

Create Force.com Sharing Rules with Clicks, Not Code

May 22, 2017



SCENARIO

When a Record is created for Object B, we want to create a sharing rule on the related record in Object A for the related user or a specific public group. In this example, Object A and Object B have a Master-detail relationship where object A is the master.

The related user we are creating the sharing rule for, will be the record owners' manager - as defined on their user record.

OVERVIEW

There are 3 components that need to be created to accomplish this task. We must create the components in the following order.

1. Create an Apex Sharing Reason: required field on Sharing Rule
2. Create a Flow: to create the Sharing Rule on Object A
3. Create a Process Builder: to launch the Flow when an Object B record is created, and define the Flow variables (ParentID of the Object A record, and the UserorGroupID the record will be shared with)

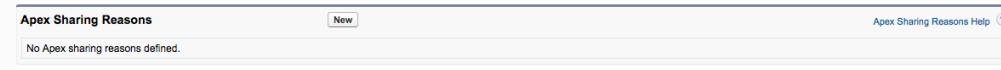
NOTE: Object A must be set to 'Private' (Setup | Security Controls | Sharing Settings) to complete this exercise, as an Object marked 'Public' will **not** have a corresponding 'Share' Object for Sharing Rules.

STEP-BY-STEP INSTRUCTIONS

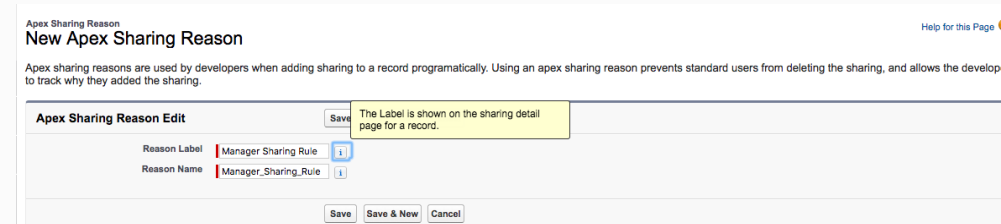
1. Create the Sharing Reason

Create a Sharing Reason on Object A that will be referenced in the Sharing Rule.

Step 1: Setup | Create | Objects| “Object A” | Apex Sharing Reasons | New

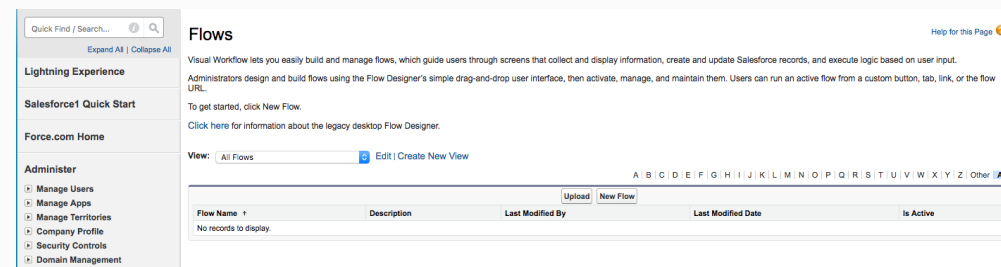


Step 2: Enter Reason Label (e.g. "Manager Sharing Rule") and Reason Name, then Save

