

# Salesforce.org EZ Datalake Testing Deletion Scenarios

Prepared for Salesforce by the Envision Engineering Team  
May 2022



**EnvisionEngineering**

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# 1 Introduction

This document provides results of testing deletion. Deletion scenarios have been laid out by customer here:

<https://app.smartsheet.com/sheets/4RJ7Gf2F6Jghx6RJ4x9fmFX5Xrc47554Cf3qcM1?view=grid>

## 2 Test Setup

New clone “eedeletion” was setup for testing deletion scenarios. [Refer to document “Creating sandboxes in SF Demo NPO Organization” for details.](#)

Sandbox: <https://tweeks-220104-26-demo--eedeletion.my.salesforce.com/?un=rohiniks%40sflakehouse.amazon.com.eedeletion>

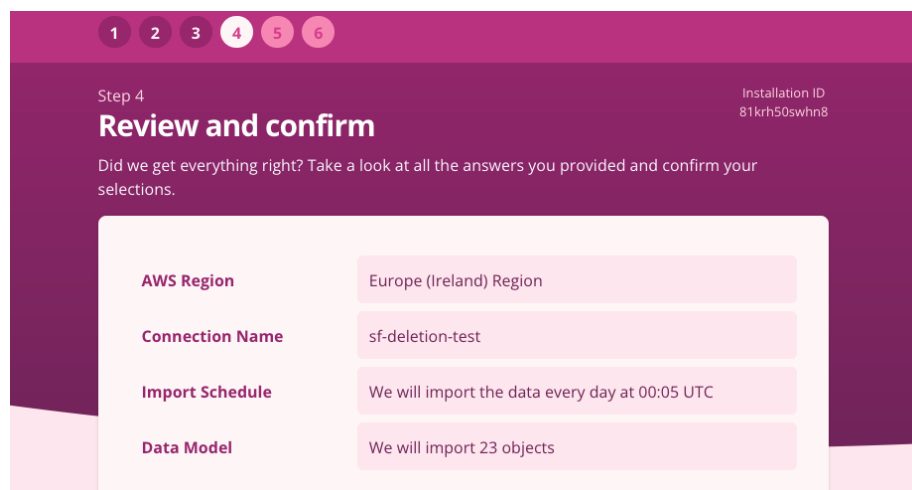
Tested with deployment on **May 6, 2022** (git tag: sf-deletion-test-prerelease)

Deployment: <https://dev5747.d27ad7slhl9a0.amplifyapp.com/> (not guaranteed to persist – deployment maybe torn down post testing)

Appflow connector: sf-deletion-test

All installations were setup on May 6th, 2022

Daily Sync Installation ID:



AWS Region	Europe (Ireland) Region
Connection Name	sf-deletion-test
Import Schedule	We will import the data every day at 00:05 UTC
Data Model	We will import 23 objects

Weekly Sync Installation ID:

Step 4

Installation ID: 4kio0adz2bme

### Review and confirm

Did we get everything right? Take a look at all the answers you provided and confirm your selections.

<b>AWS Region</b>	Europe (Ireland) Region
<b>Connection Name</b>	sf-deletion-test
<b>Import Schedule</b>	We will import the data every week, on Sunday at 23:00 UTC
<b>Data Model</b>	We will import 23 objects

Monthly Sync Installation ID:

