

Blackbaud Grantmaking™

Conditional Display Logic

Managing Conditional Logic Modal Parts

Conditional Display Logic can be applied to all fields, layouts and pages on a given form[§]. The Conditional Logic modal validates whether an expression is true or false and then applies the **Visibility Configuration** option chosen if the expression is true.

Manage Conditional Logic

bbcon medium number *Conditional Logic Applies To...*

Show component when ▼

i bbcon text contains

+ Add condition + Add new rule

Field

Operator

Value

bbcon text ▼

Contains ▼

Specific value ▼

x

Cancel
Clear all logic
Apply

Blue: Field that will be Conditionally Displayed/Hidden

Red: Application Field Used for Comparison

Green: Comparison Operator

Purple: Plain Text Explanation

Orange: Visibility Configuration

Brown: Comparison Value

Instructions for Adding Conditional Display Logic

1. When editing a form, click the 'Edit' pencil icon for the field or layout component you want to conditionally display/hide. (Blue)
2. Click on the 'Display' tab, or the down arrow next to the 'Details' tab, then select 'Display'.
3. Choose the visibility configuration option from the dropdown menu. (Orange)
4. Click the 'Manage Conditional Logic' link.
5. Click 'Add Condition' or 'Add New Rule'.
 - a. A Condition is *simple* logic, usually evaluating a single expression.
 - b. A Rule is *complex* logic. Rules consist of multiple Conditions.

§ - Note: There are a handful of components which are not available to conditionally display, such as digital signatures.

6. Choose the 'Field' to compare. (Red)
7. Choose the 'Comparison Operator'. (Green)
8. Choose whether the second value to compare is a specific value or value from another component (if option is available).
 - a. 'Specific value' allows you to specify what to compare to your first value.
 - b. 'Value from another component' allows you to compare the value of that other component to the data entered in the 'Field'

Note: 'Value from another component' field options will depend on the 'Field' field type and comparison operator. Ex. If your 'Field' field is a date field, you won't be able to compare it to a text field.

9. Enter the value you want to compare. (Brown)
10. Review 'Plain Text Explanation'. (Purple)
11. Click Apply.
12. Click Save.
13. Save Form.

Comparison Operators

For each type of database field, there is a different set of comparison operators available.

Comparison operators enter the picture when certain conditions must be satisfied to return either a true or false value based on the comparison.

The selected **Visibility Configuration** will be implemented when the comparison is true.

Note: The Applicant and Grantee Portal is advanced by continuous release and operators may be subject to change. This document walks through the different operators that are available as of bbcon 2024 in Seattle.

Field Types (Blueprint Module)

- True/False
- Small Number, No Decimal
- Medium Number, No Decimal
- Large Number, No Decimal
- Currency
- Number, With Decimal
- Date
- Text
- Values
- Long Text

All Available Operators

	Operator	Operator Description
	Contains	Is the value contained anywhere within the field?
	Ends With	Is the value found at the end of the field?
	Equal To	Is the value equal to the field?
	Is Blank	Is the field blank?
	Not Blank	Is the field not blank?
	Not Equal To	Is the value not equal to the field?
	One Of	Is the value one of the picklist options available?
	Starts With	Is the value found at the start with the field?
	Greater Than	Is the value greater than the field?
	Greater Than or Equal To	Is the value greater than or equal to the field?
	Less Than	Is the value less than the field?
	Less Than or Equal To	Is the value less than or equal to the field?
*	Does Not Include	Is the value missing from the options selected in the classification?
*	Includes	Is the value included in the options selected in the classification?
†	After	Is the date entered in the field after the date in the value?
†	Before	Is the date entered in the field before the date in the value?
†	Is Between	Is the date entered in the field between the dates in the value?
†	Last 365 Days	Is the date entered in the field within the last 365 days?
†	Last Month	Is the date entered in the field within the last month?
†	Last Week	Is the date entered in the field within the last week?
†	Last Year	Is the date entered in the field within the last year?
†	On or After	Is the date entered in the field on or after the date in the value?
†	On or Before	Is the date entered in the field on or before the date in the value?
†	This Month	Is the date entered in the field within this month? (September)
†	This Week	Is the date entered in the field within this week? (September 22-28)
†	This Year	Is the date entered in the field within this year? (2024)
†	Today	**Logic currently not set for use with BBGM**
†	Tomorrow	**Logic currently not set for use with BBGM**
†	Yesterday	**Logic currently not set for use with BBGM**

* - Indicates an operator only available for Classification tables

† - Indicates a 'date only' operator

Note: Date only operators have a third option beyond 'Specific Value' and 'Value From Another Field' called 'Today's Date'. The date operators available will use either the 'Specific Value' field or 'Today's Date' as the relative date.