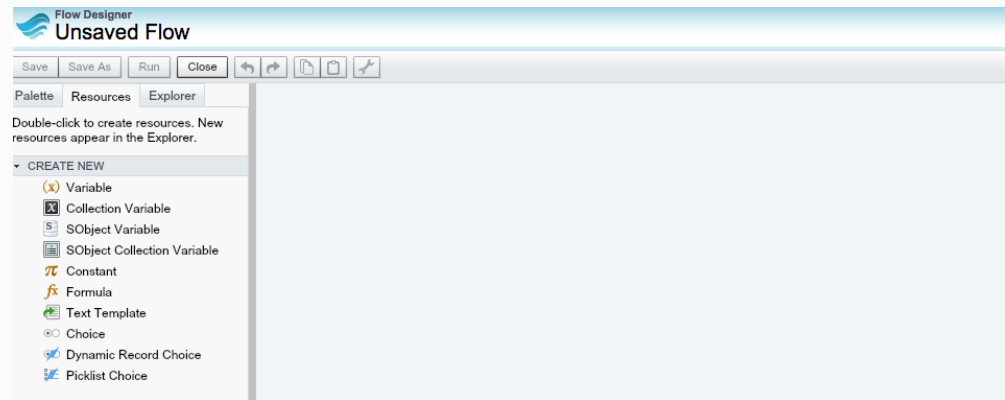


2. Create the Flow

Step 1: Setup | Create | Workflow & Approvals | New Flow



Step 2: Go to the 'Resources' tab and double-click 'Variable'



Step 3: Create two custom Variables

- “UserOrGroupId”
- “ParentId”

Variable 1: UserOrGroupId

- **Unique Name:** Enter name (e.g. “UserOrGroupId”)
- **Data Type:** Text
- **Input/Output Type:** Input and Output
- **Default Value:** GLOBAL CONSTANT |
{!\$GlobalConstant.EmptyString}

The screenshot shows a 'Variable' configuration dialog box. It has a title bar with a close button. Below the title bar, it says 'Create updatable values that can be used throughout your flow.' There are four main fields: 'Unique Name' with a red asterisk icon, 'Description', 'Data Type', and 'Input/Output Type'. The 'Unique Name' field contains the text 'UserOrGroupId'. The 'Data Type' field is a dropdown menu currently showing 'Text'. The 'Input/Output Type' field is a dropdown menu currently showing 'Input and Output'. There are information icons (i) next to the 'Unique Name' and 'Input/Output Type' fields.

Default Value

OK Cancel

Click OK, then go back to the 'Resources' tab and double-click 'Variable'

Variable 2: ParentId

- **Unique Name:** Enter name (e.g. "ParentId")
- **Data Type:** Text
- **Input/Output Type:** Input and Output
- **Default Value:** GLOBAL CONSTANT |
 {!\$GlobalConstant.EmptyString}

Variable ✕

Create updatable values that can be used throughout your flow.

