



2.4.2 Using Form Designer

Designing Forms is easy with Form Designer. You can still upload a Form Template spreadsheet (which is required for some of the more complex functions) but with Form Designer, you can create a form right in the user interface. See [Using the Form Template](#) for information about using the spreadsheet method of building forms. **Note:** *You can also upload a Form Template and then make changes in Form Designer. However, if you do this and try to download the form template again, you will lose some formatting inside the spreadsheet file (but it will still be fully functional).*

Quick Start

1. Enter Form Designer:

1. Click the **Design** button under your study card on the **My Studies** screen.
2. To add a new Form, click **+Add a Form**. If you want to use an existing Form, go to the next step.
3. Click the Form Card.
4. Click the **Design** button to enter Form Designer.

2a. Add an Item to the Form:

1. Click the **+** button.
2. Enter the text of your question.
3. Click **+Add Question**.
4. Select the icon for the type of response you want for the question.
5. Customize your question settings, skip logic, and validation criteria as needed. For multiple choice questions, replace **Option 1**, **Option 2**, etc. with your choices.
6. Repeat as needed.

2b. Create a Group of Items:

1. Click the item to select it. A blue outline appears to indicate that the item is selected.
2. Click the **Create group with selected questions** button.
3. Click the **+** button within the group to add a new item or drag and drop an item into the group.
4. Repeat as needed.

Note: *You can also hold the **Ctrl** button, select multiple items, and then click the **Create group with selected questions** button. If you start to drag something and then decide not to move it, click the **Esc** button.*

3. Save Your Work

Click **Save Draft** to save your Form.

4. Preview Your Form

Click the **Preview** icon to preview your Form.

5. Exit Form Designer

Click the **X** to exit Form Designer.

6. Add the Form to Your Study

1. Click the **Menu** icon next to your draft.
2. Select **Add to Study**.

Form Designer Details

Layouts

A Layout determines the appearance of a Form, specifically, how items appear on the Form.

You Can Specify a Layout to Display:

- A single item per page or multiple items per page
- Each item in a separate line or items in a grid

To Select a Layout:

Click **Layout & Settings**. New Forms are set to **Grid - multiple pages** by default. Grids are ideal for adding multiple items in a single line. **Best Practices:**

- *In general, the **Simple** style is best for participant-facing Forms. The **Grid** style is useful for Forms with a lot of information and can deliver a better user experience for research professionals.*
- *If you are not sure how many pages you want the Form to have, consider using the **multiple page** layout, as you can specify the number of pages (including a single page) while the **single page** layout restricts you to one page.*

Layout Options:

- **Simple - single page:** Items appear in rows on a single page. In the Form Definition spreadsheet, this is configured by leaving the **Style** column blank.
- **Simple - multiple pages:** Items appear in rows with each item on a separate page. In the Form Definition spreadsheet, this is configured by entering pages in the **Style** column.
- **Grid - single page:** Items appear in columns on a single page. In the Form Definition spreadsheet, this is configured by entering **theme-grid** in the **Style** column.
- **Grid - multiple pages:** Items appear in columns with each on a separate page (default). In the Form Definition spreadsheet, this is configured by entering **pages theme-grid** in the **Style** column.

001: Medical History

2.2.1 Diabetes History

Date of diagnosis of diabetes: <input type="text" value="yyyy-mm-dd"/>	<input type="text" value="P"/> <input type="text" value="R"/>
--	--

Close

Next →

Grid - multiple pages

001: Medical History

2.2.1 Diabetes History

Date of diagnosis of diabetes: <input type="text" value="yyyy-mm-dd"/>	<input type="text" value="P"/> <input type="text" value="R"/>	Was the subject ever treated with oral anti-hyperglycemic agent? <input type="text" value="P"/> <input type="radio"/> Yes <input type="radio"/> No
--	--	---

Close

Grid - single page

001: Medical History

2.2.1 Diabetes History

Date of diagnosis of diabetes:

Close

Next →

Simple - multiple pages

001: Medical History

2.2.1 Diabetes History

Date of diagnosis of diabetes:

Was the subject ever treated with oral anti-hyperglycemic agent?






Yes No

Close





Simple - single page

Icons

The following icons appear on in the upper-left corner of the Form Designer screen:

Icon	Action
	Preview Form
	Expand/Collapse Questions
	Create Group with Selected Questions
	Delete Selected Items
	Duplicate Selected Questions

The following icons appear on the right-hand side of each item:

Icon	Action
	View/Change Question Settings Note: You can also click this icon to expand/collapse settings
	Delete Question Note: This action cannot be undone
	Duplicate Question
	Add Question to Library

Layout Groups

Layout groups are a set of items that are grouped together on a Form. This feature is optional, and you can decide to include/exclude layout groups based on how you want the Form to look. These should not be confused with item groups, which are internal groups used in the database and data extracts. To group items together, select each item on the top left item type icon, and then click the **Group** button. Once a group has been created, you can drag-and-drop items into that group. To use group settings, click the **Settings (Gear)** button in the group header.