Step 4

Installation ID: psmfjm8gslzo

### Review and confirm

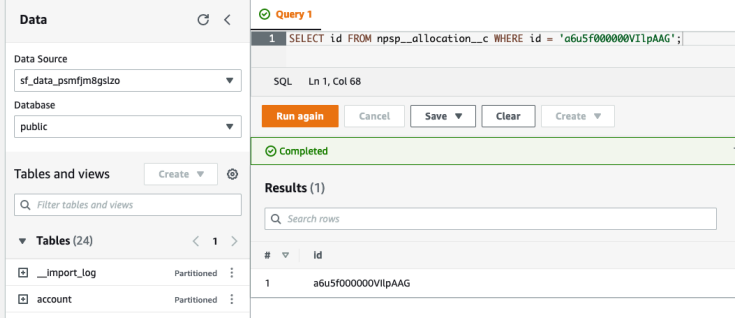
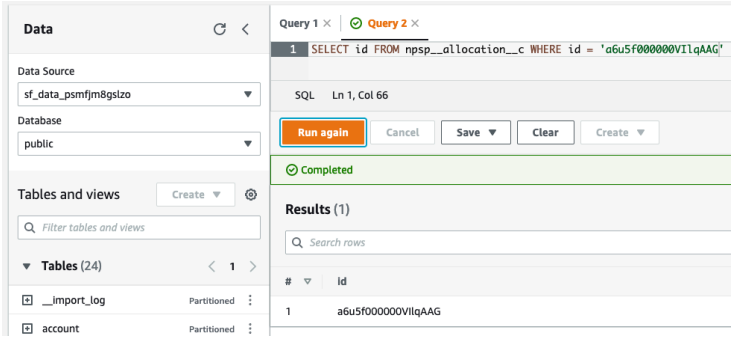
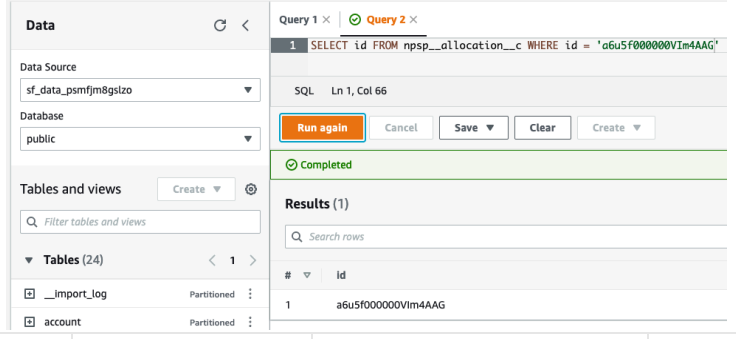
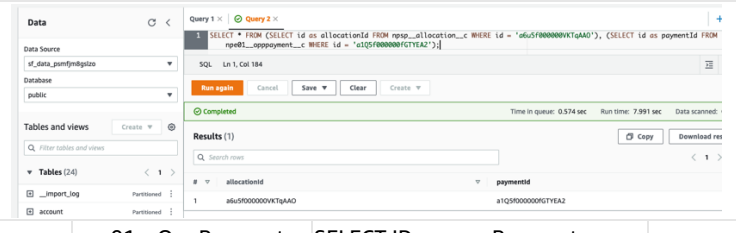
Did we get everything right? Take a look at all the answers you provided and confirm your selections.

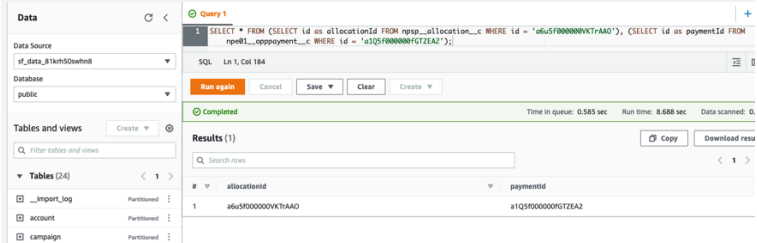
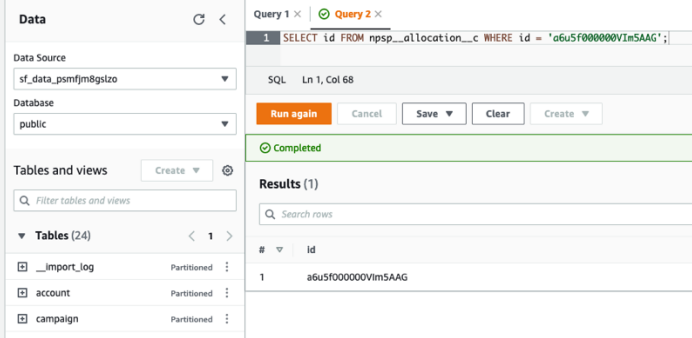
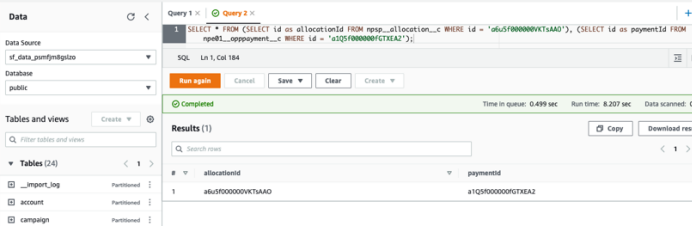
<b>AWS Region</b>	Europe (Ireland) Region
<b>Connection Name</b>	sf-deletion-test
<b>Import Schedule</b>	We will import the data every month, on the last day of the month at 23:00 UTC
<b>Data Model</b>	We will import 23 objects

**Note:** monthly sync results need to be checked past June 6<sup>th</sup> for final results and hence test results are not in this document. It is recommended for ProServe to test out these monthly sync results.