Unique Name * i

Description

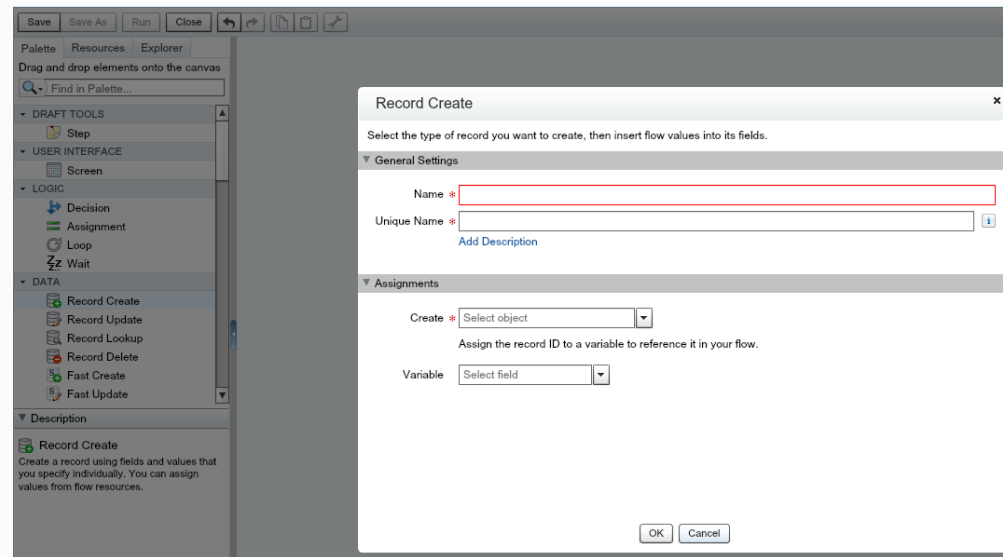
Data Type ▼

Input/Output Type ▼ i

Default Value ▼

OK Cancel

Step 4: Go to the 'Palette' tab and drag 'Record Create' onto the canvas



Step 5: Input Record Create Details

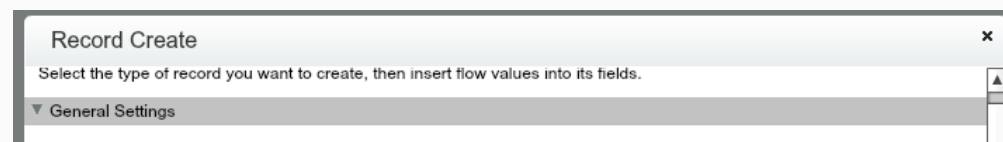
Element: Record Create

- **Name:** Enter name (e.g. “Object A Sharing Rule”)
- **Create:** Select the share version of related object (e.g. Object_A_Share)

Tip: Type the word “Share” to filter the selection

Field Values

- **Access Level:** Edit
- **ParentId:** “{!ParentId}”
- **RowCause:** “Sharing_Reason_A__C”
- **UserOrGroupId:** “{!UserOrGroupId}”



Name * Object A Sharing Rule

Unique Name * Object_A_Sharing_Rule [i](#)

[Add Description](#)

▼ Assignments

Create * Object_A_Share ▼ with the following field values:

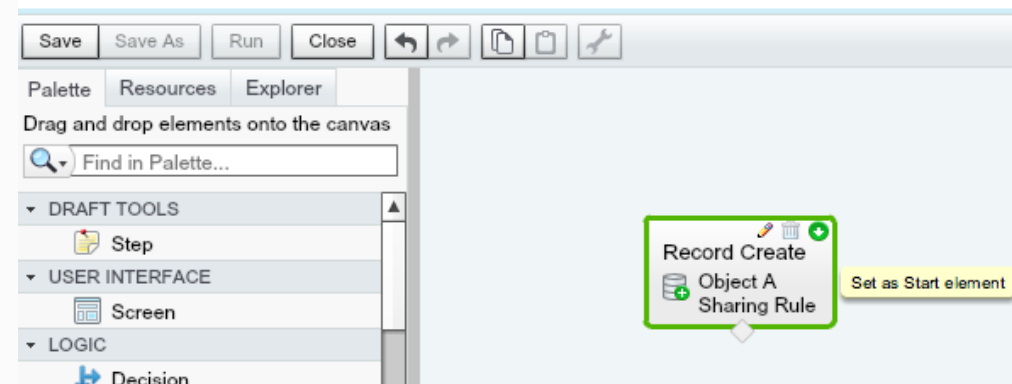
Field	Value
AccessLevel ▼	Edit ▼
ParentId ▼	{!ParentId} ▼
RowCause ▼	Sharing_Reason_A__c ▼
UserOrGroupId ▼	{!UserOrGroupId} ▼

[Add Row](#)

OK Cancel

Step 6: Set the Record Create element as the Start Element

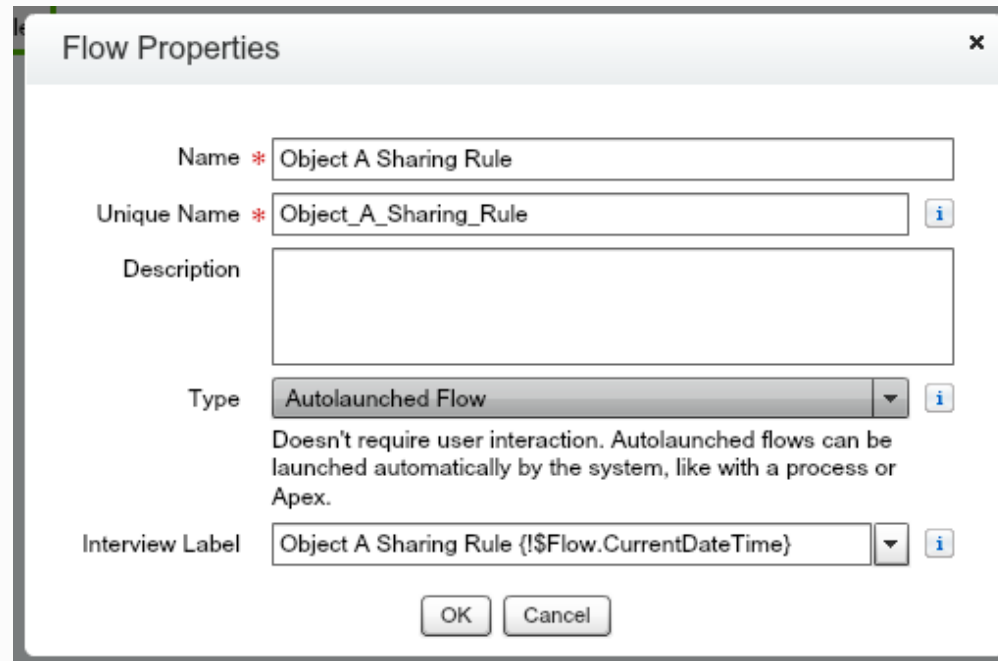
Select the “+” icon in the top right corner.