Within Group Settings, You Can:

- Make items in the group appear on the same page
- Specify the number of columns of items in the group
- Create a repeating group
- Define skip logic for the entire group

Content Library

Use the Content Library to add pre-made items to your forms. Instead of creating the same item each time you want to add it to a form, save the item or group of items in the Content Library to add

it to the form instantly. For more information, see: [Content Library](#).

Preview

Click the **Preview** button to preview your form.

Versions and Drafts

Click the **Save Draft** button in the upper right-hand corner to save your Form. This does not:

- Create a new version
- Include the draft when you publish your study
- Appear on the Activity Log

Your updated design appears on your Form card in Study Designer under **Drafts**. Your draft is labelled (**latest**), and if you have multiple drafts, it is moved to the top of the list.

To Create Multiple Drafts:

1. Open the Form in Form Designer.
2. Click **Layout & Settings**, and change the value in the **Version number** field.
3. Click **Save Draft**.
4. Repeat the process for each draft.

To Discard a Draft:

Click the **Menu** button next to the draft you want to delete, and selecting **Discard**. **Note:** *Discarded drafts are not retrievable.*

To Save a New Version:

1. Click **Layout & Settings**, and change the number in the **Version number** field.
2. Click **Save Draft**.
3. Exit Form Designer.
4. Click the **Menu** icon next to the draft you want to make a version.
5. Select **Add to Study**. Your Form becomes a version, and is no longer displayed in the **Drafts** section of the Form Card in Study Designer. This version is included when you publish your study.

To Overwrite an Existing Version:

1. Do *not* change the version number.
2. Click **Save Draft**.
3. Exit Form Designer.
4. Click the **Menu** icon next to the draft you want to make a version.
5. Select **Add to Study**. Your pre-existing Form version is replaced by your new version, and is no longer displayed in the **Drafts** section of the Form Card in Study Designer. This version is included when you publish your study.

Note: *If you want to make a new version of a Form (and not overwrite an existing Form), make sure to change the version number in the **Layout & Settings** panel.*

Form Designer Limitations

Currently, Form Designer does not support all of the functionality that is available in OpenClinica Forms. Instead, use the Form Template to take advantage of these features. Specifically:

- You cannot use cross-form logic in Form Designer.
- You can add edit checks in Form Designer but hard edit checks must be defined in the Form Template.
- There is no functionality for cascading selects (i.e. you cannot restrict the list of options available in the next item based on the previous selection. You can still add conditional fields to determine whether the next item appears at all.)

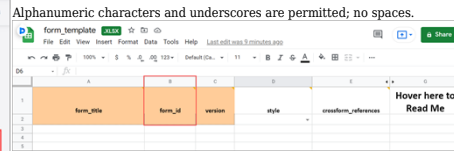
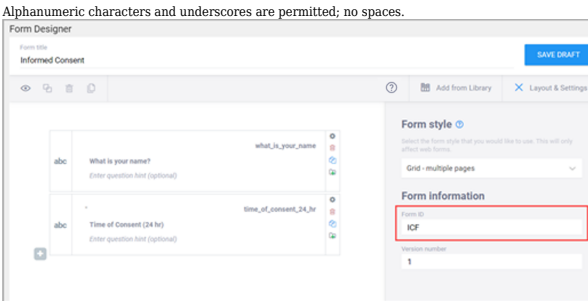
Form Designer and Form Template Fields

Click the images to enlarge them.

Field
Form Title The form title appears at the top of the data entry page.

Form Designer
 You can use alphanumeric characters, special characters (e.g. & # \$ ^ _), and spaces

Form Template
 You can use alphanumeric characters, special characters (e.g. & # \$ ^ _), and spaces.



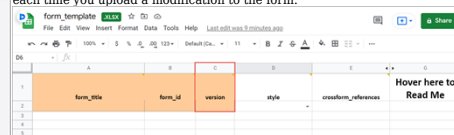
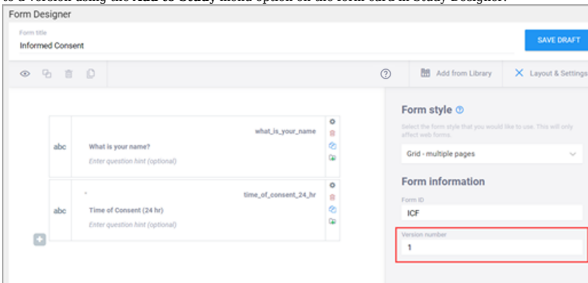
Form ID A unique identifier used as an internal reference when the form is uploaded. This value is not visible to end-users.

You must change the version number if you want to create a new version of your form. Otherwise, in the TEST environment, the new version overwrites the existing version except for changes to the item types, the item groups, or moving an item in or out of a repeating group. In the PRODUCTION environment, you can not overwrite a version of a form and must have a unique identifier for each version. Saving your form as a draft does not create a new version, but you can later promote a draft to a version using the **Add to Study** menu option on the form card in Study Designer.

In the Test environment you can overwrite versions for changes to anything except the following features (these require a new form or a new item name):

- Data type (the type column of the survey sheet)
 - Item group (the **bind:oc:itemgroup** column of the survey sheet)
 - Moving an item into or out of a repeating group
- In the Production environment, you must have a unique version identifier each time you upload a modification to the form.