Note: Classification tables that accept multiple values will have a different set of operators than single selection values. Please see the Classification Tables Field Type explanation below.

Field Type Explanation and Use

Database Field Type	Description	What is it used for?
True/False	Allows for a True/False Dropdown ***	True/False Validation
Small Number, No Decimal	Allows for an integer between 0 and 255	Small Numbers
Medium Number, No Decimal	Allows for an integer between -32,768 and 32,767	Medium Numbers
Large Number, No Decimal	Allows for an integer between -2,147,483,648 and 2,147,483,647	Large Numbers
Currency	Allows for a dollar value - a number with two decimals	Any Dollar Value
Number, With Decimal	Allows for numbers with up to 4 decimal places	Numbers with Decimals
Date	Allows for dates	Dates
Text	Allows for text values up to 255 characters long	Short Text (e.g. Titles)
Values	Allows for a user-defined dropdown list	Dropdown List
Long Text	Allows for text values up to 64,000 characters long	Long Text (e.g. Descriptions)
Classification Tables	Also referred to as 'Code Tables,' these are system defined classifications/codes that can be applied to Contact, Request, or Organization records	Classifying Data

*** - In the Legacy Grantee Portal, these fields were represented by a checkbox

Operator Availability

Database Field Type	Operator Availability
True/False	Contains, Ends With, Is Blank, Not Blank, Not Equal To, One Of, Starts With
Small Number, No Decimal	Equal To, Greater Than, Greater Than or Equal To, Is Blank, Less Than, Less Than or Equal To, Not Blank, Not Equal To
Medium Number, No Decimal	Equal To, Greater Than, Greater Than or Equal To, Is Blank, Less Than, Less Than or Equal To, Not Blank, Not Equal To
Large Number, No Decimal	Equal To, Greater Than, Greater Than or Equal To, Is Blank, Less Than, Less Than or Equal To, Not Blank, Not Equal To
Currency	Equal To, Greater Than, Greater Than or Equal To, Is Blank, Less Than, Less Than or Equal To, Not Blank, Not Equal To
Number, With Decimal	Equal To, Greater Than, Greater Than or Equal To, Is Blank, Less Than, Less Than or Equal To, Not Blank, Not Equal To
Date	After, Before, Equal To, Is Between, Is Blank, Last 365 Days, Last Month, Last Week, Last Year, Not Blank, Not Equal To, On or After, On or Before, This Month, This Week, This Year
Text	Contains, Ends With, Equal To, Is Blank, Not Blank, Not Equal To, Starts With
Values	Contains, Ends With, Is Blank, Not Blank, Not Equal To, One Of, Starts With
Long Text	Contains, Ends With, Equal To, Is Blank, Not Blank, Not Equal To, Starts With
Classification Tables	<i>Single Value Table</i> : Contains, Ends With, Is Blank, Not Blank, Not Equal To, One Of, Starts With <i>Multi Value Table</i> : Does Not Include, Equal To, Includes, Is Blank, Not Blank, Not Equal To

Classification Table Operator availability depends on whether the Classification Table is configured to allow only a single value or multiple values to be added.

Note: This setting is configured in Control Panel > Classifications > [Classification Table] > Max. number of values

Coding

Description * 0/75

Program Area

Levels

5

Max. number of values

3

Require entry at lowest level

Track percentages

Note: Classification Tables selected in the 'Field' variable will only allow for a 'Specific Value' and do not allow you to choose to reference another field.