Step 7: Press Save to save the Flow

Enter the Flow Properties

- **Name:** Enter name (e.g. “Object A Sharing Rule”)
- **Type:** Autolaunched Flow



The image shows a 'Flow Properties' dialog box with the following fields and values:

- Name:** Object A Sharing Rule
- Unique Name:** Object_A_Sharing_Rule
- Description:** (Empty text area)
- Type:** Autolaunched Flow (Selected from a dropdown menu)
- Interview Label:** Object A Sharing Rule {!\$Flow.CurrentDateTime}

Below the fields are 'OK' and 'Cancel' buttons. A help icon (i) is visible next to the Unique Name, Type, and Interview Label fields.

Step 8: Activate the Flow

Setup | Create | Workflow & Approvals | Flow | “Object A Sharing Rule” | Activate

Upload New Flow					
Action	Flow Name	Description	Last Modified By	Last Modified Date	Is Active
Open Edit Del	Object A Sharing Rule		System Administrator	5/18/2017 12:02 PM	<input type="checkbox"/>

Flow Versions						
Action	Name	Version	Description	Created Date	Type	Status
Open Run Deactivate	Object A Sharing Rule	1		5/18/2017 12:02 PM	Autolaunched Flow	Active

The Flow Status should be “Active”

3. Create the Process Builder

Step 1: Setup | Create | Workflow & Approvals | Process Builder | New

My Processes 16 items New						
PROCESS ▾	DESCRIPTION	OBJECT	PROCESS TYPE	LAST MODIFIED	STATUS	ACTIONS

Step 2: Enter New Process details

- **Process Name:** Enter name (e.g. “Object A Sharing Rule Creation”)
- **The process starts when*:** A record changes