Form Version A unique identifier for an iteration of a given form (including changes to items, form logic, etc.).



There are four styles to choose from:

- **Simple - single page:** Items appear in rows on a single page.
- **Simple - multiple pages:** Items appear in rows with the other items in their groups on, each group on a separate page.
- **Grid - single page:** Items appear together as a group but can have multiple questions appearing in the same row as columns; this is defined in the individual question settings.
- **Grid - multiple pages:** The same as **Grid - single page** but each group of items will be displayed on its own page.

You can leave this column blank or select from three options: If left blank: Each question is on a separate line on the same page. **[Simple - single page]**

• **- pages:** One question or group of questions per page, with each question on a separate line. **[Simple - multiple pages]**

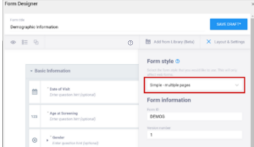
• **- theme-grid:** All groups of questions will appear on a single page, with all items displayed in table format. **[Grid - multiple pages]**

• **- pages theme-grid:** One question or group of questions per page with all items displayed in table format. **[Grid - single page]**

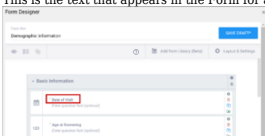
Note:

When using Form Template, question groups (referenced above) are defined on the survey worksheet. When combined with the field-list option of the appearance column on the survey worksheet, you can control the display of questions and the structure of grids. See the entry on appearance below for more information.

Form Style This specifies the layout and appearance of the form, primarily dealing with how the items are displayed (each question on a separate line, or a grid, and whether on a single page or multiple pages by groups).



This is the text that appears in the Form for an item/question.



Question Text/Label

The name of your code list. The same name is used for each value combination of a list. Alphanumeric characters and underscores are permitted; no spaces. If you have a yes/no codelist and name it YN, there would be two rows referencing the same list name: **list_name label name**

YN Yes 1 YN No 2

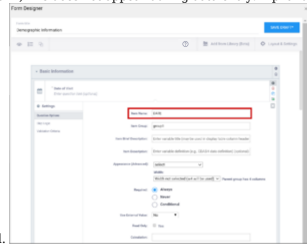
Enter Question Hint/Hint

Informative text that appears on the Form to help the user. For example, "Please provide weight in kilograms." Hints appear in italics under the question label.

Informative text displayed on the form to help the user. For example, Please provide weight in kilograms. Hints display in italics under the question label.

The internal name of the item, as used in the database. This is used to generate the item object identifier (OID). This does not appear during data entry. Alphanumeric characters and underscores

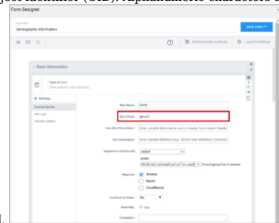
Item Name/Name



are allowed.

The internal name of the group that the item is in, as used in the database. This is used to generate the item object identifier (OID). Alphanumeric characters and underscores are allowed; spaces are

Item Group



not allowed.

The unique name of the item. This is not displayed during data entry, but is how the data is referenced in the database. Allows alphanumeric characters and underscores; spaces are not allowed. It is recommended that only lowercase letters, digits, and underscores are used in item names. Once an item name is defined in this spreadsheet and the form is uploaded into OpenClinica, the name should not be changed to use different letter case when the form is uploaded again. For example, if **item1** is part of the first form upload, this name should not be changed to **ITEM1** or **Item1** when the form is subsequently uploaded. Any change from/to upper/lower case in an item name will result in a form or publish error.

The name of the group to which you are assigning the item in the underlying database. This becomes the item group object identifier (OID). Alphanumeric characters and underscores are allowed; spaces are not allowed. It is recommended that only lowercase letters, digits, and underscores are used in itemgroup names. The itemgroup name does not have to correspond to the begin/end group names defined in the **type** column. Begin group/repeat, end group/repeat, and note types should not have a value in the **bind:oc:itemgroup** cell. All items in a repeating group must have the same itemgroup name. That itemgroup name cannot be used by other items that are outside that repeating group. Once an itemgroup name is defined in this spreadsheet and the form is uploaded into OpenClinica, the itemgroup name should not be changed to use different letter case when the form is uploaded again. For example, if **group1** is part of the first form upload, this should not be changed to **GROUP1** or **Group1** when the form is subsequently uploaded. Any change from/to upper/lower case in an itemgroup name will result in a form or publish error.

The data type of the item (e.g. select one, select multiple, etc.)

The data type of the item (e.g. select one, select multiple, etc.)