## 3 Data Validation Before Deletion

Scenario #	Tables Involved	ID(s) Under Test	SOQL Query to Locate	Confirmed in Daily	Confirmed in Weekly	Confirmed in Monthly
------------	-----------------	------------------	----------------------	--------------------	---------------------	----------------------

1	np__Allocation__c	a6u5f000000VlpAAG	SELECT ID FROM np__Allocation__c LIMIT 1	YES	YES	YES
						
2	np__Allocation__c	a6u5f000000VlqAAG	SELECT ID FROM np__Allocation__c LIMIT 2	YES	YES	YES
						
3	np__Allocation__c	a6u5f000000Vlm4AAG	SELECT ID FROM np__Allocation__c LIMIT 3	YES	YES	YES
						
4	npe01__OppPayment__c, np__Allocation__c	npe01__OppPayment__c: a1Q5f000000fGTyEA2 np__Allocation__c: a6u5f000000VKTqAAO	SELECT ID, np__Payment__c from np__Allocation__c WHERE np__Payment__c != NULL LIMIT 1	YES	YES	YES
						
5	npe01__OppPayment__c, np__Allocation__c	npe01__OppPayment__c: a1Q5f000000fGTZEA2 np__Allocation__c: a6u5f000000VKTAAO	SELECT ID, np__Payment__c from np__Allocation__c WHERE np__Payment__c != NULL AND np__Payment__c != 'a1Q5f000000fGTyEA2' LIMIT 1	YES	YES	YES

						
6	npSP__Allocation__c	a6u5f000000VIm5AAG	SELECT ID FROM npSP__Allocation__c WHERE ID NOT IN ('a6u5f000000VIlpAAG', 'a6u5f0000000VIlqAAG', 'a6u5f000000VIm4AAG') LIMIT 1	YES	YES	YES
						
7	npe01__OppPayment__c, npSP__Allocation__c	npe01__OppPayment__c: a1Q5f000000fGTXE2 npSP__Allocation__c: a6u5f000000VKTsAAO	SELECT ID, npSP__Payment__c from npSP__Allocation__c WHERE npSP__Payment__c != NULL AND npSP__Payment__c NOT IN ('a1Q5f000000fGTYE2', 'a1Q5f000000fGTZEA2') LIMIT 1	YES	YES	YES
						

## 4 Test Scenarios

### 4.1 Scenario 1

Deletion Scenario	Deletion Type	Replication Steps	Expected Results	Notes	Test Results		
					Daily Sync	Weekly Sync	Monthly Sync
Record(s) removed from CRM via API	Hard	"Delete an Allocation record - npSP__Allocation__c using the API. <a href="https://help.salesforce.com/s/articleView?id=000321526&amp;type=1">https://help.salesforce.com/s/articleView?id=000321526&amp;type=1</a> An API delete can be done in the Salesforce Developer Console, an IDE of your preference, or using DataLoader or other ETL tool."	The record is no longer in the UI or available via the API. A periodic batch integration would not have knowledge of this delete.	It is possible that after a hard delete the record is still available to query via the API for an undetermined amount of time until there is a database merge. This is not consistent and	✓	✓	-

				should not be considered a feature when building the solution.			
--	--	--	--	--	--	--	--

**Dataloader** was used to delete the record with ID a6u5f000000VIlpAAG

CSV Viewer			
Row Number	ID	STATUS	
1	a6u5f000000VIlpAAG	Item Deleted	

**Daily Sync** athena-workgroup =  
sf-workgroup-81krh50swhn8

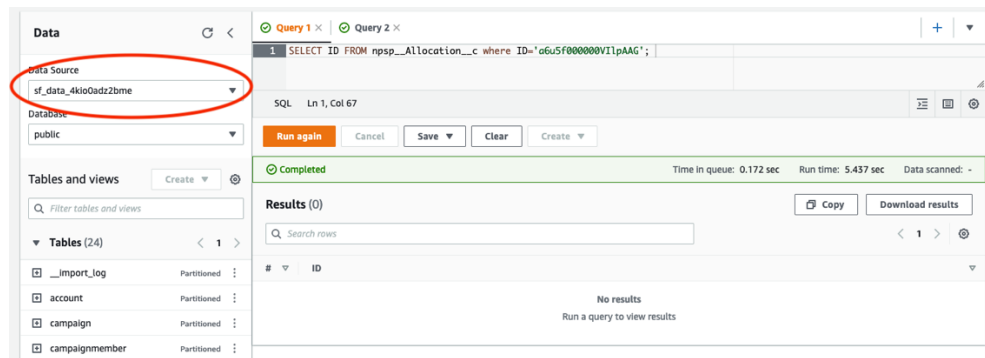
**Test Date** May 19

The screenshot shows the AWS Athena console interface. On the left, the 'Data Source' dropdown is highlighted with a red circle and contains the value 'sf\_data\_81krh50swhn8'. The 'Database' is set to 'public'. The 'Query 1' editor shows the SQL statement: `SELECT ID FROM npsp_Allocation__c where ID='a6u5f000000VIlpAAG'`. Below the query editor, the execution status is 'Completed' with a 'Run time' of 5.861 sec. The 'Results (0)' section indicates that no results were returned, displaying the message 'No results. Run a query to view results'.

