

Current and Previous

Lab 5.2

15-20 minutes

Lab objectives

You will perform the following in this lab:

- Use the **current** and **previous** global objects in a Business Rule.
- Create two new form fields for use in your Business Rule.
- Practice debugging.
- Complete a Cloud Dimensions' Phase II requirement.



Business Problem

The current process to gather Root Cause Analysis (RCA) at Cloud Dimensions asks users to provide their findings and documentation in the 'Additional comments' field prefixed by the text 'RCA: '. This strategy has proven to be unsuccessful as the prefix is often forgotten and it is difficult to extract data from records with multiple RCA updates. RCA reporting is currently performed manually. It takes hours to produce, and the results are often incomplete.

Project Requirement

Create a new 'RCA' field on the Incident form to capture Root Cause Analysis documentation.

For reporting purposes, create a second field on the Incident form called 'RCA included' to easily identify records where Root Cause Analysis documentation is included. In the event the updating Analyst forgets to update this field, the system should evaluate the 'RCA' field and if populated, the 'RCA included' field should also be selected (checked). In the case where an existing value in the 'RCA' field is removed, the check should be removed from the 'RCA included' field as well.

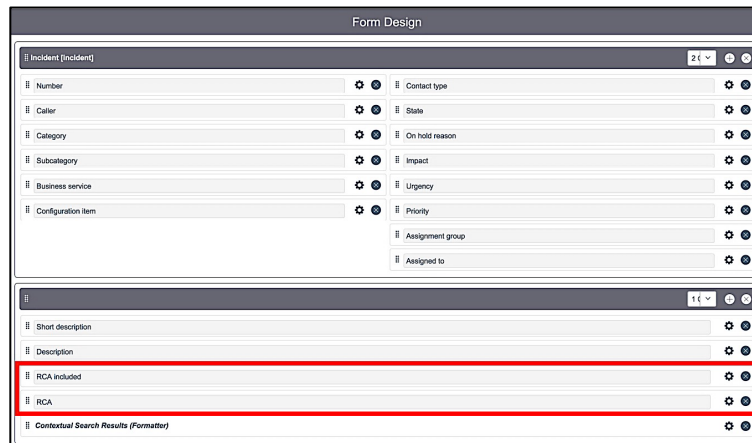
A. Preparation

1. Create two new fields on the Incident form.
 - a) Open an Incident.
 - b) Right-click the form's Context menu and select **Configure > Form Design**.
 - c) Select the **Field Types** tab on the left side of the screen.
 - d) Drag a **True/False** field to the form below the *Description* field.
 - e) Select the **Edit this field** (gear) icon on the right side of the field.

f) Configure the record:

Label: **RCA included**
Name: **u_rca_included**
 - g) Close the Properties window.
 - h) Drag a **String** field to the form below the *RCA included* field.

Label: **RCA**
Name: **u_rca**
Max length: **1000**
 - i) Close the Properties window.
 - j) Select **Save**.



- k) Close the Form Design browser tab/window.
- l) Reload the Incident form to see the changes to the form.

B. Create the Business Rule

1. Create a new Business Rule.

Name: **Lab 5.2 RCA Included**
Table: **Incident [incident]**
Active: **Selected (checked)**
Advanced: **Selected (checked)**
When: **before**
Order: **125**
Insert: **Selected (checked)**
Update: **Selected (checked)**

2. On the Advanced tab, within the executeRule() function in the Script field, type **try** followed by the <tab> key to insert the **try** Syntax Editor Macro (created in Lab 1.1).
3. Select the **Format Code** icon on the Syntax Editor toolbar to properly align the script.
4. Update the statement in the **catch** block to use the server-side **gs.error()** method instead of the client-side **g_form.addErrorMessage()** method.

```
1 (function executeRule(current, previous /*null when async*/ ) {  
2  
3     try {  
4         //  
5     }  
6     catch (err) {  
7         gs.error("A runtime error occurred: " + err);  
8     }  
9  
10 })(current, previous);
```

5. Examine the pseudo-code for the script you will write:
 - If the RCA field has no value and the RCA included checkbox is selected (checked)
 - De-select the RCA included checkbox (uncheck).
 - Else if the RCA field has a value and the RCA included checkbox is not selected (not checked)
 - Select the RCA included checkbox (check).

6. Write the script in the try:

```
1 ▾ (function executeRule(current, previous /*null when async*/ ) {  
2  
3 ▾   try {  
4 ▾     if (current.u_rca.nil() && current.u_rca_included) {  
5         current.u_rca_included = false;  
6     }  
7 ▾     else if (!current.u_rca.nil() && !current.u_rca_included) {  
8         current.u_rca_included = true;  
9     }  
10    }  
11  
12 ▾    catch (err) {  
13        gs.error("A runtime error occurred: " + err);  
14    }  
15  
16    })(current, previous);
```

7. Select **Submit**.

C. Test Your Work

1. Open an Incident record.
2. Select (check) the **RCA included** checkbox.
3. **Save** the record to remain on the form.
4. Is the *RCA included* checkbox checked? If yes, debug and re-test.
5. Enter a value of your choice in the **RCA** field.
6. **Save** the record to remain on the form.
7. Is the *RCA included* checkbox checked? If not, debug and re-test.
8. Does the *RCA included* field need to remain visible on the form?

9. Make the 5.2 RCA Included Business Rule **inactive**.

Lab Completion

You have successfully completed the lab and practiced using the current and previous global objects. Now, you will be the life of the party!