- **Single-select:** Allows the user to select one response from a list defined in the Form. Enter options in the **Item Details**.
- **Single-select (external list):** Allows the user to select one response from a list defined in a CSV file. Upload the file in the **Item Details**. This is ideal for long lists.
- **Multi-select:** Allows the user to select one or more responses from a list defined in the Form. Enter options in the **Item Details**.
- **Text:** Allows the user to enter a text value. Select the text icon. Text is up to **3,999** characters.
- **Integer:** Allows the user to enter an integer value. Select the **integer** icon.
- **Decimal:** Allows the user to enter a decimal value. Select the **decimal** icon.
- **Calculate:** Calculates a value and does not display it to the user by default. Select the **calculate** icon.
- **Date:** Allows the user to enter a date value. Select the **date** icon.
- **Note:** Displays a message to the user without collecting a value. Select the **note** icon.
- **File:** Allows the user to attach a file. Select the **file** icon.
- **Image:** Allows the user to attach a .png or .gif file. Select the **image** icon.
- **Audio:** Allows the user to attach an audio file. Select the **audio** icon.
- **Video:** Allows the user to attach a video file. Select the **video** icon.
- **Layout Group (non-repeating):** Allows users to group items together to alter the layout of the Form. Select one or more items and click the **Group** button.
- **Layout Group (repeating):** Allows user to group items together to alter the layout of the Form and allow the user to enter values for the items multiple times, if necessary. Select one or more items and click the **Settings (Gear)** icon for the group and click

Type

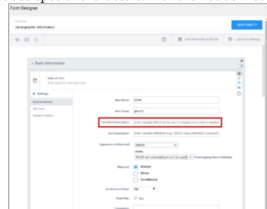
- **Single-select (external list):** Allows the user to select one response from a list defined in a CSV file. On the **survey** sheet, enter **select_one xxxxx** in the **type** column. On the **choices** sheet, enter the same **xxxxx** in the **list_name** column for each choice and define options in the **label** and **name** columns.
- **Single-select (external list):** Allows the user to select one response from a list defined in a CSV file. On the **survey** sheet, enter **select_one_from_file xxxxx.csv** in the **type** column. This is ideal for long lists.
- **Multi-select:** Allows the user to select one or more responses from a list defined in the Form. On the **survey** sheet, type **select_multiple xxxxx** in the **type** column. On the **choices** sheet, enter the same **xxxxx** in the **list_name** column for each choice and define options in the **label** and **name** columns.
- **Text:** Allows the user to enter a text value. On the **survey** sheet, enter text in the **type** column. Text is up to **3,999** characters.
- **Integer:** Allows the user to enter an integer value. On the **survey** sheet, enter **integer** in the **type** column.
- **Decimal:** Allows the user to enter a decimal value. On the **survey** sheet, enter **decimal** in the **type** column.
- **Calculate:** Calculates a value and does not display it to the user by default. On the **survey** sheet, enter **calculate** in the **type** column. Use a **type** of **note** to display the answer.
- **Date:** Allows the user to enter a date value. On the **survey** sheet, enter **date** in the **type** column.
- **Note:** Displays a message to the user without collecting a value. On the **survey** sheet, enter **note** in the **type** column.
- **File:** Allows the user to attach a file. On the **survey** sheet, enter **file** in the **type** column.
- **Image:** Allows the user to attach a .png or .gif file. On the **survey** sheet, enter **image** in the **type** column.
- **Audio:** Allows the user to attach an audio file. On the **survey** sheet, enter **audio** in the **type** column.
- **Video:** Allows the user to attach a video file. On the **survey** sheet, enter **video** in the **type** column.
- **Layout Group (non-repeating):** Allows users to group items together to alter the layout of the Form. On the **survey** sheet, enter **begin group** in the **type** column to indicate the beginning of a group of items and enter **end group** in the **type** column to indicate the end of the group of items.
- **Layout Group (repeating):** Allows user to group items together to alter the layout of the Form and allow the user to enter values for the items multiple times, if necessary. On the **survey** sheet, enter **begin repeat** in the **type** column to indicate the beginning of a repeated group of items and enter **end repeat** in the **type** column to indicate the end of a repeated group of items.

the **Repeat this group if necessary** check box



A short description of the item that can be used to reference it in tables. This description can be up to 40 characters. You cannot use special characters. If this is not defined for an item in a table, the

Item Brief Description



Item Name appears instead.

A long description of the item that can be used to define the data that the item/question contains. This is not displayed on the Form during data entry. The text can be up to 3,999 characters. You cannot use special characters. The description is included in some data extract formats.

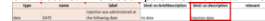
Item Description



A short description of the item that can be used to reference it in tables. This description can be up to 40 characters. You cannot use special characters. If this is not defined for an item in a table, the Item Name appears instead.



A long description of the item that can be used to define the data that the item/question contains. This is not displayed on the Form during data entry. The text can be up to 3,999 characters. You cannot use special characters. The description is included in some data extract formats.



This determines how each item appears based on its Type. Items do not have a specific appearance by default. This setting is optional. **Note:** the type, **other** indicates that instead of selecting the option, other, you can enter the appearance directly in the field. other also appears as an option for the item types indicated. You can specify width for any item. (See **Width**) **Single select / Multi-select**