**Weekly Sync** athena-workgroup =  
sf-workgroup-4kio0adz2bme

**Test Date** May 23



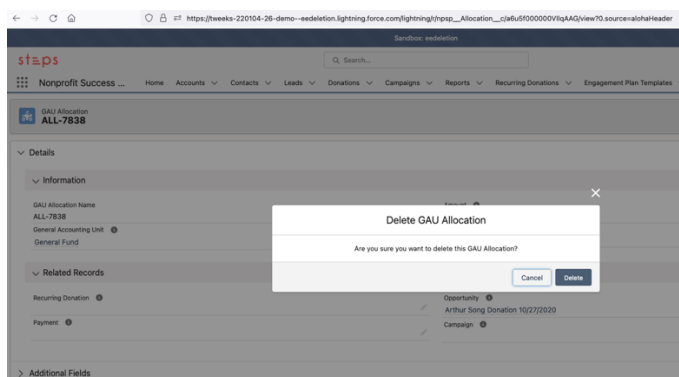


## 4.2 Scenario 2

Deletion Scenario	Deletion Type	Replication Steps	Expected Results	Notes	Test Results		
					Daily Sync	Weekly Sync	Monthly Sync
Records removed from CRM in UI	Soft	Delete an Allocation record - npsp__Allocation__c from the target record in the UI	Allocation record can be found in the recycle bin. When queried with the API, IsDeleted = TRUE. Will be available in this state for 14 days until purged from system unless removed manually (see row 3).		✓	✓	-

UI was used to delete record with ID a6u5f000000VllpAAG from npsp\_\_Allocation\_\_c  
<https://help.salesforce.com/s/articleView?id=000321696&type=1>

### Before deletion:



**Daily Sync** athena-workgroup =  
sf-workgroup-81krh50swhn8

**Test Date** May 19

**Weekly Sync** athena-workgroup =  
sf-workgroup-4kio0adz2bme

**Test Date** May 23

## 4.3 Scenario 3

Deletion Scenario	Deletion Type	Replication Steps	Expected Results	Notes	Test Results		
					Daily Sync	Weekly Sync	Monthly Sync

Records removed from recycle bin	Hard	Complete row 1 to delete one or more records. Navigate to recycle bin and select one or more records, click the "delete" button.	The record is no longer in the UI or available via the API. A periodic batch integration would not have knowledge of this delete if removal from the recycle bin happens between integration syncs.	See note on row 1	✓	✓	-
----------------------------------	------	--	---	-------------------	---	---	---

## Before deletion:

The screenshot shows the Salesforce Lightning interface for a record named "GAU Allocation ALL-10511". The page has a navigation bar with "Nonprofit Success ..." and various tabs like Home, Accounts, Contacts, Leads, Donations, Campaigns, Reports, and Recurring Donations. The main content area is titled "Details" and includes sections for "Information" and "Related Records".

**Information:**

- GAU Allocation Name: ALL-10511
- General Accounting Unit: General Fund
- Amount: \$10,000.00
- Percent: Percent

**Related Records:**

- Recurring Donation: Opportunity: JP Morgan Chase Foundation \$10000 Matching Donation 07/26/2021
- Payment: Campaign

Additional Fields: >

**Dataloader** was used to delete the record with ID a6u5f000000VIm4AAG

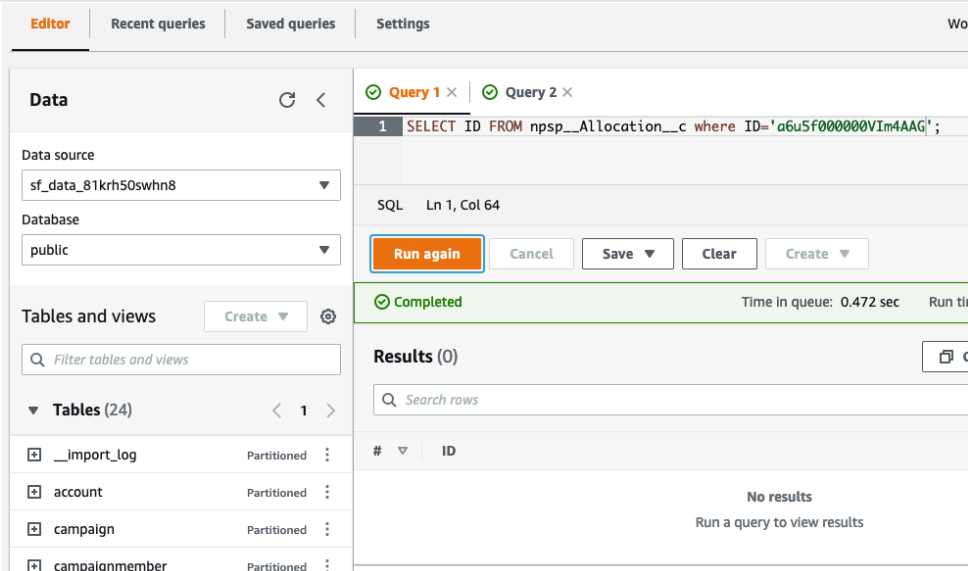
The screenshot shows a "CSV Viewer" window with a table containing one row of data.

