value	Points and Picas
2p4	2 picas and 4 points
2p4.5	2 picas and 4.5 points
2.1p4	2 picas 4 points (the decimal is ignored)
2p18	3 picas 6 points (2 picas and 18 points)
6	6 points
0p6	6 points
6p	6 picas
6p0	6 picas

5.4 Document scripts

- “HTML document script” below
- “PDF document script” below

5.4.1 HTML document script

HTML forms can include script that the web browser executes. The script is part of the page source and is viewable in the web browser.

If the web browser encounters a JavaScript Runtime Error while running Document JavaScripts, it indicates an error.

To resolve the error, use a debugging tool to locate the error. Many web browsers now include development tools. When you locate the error, correct it in the LiquidOffice Script Editor.

For information about the development tools available with your web browser, see the documentation provided for your web browser.

5.4.2 PDF document script

PDF documents can include Custom Document JavaScripts. These scripts are where custom JavaScript created in the Form Designer is placed upon export to PDF. Acrobat embraces the idea of separating scripts into segments called *Document JavaScripts* rather than having one

container hold all script included with a file. The Document JavaScripts area is also created automatically by Form Designer when a PDF form is created from a form template.

To view Document JavaScript in Adobe Acrobat

- On the menu bar, click **Advanced > Document Processing > Document JavaScript**. A dialog box opens, listing all the Document JavaScripts included with the form. User-defined scripts appear at the bottom of the list and begin with `CS90_Custom`.

Size restrictions for PDF document scripts

Depending on the size of custom script written by the form designer, the script can be spread across more than one Document JavaScript. This spreading occurs because Form Designer limits the size of each Document JavaScript to approximately 10 KB.

If a script contains a block of code greater than 10 KB, the form cannot be saved, previewed, or published as an interactive PDF form. The form can be saved as a Non-fillable PDF.

Debug PDF document script

If Acrobat encounters a JavaScript Runtime Error while running Document JavaScripts, the Acrobat Java Console displays a description of the error.

To debug this script, the user must locate the line with the error. Find the error in the Document Javascript, and then return to the Form Designer Script Editor to correct the problem.

5.5 Shortcut keys reference

This section lists the shortcut key combinations that you can use to access Form Designer commands.

> **Note:** Some shortcut commands do not work if you have set focus to the **Gallery** rather than the **Work Area**.
>
> Click the form to return the focus to the Work Area.

File shortcut keys

Command	Keystroke
Start a new form	`Ctrl + N`
Open a form	`Ctrl + O`
Save a form	`Ctrl + S`
Save As	`Shift + Ctrl + S`

Command	Keystroke
Close a form (or close Form Designer if only one form is open).	`Alt + F4`
Print a form	`Ctrl + P`

Edit shortcut keys

Command	Keystroke
Undo	`Ctrl + Z`
Redo	`Ctrl + Y`
Cut	`Ctrl + X`
Copy	`Ctrl + C`
Paste	`Ctrl + V`
Duplicate an object	`Ctrl +` drag selected object
Delete the selected object	`Delete`

View shortcut keys

Command	Keystroke
Zoom In	`Ctrl + +`
Zoom Out	`Ctrl + –`
Scroll up or down	`Page Up` `Page Down`
Scroll left	`Shift + Page Up`
Scroll right	`Shift + Page Down`
View next or previous page (when work area has focus)	`Ctrl + Page Up` `Ctrl + Page Down`
Move focus to Sidebar	`Alt + 0` (zero)
Move focus to Work Area	`Escape`
Toggle between **Gallery** and **Field List** (when Sidebar has focus)	`Ctrl + Page Down`
Move focus among **Gallery** tabs (when Sidebar has focus)	`Ctrl + Shift + Tab`
Open drawers in **Gallery** tabs (when Sidebar has focus)	`Alt +` accelerator key

Format shortcut keys

Command	Keystroke

Align objects	`Ctrl +` (arrow keys)
	`Ctrl + Up`
	`Ctrl + Down`
	`Ctrl + Left`
	`Ctrl + Right`

Move objects	Arrow keys (`Up, Down, Left, Right`)
Precisely move selected objects	`Shift +` (arrow keys)

Command	Keystroke
Apply or remove bold formatting	`Ctrl + B`
Apply or remove italic formatting	`Ctrl + I`
Apply or remove underlining	`Ctrl + U`
Select All	`Ctrl + a`
Group selected objects	`Ctrl + A`
Ungroup objects	`Ctrl + Shift + G`

Tools shortcut keys

Command	Keystroke
Find text	`Ctrl + F`
Replace text	`Ctrl + H`

Other shortcut keys

Command	Keystroke
Start the Spell Checker	`F7`
Open the Properties dialog box	`Alt + Enter`
Open the right-click menu	`Shift + F10`
Edit a selected Text Box or Title	`F2`
Open the Line toolbar control for a selected object	`Ctrl + Shift + L`
Open the Fill Style toolbar control for a selected object	`Ctrl + Shift + I`
Set focus to the **X** box on the Size and Position toolbar	`Ctrl + Shift + O`
Set focus to the **W** field on the Size and Position toolbar	`Alt + Shift + S`
Select next/previously selected object on the form (when work area has focus).	`tab` `Shift + Tab`