New Process

Process Name *

Object A Sharing Rule Creation

API Name * ⓘ

Object_A_Sharing_Rule_Creation

Description

The process starts when *

A record changes ▾

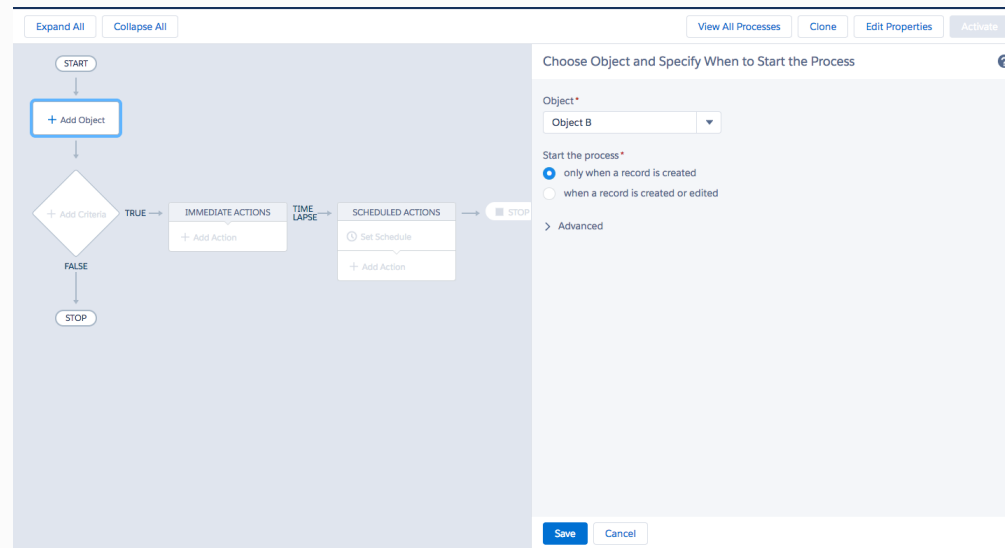
Cancel

Save

Step 3: Add Object

- Object: “Object B”

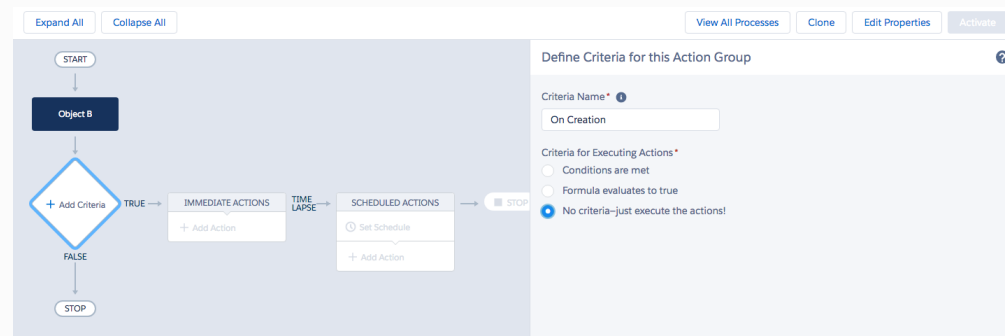
- Select the appropriate option to start the process (in this example, the process will launch only when a record is created)



Step 4: Define Criteria for Action Group

Click Add Criteria

- Enter Criteria Name (e.g. “On Creation”)
- Select the appropriate option (in this example, “No criteria—just execute the actions!” is selected)

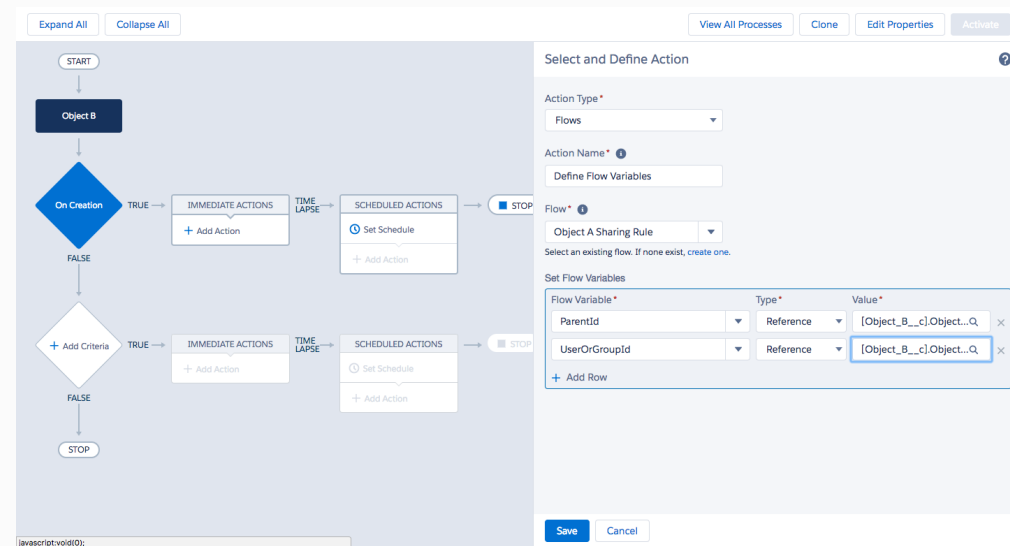


Save Cancel

Step 5: Set an Immediate Action to launch the Flow

+ Add Action

- **Action Type:** Flows
- **Action Name:** Enter name (e.g. “Define Flow Variables”)
- Select your Flow in the Flow Field (e.g. “Object A Sharing Rule”)