- **default:** Allows the user to select one or multiple responses.
- **minimal:** Displays answer choices in a drop-down menu rather than the default display of radio buttons (for **select_one** and **select_multiple**) or check boxes (for **select_multiple**)
- **columns** or **columns no-buttons:** Arranges answer choices horizontally in columns based on screen size (Displays radio buttons or check boxes unless you specify no-buttons, which displays text or images.)
- **columns-pack** or **columns-pack no-buttons:** Arranges image answer choices side-by-side, close together (Displays radio buttons or check boxes unless you specify no-buttons, which displays text or images.)
- **columns-n** or **no-buttons:** Arranges image answer choices in column Format with n columns (n <= 10) (Displays radio buttons or check boxes unless you specify no-buttons, which displays text or images.)
- **likert:** Displays answer choices as a Likert scale (This is not available for select_multiple items.)
- **image-map:** Displays an image (must be uploaded with the Form); allows user to select by clicking part of the image (e.g., a select_multiple specific parts on a body map). Only files with an extension of .svg are permitted, and the file name must be listed in the image column for the item
- **autocomplete:** Displays options that match the information you enter as you type.
- **other:** Select other and enter another appearance or define the column width.

text

- **default:** Allows the user to enter a single line of text.
- **multiline:** Allows the user to enter text in a text box multiple lines long (word wrap).
- **other:** Select other and enter another appearance or define the column width.

integer

- **default:** Allows the user to enter a whole number.
- **other:** Enter another appearance or define the column width.
- **analog scale:** Allows the user to input an integer using a Visual Analogue Scale. Select the appropriate option for how you want to display the scale: **analog horizontal**, **analog horizontal no-ticks**, **analog vertical**, **analog vertical no-ticks**, and **analog-scale vertical show-scale**. The scale is always 0-100. In Form Designer, type this into the **Appearance** field.

decimal

- **default:** Allows the user to enter a decimal number.
- **other:** Enter another appearance or define the column width.

calculate

- **default:** This occurs internally, so it does not have an appearance. You can use the note type to display the result.

Date

- **default:** Allows the user to enter a full date: day, month, and year.
- **month-year:** Allows the user to enter a partial date: month and year only.
- **year:** Allows the user to enter a partial date: year only.
- **other:** Select other and enter another appearance or define the column width.

note

- **default:** Displays a note.
- **other:** Enter another appearance or define the column width.

file

- **default:** Allows the user to upload a file.
- **other:** Enter another appearance or define the column width.

image

- **default:** Allows the user to upload an image. A preview appears.
- **draw:** Allows the user to draw a picture on the screen, using the mouse or a touch screen
- **annotate:** Allows the user to upload an image and then draw on it, using the mouse or a touch screen
- **signature:** Allows the user to draw a signature on the screen using the mouse or a touch screen. This is not a 21 CFR Part 11-compliant signature.
- **other:** Select other and enter another appearance or define the column width.

audio

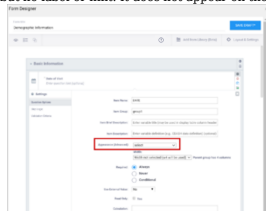
- **default:** Allows the user to upload an audio file. A preview appears.
- **other:** Enter another appearance or define the column width.

video

- **default:** Allows the user to upload a video file. A preview appears.
- **other:** Enter another appearance or define the column width.

Layout groups

- **default:** Allows the user to group items without altering how they are displayed.
- **field-list:** Displays an entire group of questions together on one page. In Form Designer, check the box next to the Show all questions in this group on the same screen.
- **table-list:** Displays a common list of labels as a top row, and then each field in the group displays columns of radio buttons or check boxes. **Note:** Items with no label or hint are treated as background calculations. This means you can set the data type of a background calculation item as needed. For example, you can have an **integer** type item with a calculation but no label or hint. It does not appear on the form and performs a



background calculation.

This determines how each item appears based on its Type. Items do not have a specific appearance by default. This setting is optional. **Note:** the type, **other** indicates that instead of selecting the option, other, you can enter the appearance directly in the field. other also appears as an option for the item types indicated. You can specify width for any item. (See **Width**) **Single select / Multi-select**

- **default:** Allows the user to select one or multiple responses.
- **minimal:** Displays answer choices in a drop-down menu rather than the default display of radio buttons (for **select_one** and **select_multiple**) or check boxes (for **select_multiple**)
- **columns** or **columns no-buttons:** Arranges answer choices horizontally in columns based on screen size (Displays radio buttons or check boxes unless you specify no-buttons, which displays text or images.)
- **columns-pack** or **columns-pack no-buttons:** Arranges image answer choices side-by-side, close together (Displays radio buttons or check boxes unless you specify no-buttons, which displays text or images.)
- **columns-n** or **no-buttons:** Arranges image answer choices in column Format with n columns (n <= 10) (Displays radio buttons or check boxes unless you specify no-buttons, which displays text or images.)
- **likert:** Displays answer choices as a Likert scale (This is not available for select_multiple items.)
- **image-map:** Displays an image (must be uploaded with the Form); allows user to select by clicking part of the image (e.g., a select_multiple specific parts on a body map). Only files with an extension of .svg are permitted, and the file name must be listed in the image column for the item
- **autocomplete:** Displays options that match the information you enter as you type.
- **other:** Select other and enter another appearance or define the column width.

text

- **default:** Allows the user to enter a single line of text.
- **multiline:** Allows the user to enter text in a text box multiple lines long (word wrap).
- **other:** Select other and enter another appearance or define the column width.

integer

- **default:** Allows the user to enter a whole number.
- **other:** Enter another appearance or define the column width.
- **analog scale:** Allows the user to input an integer using a Visual Analogue Scale. Select the appropriate option for how you want to display the scale: **analog horizontal**, **analog horizontal no-ticks**, **analog vertical**, **analog vertical no-ticks**, and **analog-scale vertical show-scale**. The scale is always 0-100. In Form Designer, type this into the **Appearance** field.

decimal

- **default:** Allows the user to enter a decimal number.
- **other:** Enter another appearance or define the column width.

calculate

- **default:** This occurs internally, so it does not have an appearance. You can use the note type to display the result.