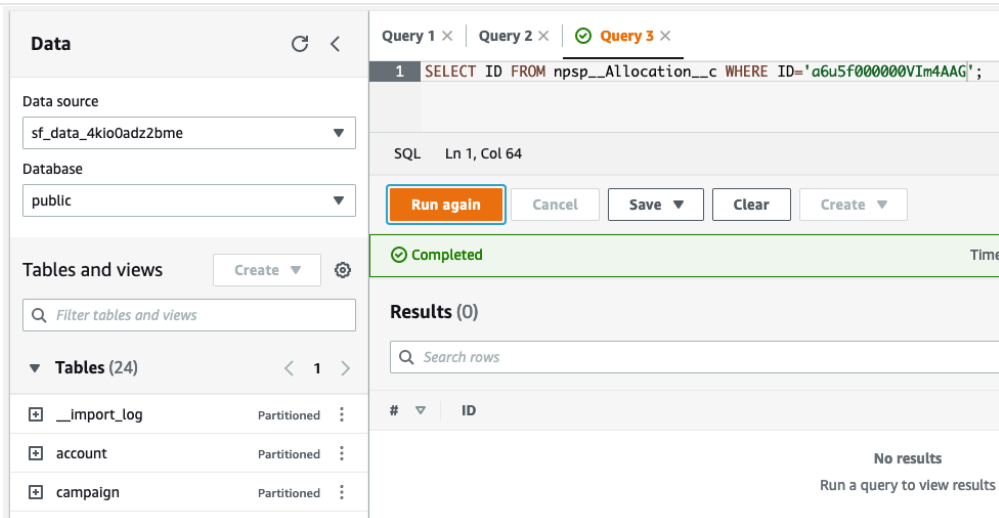
Row Number	ID	STATUS
1	a6u5f000000VIm4AAG	Item Deleted

The screenshot shows the "Recycle Bin" interface in Salesforce. It displays a list of deleted records with columns for Record Name, Type, Deleted By, and Deleted Date. A confirmation dialog is open, asking "Permanently delete gau allocation?" with options to "Cancel" or "OK".

Record Name	Type	Deleted By	Deleted Date
ALL-10511	GAU Allocation	Rohini Krishnapura	5/17/2022, 1:30 PM
ALL-7868	GAU Allocation	Rohini Krishnapura	5/17/2022, 1:01 PM
ALL-7838			5/17/2022, 1:01 PM
ALL-7865			5/9/2022, 12:57 PM
ALL-7861			5/9/2022, 12:56 PM

**Daily** athena-workgroup =  
**Sync** sf-workgroup-81krh50swhn8

<b>Test Date</b>	May 19
	

<b>Weekly Sync</b>	athena-workgroup = sf-workgroup-4kio0adz2bme
<b>Test Date</b>	May 23
	

## 4.4 Scenario 4

npe01\_OppPayment\_c: a1Q5f000000fGTYEA2

npsp\_Allocation\_c: a6u5f000000VKTqAAO

Deletion Scenario	Deletion Type	Replication Steps	Expected Results	Notes	Test Results		
					Daily Sync	Weekly Sync	Monthly Sync
Records removed from CRM with cascading delete via API	Hard	Complete row 1 to delete one or more records. Navigate to recycle bin and select one or more records, click the "delete" button.	The target record as well as its child records (i.e., npsp__Allocation__c) are no longer in the UI or available via the API. A periodic batch integration would not have knowledge of this delete.	See note on row 1	✓	✓	-

## Before deletion:

Dataloader was used to delete the record with ID a1Q5f000000fGTYE2

CSV Viewer			
Row Number	ID	STATUS	
1	a1Q5f000000fGTYE2	Item Deleted	

**Daily Sync** athena-workgroup =  
sf-workgroup-81krh50swhn8

**Test Date** May 19

The screenshot displays the AWS Athena console interface. On the left, the 'Data' sidebar shows the data source 'sf\_data\_81krh50swhn8' and the database 'public'. Below this, a list of tables and views is shown, including '\_import\_log', 'account', and 'campaign'. The main panel shows two queries. Query 1 is a SELECT statement from npsp\_\_Allocation\_\_c. Query 2 is a SELECT statement from npe01\_\_OppPayment\_\_c. Both queries are completed and show no results.