Set Flow Variables

Row 1

- **Flow Variable:** Select the variable you created in the Flow that defines the ParentId (e.g. “Parent Id”)


- **Type:** Reference
- **Value:** Object A | Record ID

ACTION NAME

Select a Field

Object_B__c ▶ Object A ▶ Record ID

You have selected the following field:



Record ID
Type: ID
API Name: Id

Cancel

Choose

Row 2


- **Flow Variable:** Select the variable you created in the Flow that defines the UserorGroupId (e.g “UserOrGroupId”)
- **Type:** Reference
- **Value:** Select the Related User ID that you will be sharing the Record with (e.g. Object | Owner ID (User) | Manager ID | User ID, based on this sample scenario)

ACTION NAME

Select a Field

Object_B__c ▶ Object A ▶ Owner ID (User) ▶ Manager ID ▶ User ID

You have selected the following field:

 User ID
Type: ID
API Name: Id

Save and Activate your Process

Set Flow Variables

Flow Variable *	Type *	Value *
ParentId	Reference	[Object_B__c].Object...Q
UserOrGroupId	Reference	[Object_B__c].Object...Q

+ Add Row

TEST THE FLOW

TEST CASE

When a Record is created in Object B, we expect a sharing rule to be created on the related record in Object A for the related user (or a specific public group). In this example, the related user we are creating the sharing rule for will be the record owners' manager - as defined on their user record. Object A and object B have a Master-detail relationship, where object A is the master.

SCRIPT

Create a record in Object A, then create a related created in Object B. We expect the Flow/Process builder to create a sharing rule on the related record in Object A. The Sharing Rule should consist of the following:

- **Type:** User
- **Name:** Record Owners Manager (e.g. Samantha Lewis is the Owner, and her Manager is System Administrator)
- **Access Level:** Read/Write (Edit translates to Read/Write)
- **Reason:** Sharing Reason A

1. Create record in Object B

The screenshot shows a Salesforce record page for 'Object A' with the record name 'Record Test 2'. The page includes a 'Back to List: Object A' link and a 'Customize Page | Edit Layout | Printable View | Help for this Page' menu. Below the record name, there are buttons for 'Edit', 'Delete', 'Clone', and 'Sharing'. The 'Object A Detail' section shows the 'Object A Name' as 'Record Test 2', the 'Created By' as 'System Administrator' on '5/19/2017 8:46 AM', and the 'Owner' as 'Samantha Lewis' with a '[Change]' link. The 'Last Modified By' is also 'System Administrator' on '5/19/2017 8:50 AM'. Below this, there are buttons for 'Edit', 'Delete', 'Clone', and 'Sharing'. The 'Object B' section shows a 'New Object B' button and a table with one record: 'Record Test B'. The table has columns for 'Action' and 'Object B Name'. The 'Action' column has links for 'Edit' and 'Del'. The 'Object B Name' column has the text 'Record Test B'. At the bottom, there is a 'Back To Top' link and a note 'Always show me more records per related list'.

2. Check the Sharing Rule on the record in Object A, by pressing the "Sharing" button on the record

Sharing Detail

Record Test 2

Record Test 2

Help for this Page

This page lists the users, groups, roles, and territories that have sharing access to **Record Test 2**. Click **Expand List** to view all users who have access to it.

View: All Edit Create New View

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z Other **All**

User and Group Sharing

Add Expand List

User and Group Sharing Help

Action	Type	Name ↑	Access Level	Reason
	User	Samantha Lewis	Full Access	Owner
Edit Del	User	System Administrator	Read/Write	Sharing Reason A

Explanation of Access Levels

- Full Access - User can view, edit, delete, and transfer the record. User can also extend sharing access to other users.
- Read/Write - User can view and edit the record, and add associated records, notes, and attachments to it.
- Read Only - User can view the record, and add associated records to it. They cannot edit the record or add notes or attachments.
- Private - User cannot access the record in any way.