Date

- **default:** Allows the user to enter a full date: day, month, and year.
- **month-year:** Allows the user to enter a partial date: month and year only.
- **year:** Allows the user to enter a partial date: year only.
- **other:** Select other and enter another appearance or define the column width.

note

- **default:** Displays a note.
- **other:** Enter another appearance or define the column width.

file

- **default:** Allows the user to upload a file.
- **other:** Enter another appearance or define the column width.
- **draw:** Allows the user to draw a picture on the screen, using the mouse or a touch screen
- **annotate:** Allows the user to upload an image and then draw on it, using the mouse or a touch screen
- **signature:** Allows the user to draw a signature on the screen using the mouse or a touch screen. This is not a 21 CFR Part 11-compliant signature.
- **other:** Select other and enter another appearance or define the column width.

image

- **default:** Allows the user to upload an image. A preview appears.
- **draw:** Allows the user to draw a picture on the screen, using the mouse or a touch screen
- **annotate:** Allows the user to upload an image and then draw on it, using the mouse or a touch screen
- **signature:** Allows the user to draw a signature on the screen using the mouse or a touch screen. This is not a 21 CFR Part 11-compliant signature.
- **other:** Select other and enter another appearance or define the column width.

audio

- **default:** Allows the user to upload an audio file. A preview appears.
- **other:** Enter another appearance or define the column width.

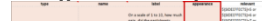
video

- **default:** Allows the user to upload a video file. A preview appears.
- **other:** Enter another appearance or define the column width.

Layout groups

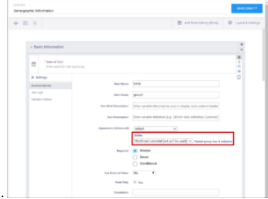
- **default:** Allows the user to group items without altering how they are displayed.
- **field-list:** Displays an entire group of questions together on one page. In Form Designer, check the box next to the Show all questions in this group on the same screen.
- **table-list:** Displays a common list of labels as a top row, and then each field in the group displays columns of radio buttons or check boxes. **Note:** Items with no label or hint are treated as background calculations. This means you can set the data type of a background calculation item as needed. For example, you can have an **integer** type item with a calculation but no label or hint. It does not appear on the form and performs a

background calculation.



For an item or group of items on a grid form, you can control how many columns appear on each row by specifying the width **w#**. If you specified a width of **w6** for a layout group, it takes up the entire width of the grid. If you specified **w1** for a single item in the group, there would be one small column

Width



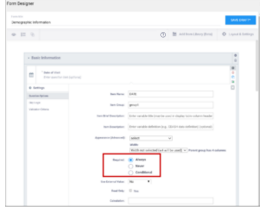
For an item or group of items on a grid form, you can control how many columns appear on each row by specifying the width **w#**. If you specified a width of **w6** for a layout group, it takes up the entire width of the grid. If you specified **w1** for a single item in the group, there would be one small column (1) and another large column (5).

Item	Width	Height	Order
Item 1	w1	h1	1
Item 2	w5	h1	2

(1) and another large column (5).

This specifies whether a user is required to enter a response to the item to proceed with data entry. Select **Always**, **Never**, or **Conditional** to specify whether/when a response to this item/question is required. If you select **Conditional**, you must enter a conditional value.

Required

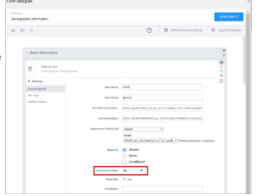


This specifies whether a user is required to enter a response to the item to proceed with data entry. For required fields, type **yes** in the **required** column on the **survey** sheet. For conditionally required fields, enter a condition, as defined in the **relevant** column of the **survey** sheet. For example, if **Number of packs per day** is required if **Does the subject smoke?** is answered **yes**, enter: $\$(smoke) = 1$ Note: This column supports the syntax as defined in the calculation, constraint, or relevant columns of this worksheet. Refer to those column comments for additional examples.

Item	Required	Relevant	Order
Item 1	yes		1
Item 2	yes	$\$(smoke) = 1$	2

This item is a value used for logic or calculations. **clinicaldata** is used for cross-Form, cross-event, or event level calculations. **contactdata** displays contact data on a form. If you enter **contactdata**, you must add a column called **instance::oc:contactdata**. That column must contain one of the following values to indicate which contact information it is collecting: **firstname**, **lastname**, **email**, **mobilenumber**, **secondaryid**.