**Query 1**

```
1 SELECT ID FROM npsp__Allocation__c WHERE ID='a6u5f000000VKTgAAd';
```

SQL Ln 1, Col 64

Run again Cancel Save Clear Create

Completed Time in

Results (0)

Search rows

No results

Run a query to view results

**Query 2**

```
1 SELECT ID FROM npe01__OppPayment__c WHERE ID='a1Q5f000000fGTYEA2';
```

SQL Ln 1, Col 67

Run again Cancel Save Clear Create

Completed Time in queue: 0.471 sec Run time

Results (0)

Search rows

No results

Run a query to view results

**Weekly Sync** athena-workgroup =  
sf-workgroup-4kio0adz2bme

**Test Date** May 23

The screenshot displays the Salesforce Data Cloud interface with two queries running. On the left, the 'Data' pane shows the data source 'sf\_data\_4kio0ad2bme' and the database 'public'. Below this, a list of tables and views is shown, including 'Import\_log', 'account', and 'campaign'. The right pane shows the results of two queries. Query 1 is a SELECT statement for 'npe01\_\_OppPayment\_\_c' with ID 'a1Q5f000000fGTZEA2'. Query 2 is a SELECT statement for 'npsp\_\_Allocation\_\_c' with ID 'a6u5f000000VKTrAAO'. Both queries show a 'Completed' status and 'Results (0)'.

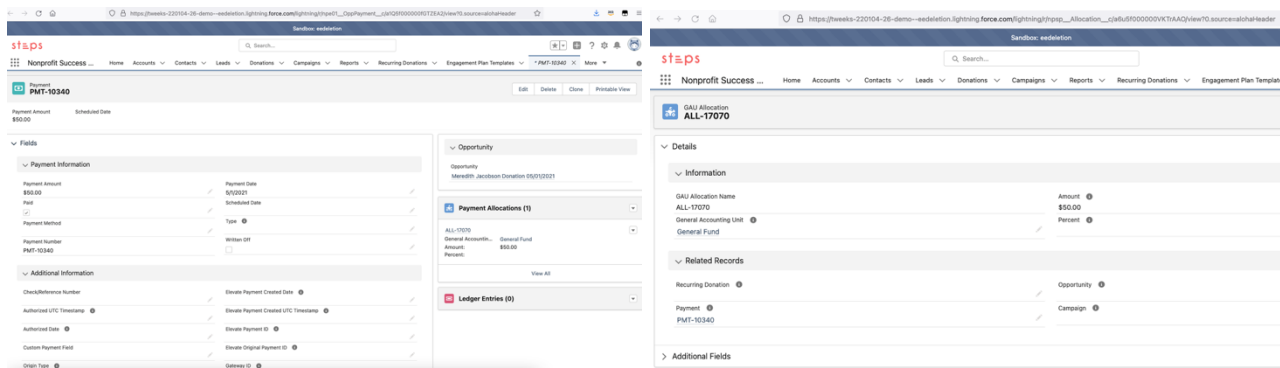
## 4.5 Scenario 5

npe01\_\_OppPayment\_\_c: a1Q5f000000fGTZEA2

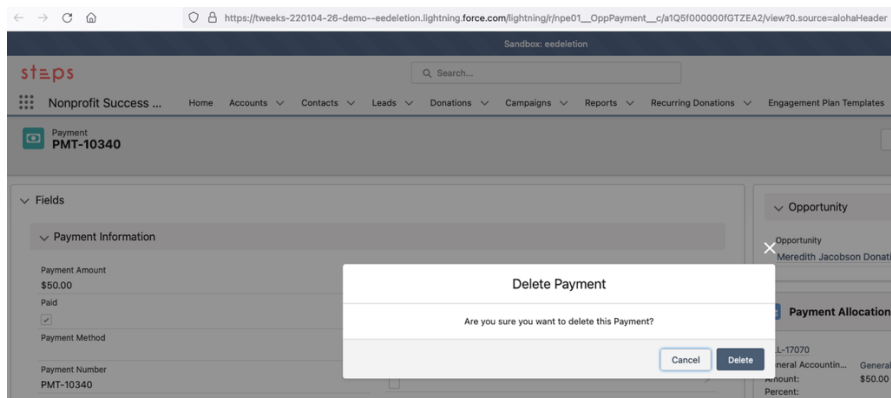
npsp\_\_Allocation\_\_c: a6u5f000000VKTrAAO

Deletion Scenario	Deletion Type	Replication Steps	Expected Results	Notes	Test Results		
					Daily Sync	Weekly Sync	Monthly Sync
Records removed from CRM with cascading delete via UI	Soft	Delete a Payment record - npe01__OppPayment__c from the target record in the UI	The target record as well as its child records (i.e., npsp__Allocation__c) can be found in the recycle bin. When queried with the API, IsDeleted = TRUE. Will be available in this state for 14 days until purged from system unless removed manually (see row 3).		✓	✓	-