Examples

Condition: Displaying Program Area Specific Metrics

Scenario:

A current Grantmaking client maintains 9 application forms in the legacy Grantee portal for a single program. These applications are substantially similar, but request program-specific metrics to measure potential impact. In the current design, applicants are directed to a central application that leverages an eligibility quiz to divert applicants to one of 8 separate application forms based on the Program Area selected.

To streamline the applicant experience and reduce administrative efforts let's add conditional logic to only display the relevant metrics sections in the Applicant and Grantee Portal.

Step-by-Step Instructions:

- 1) Place ALL needed fields on the application form
 - a. This should also include any layout components such as Panels, Columns, etc.
- 2) Determine what you want to display and when
 - a. In this scenario, I have 3 individual panels nested in a larger Metrics panel, each with two metrics questions each:

Metrics

Food Insecurity

How many picnic lunches could be purchased if this funding request is approved?*

How many of those lunches would be immune from ants if this funding request is approved?*

Educational Opportunities

How many field trips will you be able to fund if this funding request is approved?*

How many bus trips will you be able to provide if this funding request is approved?*

Domestic Violence Prevention

How many people will your organization be able to help if this request for funding is approved?*

How many people do you anticipate will need services from your organization next year?*

- 3) Select the 'Edit' icon for the first panel – 'Educational Opportunities'
- 4) Select the 'Display' tab
- 5) Click the 'Manage conditional logic' link

Configuration

Panel

The screenshot shows the 'Configuration' panel with three tabs: 'Details', 'API', and 'Display'. The 'Display' tab is selected and highlighted with a red box. Below the tabs is a dropdown menu set to 'Always show component'. An information box contains the text: 'Click "Manage conditional logic" below to create conditional logic to define when this component should show or hide.' The 'Manage conditional logic' button is highlighted with a red box.

- 6) Change the '**Visibility Configuration**' dropdown to 'Show component when'
- 7) Click the 'Add condition' link
 - a. If your display logic is more complex, you might choose 'Add new rule' instead

Manage Conditional Logic

Panel

The screenshot shows the 'Manage Conditional Logic' panel. At the top is a dropdown menu set to 'Show component when', which is highlighted with an orange box. Below it is an information box: 'Click "Add new rule" to create a complex set of rules or "Add condition" to create a simple condition'. Two buttons are visible: 'Add condition' (highlighted with a red box) and 'Add new rule'. At the bottom, there are three buttons: 'Cancel', 'Clear all logic', and 'Apply'.

- 8) Select 'Request Program Area' from the '**Select a field**' dropdown
- 9) Select 'One Of' from the '**Comparison Operator**' dropdown
- 10) Enter 'Educational Opportunities' into the '**Value**' field
- 11) Verify that the '**Plain Text Explanation**' is correct

Manage Conditional Logic

Panel

Show component when ▼

i Request Program Area one of Educational Opportunities

+ Add condition + Add new rule

Request Program Area ▼ One of ▼ Educational Opportunities x ▼ x

Cancel Clear all logic Apply

12) Click Apply

13) Click Save

14) Follow steps 3 through 13 for each additional 'Panel'

Rule: Displaying/Hiding Pages of Requirement Metrics

Scenario:

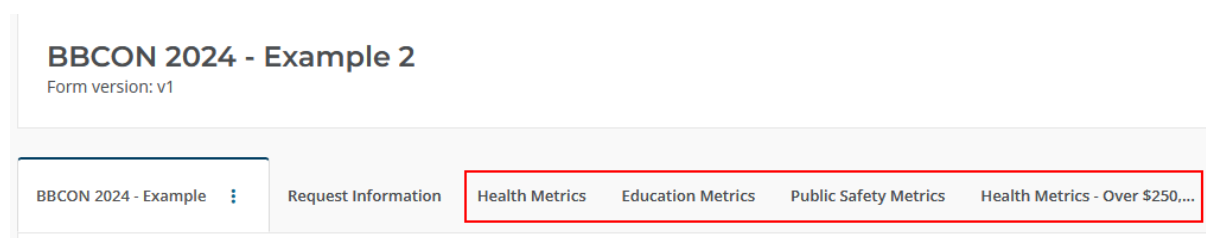
A current Grantmaking client publishes a periodic Requirement to track the progress of their ongoing approved Grants. These updates are a mandatory element of the client's workflow and are required to 'renew' a Request, or disburse a payment installment for a multi-year commitment. To facilitate this data collection, a legacy Grantee Portal Requirement form was strategically designed with a full page dedicated to each of the defined focus areas. Then, a detailed instruction page within the form guided the Grantee to identify the sections of the form that apply to their focus area. Grantees were then directed to complete only those fields, while ignoring the other/non-relevant focus areas within the form.