Use External Value

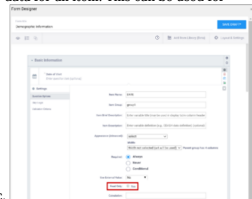


This item is a value used for logic or calculations. **clinicaldata** is used for cross-Form, cross-event, or event level calculations. **contactdata** displays contact data on a form. If you enter **contactdata**, you must add a column called **instance::oc:contactdata**. That column must contain one of the following values to indicate which contact information it is collecting: **firstname**, **lastname**, **email**, **mobilenumber**, **secondaryid**.

Item	External Value	Order
Item 1	clinicaldata	1
Item 2	contactdata	2

This specifies that you cannot enter data for an item. This can be used for

Read Only



This specifies that you cannot enter data for an item. This can be used for the **types of text**, **calculations**, etc.

Item	Read Only	Order
Item 1	yes	1
Item 2	no	2

the **types of text**, **calculations**, etc.

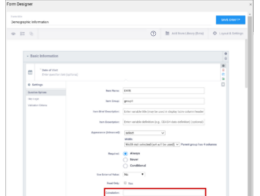
An expression used to calculate a value, usually using the values of preceding questions on the current Form. This can also be used for Cross-form calculations. **.** is used to represent the current field's value. **\$(name)** is used to reference a different item value on this Form, where name is the name of the other item. You can use parentheses. The following operators can be used:

- Addition: +
- Subtraction: -
- Multiplication: *
- Division: **div**
- Equal: =
- Not Equal: !=
- Less than: <
- Less than or equal to: <=
- Greater than: >
- Greater than or equal to: >=

Calculation

Or:

or For example, to calculate Mean Arterial blood Pressure (MAP) based on the items systolic and diastolic: **(systolic + (2*diastolic)) div 3** Calculations cannot be used for items with **type of note**. If calculation is used for any type except calculate, that field must have **Read Only** set to **yes**.



An expression used to calculate a value, usually using the values of preceding questions on the current Form. This can also be used for Cross-form calculations. **.** is used to represent the current field's value. **\$(name)** is used to reference a different item value on this Form, where name is the name of the other item. You can use parentheses. The following operators can be used:

- Addition: +
- Subtraction: -
- Multiplication: *
- Division: **div**
- Equal: =
- Not Equal: !=
- Less than: <
- Less than or equal to: <=
- Greater than: >
- Greater than or equal to: >=

Or:

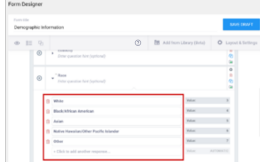
or For example, to calculate Mean Arterial blood Pressure (MAP) based on the items systolic and diastolic: **(systolic + (2*diastolic)) div 3** Calculations cannot be used for items with **type of note**. If calculation is used for any type except calculate, that field must have **Read Only** set

Item	Calculation	Read Only	Order
Item 1	$(systolic + (2*diastolic)) div 3$	yes	1
Item 2		no	2

to **yes**.

Response Text/Label

The question text to be displayed on the data entry form. This field allows alphanumeric characters. Add a line break where you want using **Ctrl-Enter** or **Ctrl-Alt-Enter** (Windows) **Option+Enter** (Mac). Styling prompts can be added to format your text as follows: ***text*** displays as italics ****text**** displays as bold *****text***** displays as bold italics Increase font size by preceding the text with one to six hash tags. **#** makes the text the largest possible size, **##** makes the text the smallest possible size. Sizes that display may vary for note vs. item vs. group labels. Colors can be added as follows: text for red text. You can use the hex code for the color of your choice. (You can look up hex codes by searching for css codes on the internet.)

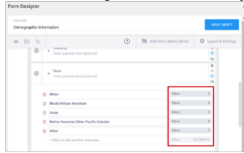


The question text to be displayed on the data entry form. This field allows alphanumeric characters. Add a line break where you want using **Ctrl-Enter** or **Ctrl-Alt-Enter** (Windows) **Option+Enter** (Mac). Styling prompts can be added to format your text as follows: ***text*** displays as italics ****text**** displays as bold *****text***** displays as bold italics Increase font size by preceding the text with one to six hash tags. **#** makes the text the largest possible size, **##** makes the text the smallest possible size. Sizes that display may vary for note vs. item vs. group labels. Colors can be added as follows: text for red text. You can use the hex code for the color of your choice. (You can look up hex codes by searching for css codes on the internet.)

Item	Response Text	Color	Order
Item 1	*text*		1
Item 2	**text**		2
Item 3	***text***		3
Item 4	#text#		4
Item 5	##text##		5
Item 6	#text#	red	6

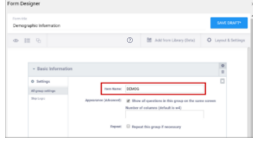
The unique code value stored in the database that corresponds to each answer choice (e.g. 1=Yes). These codes are generated automatically but can be changed.

Value/Name



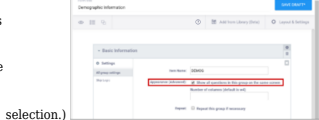
The unique internal name of the layout group used in the database. This is not displayed during data entry. Alphanumeric characters and underscores are allowed.

Item Name/Name



Click this check box to make all items appear on the same screen (regardless of your layout selection.)