**Before deletion:**

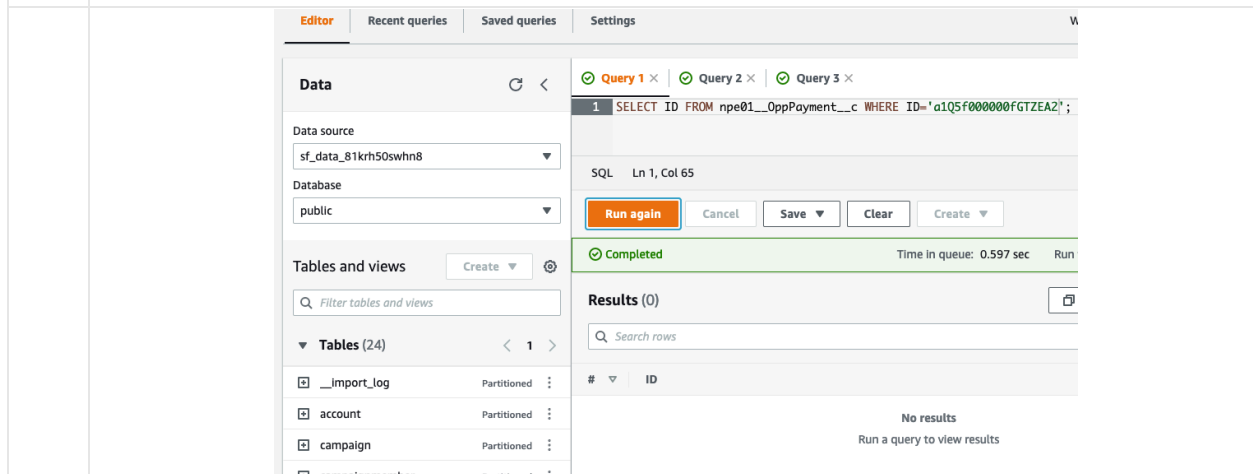


## Deleting payment record from UI

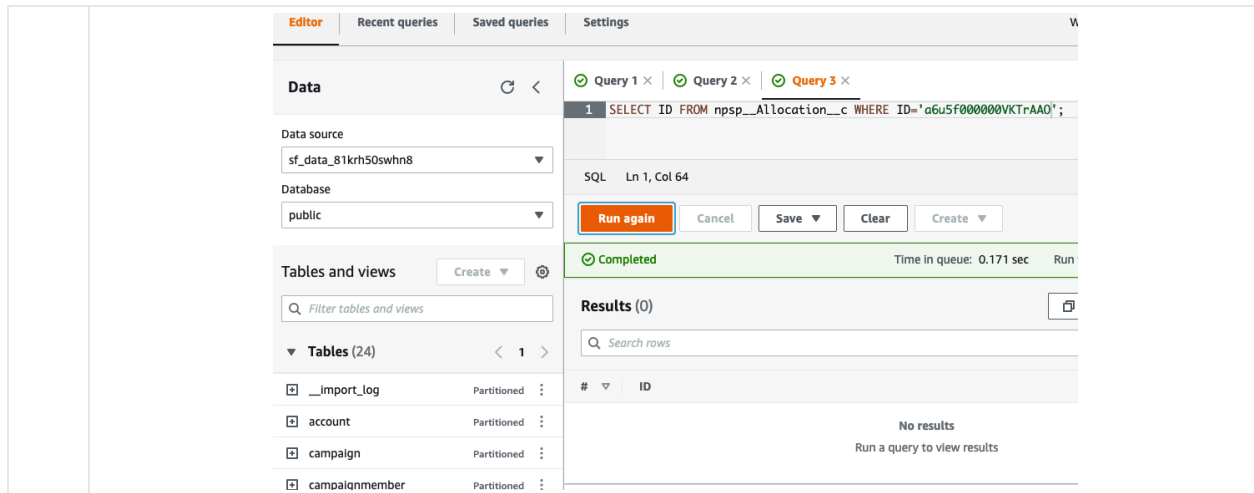


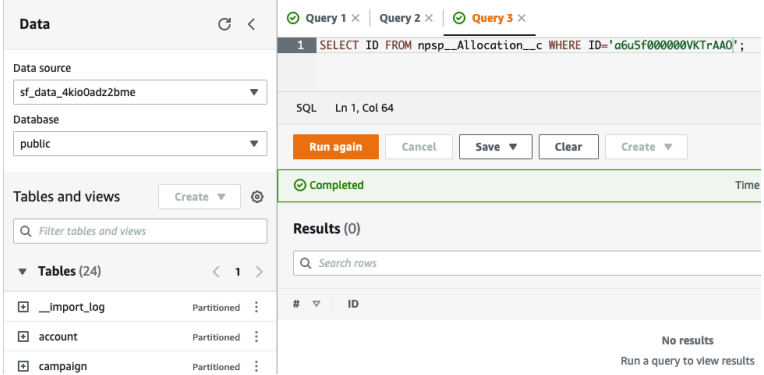
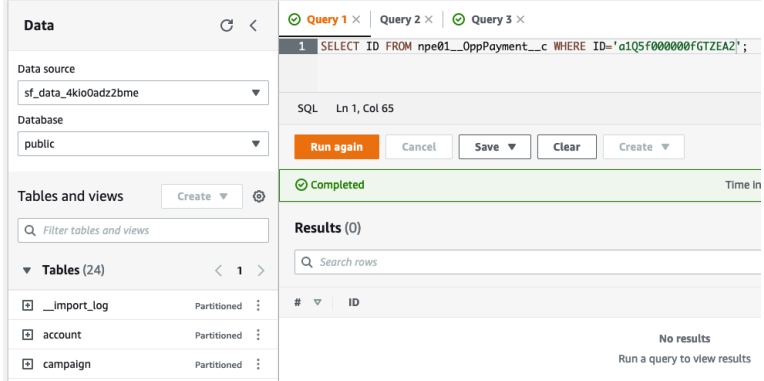
Daily athena-workgroup =  
Sync sf-workgroup-81krh50swhn8

Test  
Date May 19







<b>Weekly Sync</b>	athena-workgroup = sf-workgroup-4kio0adz2bme
<b>Test Date</b>	May 23
	
	

## 4.6 Scenario 6

a6u5f000000VIm5AAG

Deletion Scenario	Deletion Type	Replication Steps	Expected Results	Notes	Test Results		
					Daily Sync	Weekly Sync	Monthly Sync
Record(s) restored from recycle bin	N/A	Complete row 1 to delete one or more records. Navigate to recycle bin and select one or more records, click the "restore" button."	Records are removed from the recycle bin and now appear in the UI and API queries with IsDeleted = FALSE. The restored record will retain its original record ID.		✓	✓	-

### Before deletion:

The screenshot shows the Salesforce Lightning interface for a GAU Allocation record named 'ALL-10512'. The record is in the 'Recycle Bin' state. The 'Details' section is expanded, showing 'Information' and 'Related