To improve the Grantee experience and reduce errors and confusion, let's add conditional logic to this form in the Applicant and Grantee Portal. Leveraging Conditions and Rules to dynamically adapt the form to the Focus Area and grant amount, we can increase the ease and accuracy of the data collection process.

In addition to specific focus areas, grant amounts over \$250,000 required a separate set of metrics to be completed.

Step-by-Step Instructions:

- 1) Place ALL needed fields on the application form
 - a. This should also include any layout components such as Panels, Columns, etc. as well as Pages
- 2) Determine what you want to display and when
 - a. In this scenario, I have 4 different metrics pages, two of which need complex logic:



- 3) Click on the first page to configure Conditional Display Logic – in this case, 'Health Metrics'
- 4) Click the 3 dots next to the page title, and select 'Show/Hide'
 - a. This is the equivalent of the 'Display' tab when viewing a Layout Component or Individual Field
- 5) Change the '**Visibility Configuration**' dropdown to 'Show page when'
- 6) Click the 'Add new rule' link

- a. If your display logic is simple in nature, you might choose 'Add condition' instead

Show/Hide Page

Health Metrics

Show page when

Click "Add new rule" to create a complex set of rules or "Add condition" to create a simple condition

Add condition Add new rule

Cancel Clear all logic Apply

- 7) Select 'Focus Area' from the 'Select a field' dropdown
- 8) Select 'Contains' from the 'Comparison Operator' dropdown
- 9) Enter 'Health' into the 'Value' field

Show/Hide Page

Health Metrics

Show page when

(Focus Area contains Health)

Add condition Add new rule

All Any of the conditions match Add condition Add new rule Delete rule

Focus Area Contains Health

Cancel Clear all logic Apply

Since we have two different 'Health' metrics pages, we need to add a second *condition* to our rule so that the first 'Health' metrics page only displays when the Grant Amount is *less than* \$250,000. If we only added a *condition* of 'Focus Area contains Health,' then this page would ALWAYS display if the Focus Area on the Request was set to 'Health,' and then *both* 'Metrics' pages would display in the event the 'Grant Amount' was greater than or equal to \$250,000.

- 10) Click the 'Add condition' link directly above the 'Focus Area' condition to add an additional condition
- 11) Select 'Grant Amount' from the 'Select a field' dropdown
- 12) Select 'Less Than' from the 'Comparison Operator' dropdown
- 13) Enter '250000.00' into the 'Value' field

Show page when ▼

i (Focus Area contains Health **OR** Grant amount less than 250000.00)

Add condition Add new rule

Any of the conditions match Add condition Add new rule Delete rule

Focus Area	Contains	Health	✕
Grant amount	Less than	Specific value	✕
250000.00			

- 14) Verify that the 'Plain Text Explanation' is correct
 - a. When using Rules, there is an 'Any/All' toggle switch to choose between 'And' and 'Or' as the 'Boolean Operator'
 - b. If the 'Plain Text Explanation' doesn't show the correct explanation, toggle the 'Any/All' switch to switch between 'And' and 'Or'
 - c. In this scenario, we want BOTH conditions to be true, so we will use 'And'

i (Focus Area contains Health **OR** Grant amount less than 250000.00) ✕

i (Focus Area contains Health **AND** Grant amount less than 250000.00) ✔

All of the conditions match = AND

Any of the conditions match = OR

- 15) Click Apply
- 16) Click Save
- 17) Follow steps 3 through 16 for each additional 'Page'

Since there are only single metrics pages for 'Education' and 'Public Safety,' we only need to add a simple condition to each of those pages for the 'Focus Area.' The 'Health Metrics – Over \$250,000' page needs a rule where 'Focus Area' contains 'Health' AND the 'Grant Amount' is Greater Than or Equal To '250000.00.'