Show All Questions in this Group on the Same Screen/Appearance



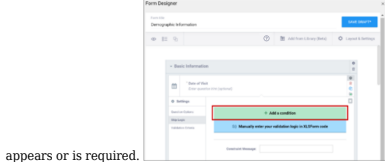
This specifies that the group of items should be repeated. Click this check box to make the selected group of questions a repeating group.

Repeat this group if Necessary



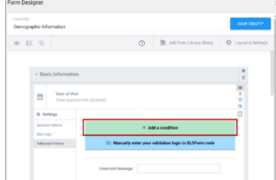
This is a condition under which an item is skipped. Enter a condition under which this item/question appears or is required.

Skip Logic / Relevant



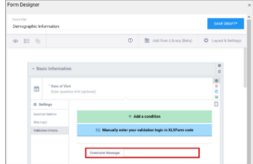
This is a condition under which an a response is considered invalid. Validation Criteria prevents users from entering invalid data. (e.g. "a Participant's pulse must be >=60 and <=100.") Note: You can also manually add skip logic or validation logic in XLS Form Code.

Validation Criteria / Constraint



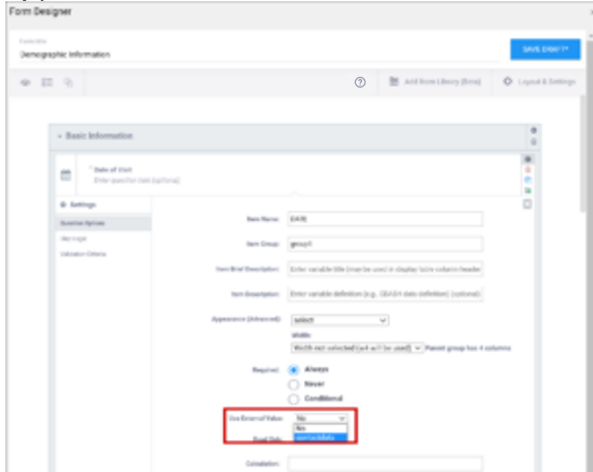
A message stating that data is invalid and/or explaining why it is invalid (e.g. "Pulse is outside normal range.") If you provide a constraint, you can include a message that explains why the answer provided is not acceptable. The message displays if the constraint expression is FALSE. For example, if you had the following constraint on the Pulse item: >= 60 and <=100 and a constraint message of: Pulse is outside of the normal range. If someone entered a Pulse of 40, Pulse is outside of the normal range. would display on the form.

Constraint Message



Displays contact data on Form. In the Use as External Value field, select contactdata. Save your draft and exit. Then re-enter Form Designer, and select the types of contact data you want to display.

Contact Data



The unique code value stored in the database that corresponds to each

answer choice (e.g. 1=Yes).

Choice Label	Choice Value	Choice Order
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
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89	89	89
90	90	90
91	91	91
92	92	92
93	93	93
94	94	94
95	95	95
96	96	96
97	97	97
98	98	98
99	99	99
100	100	100

The unique internal name of the layout group used in the database. This is not displayed during data entry. Alphanumeric characters and underscores

are allowed.

Choice Label	Choice Value	Choice Order
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
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94	94	94
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96	96	96
97	97	97
98	98	98
99	99	99
100	100	100

N/A

This uses **begin repeat** and **end repeat** in the **Type** column to specify that the group of items should be repeated.

Choice Label	Choice Value	Choice Order
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
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91	91	91
92	92	92
93	93	93
94	94	94
95	95	95
96	96	96
97	97	97
98	98	98
99	99	99
100	100	100

This is a condition under which an item is skipped (as defined in the **relevant** column). The item or group is only displayed if the provided expression evaluates to **TRUE**. Use the following syntax: **\$(other question name) = value** (for a numeric value) or **\$(other question name) = 'value'** (for a character value) If the lead-in question uses a code list defined in the **choices** worksheet, use what is in the name column for that code list as the value. For example, if you have two questions: **Does the subject smoke?** (item name = **smoke**) and **How many packs per day?** (item name=**packs**), the second question should only display if the answer to the first question is **Yes**. If the first question (smoke) uses a code list defined in the **choices** worksheet as: list_name label name YN 1 Yes YN 2 No The relevant syntax for **How many packs per day** would be: **\$(smoke) = 1** For multi select items, use the following syntax: **selected(\$(question name),value)** (for a numeric value) **selected(\$(question name),'value')** (for a character string) **Note:** This column supports the syntax as defined in the required, calculations, or relevant columns.

Choice Label	Choice Value	Choice Order
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9
10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
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74	74	74
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81	81	81
82	82	

Form Title

The form title appears at the top of the data entry page. ***BOTH Form Designer and Form Template*** - You can use alphanumeric characters, special characters (e.g. & # \$ ^ _), and spaces.

Form ID

A unique identifier used as an internal reference when the form is uploaded. This value is not visible to end-users. ***BOTH Form Designer and Form Template*** - Alphanumeric characters and underscores are permitted; no spaces. **Form Version** A unique identifier for an iteration of a given form (including changes to items, form logic, etc.).

Functional approval by Kate Lambert. Signed on 2025-02-07 3:11PM

Approved for publication by Paul Bowen. Signed on 2025-02-10 12:40PM

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