Records'. The 'Information' section displays the GAU Allocation Name, Amount (\$10,000.00), General Accounting Unit, and Percent. The 'Related Records' section shows a list of related records including Recurring Donation, Opportunity, Payment, and Campaign.

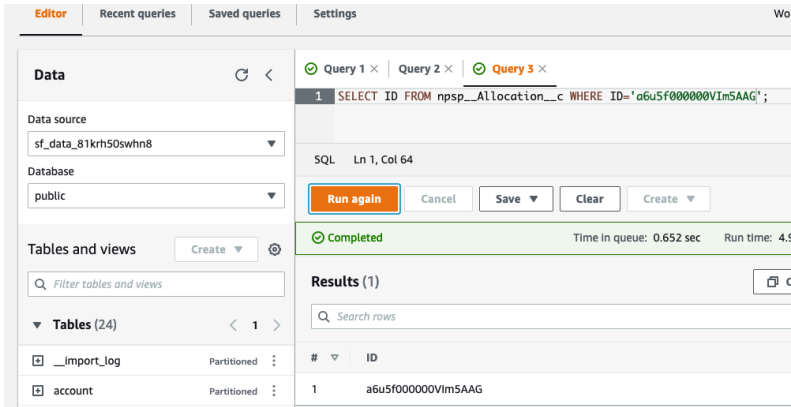
### Deleting allocation record from UI

The screenshot shows the same Salesforce Lightning interface as before, but with a 'Delete GAU Allocation' dialog box open. The dialog box contains the text 'Delete GAU Allocation' and 'Are you sure you want to delete this GAU Allocation?'. There are 'Cancel' and 'Delete' buttons at the bottom of the dialog.

Recycle Bin My Recycle Bin				
7 items • Sorted by Deleted Date • Filtered by My recycle bin • Updated a few seconds ago				
<input type="checkbox"/>	Record Name	Type	Deleted By	Deleted Date
<input type="checkbox"/>	ALL-10512	GAU Allocation	Rohini Krishnapura	5/17/2022, 2:10 PM
<input type="checkbox"/>	ALL-17070	GAU Allocation	Rohini Krishnapura	5/17/2022, 2:03 PM
<input type="checkbox"/>	PMT-10340	Payment	Rohini Krishnapura	5/17/2022, 2:03 PM
<input type="checkbox"/>	ALL-7868	GAU Allocation	Rohini Krishnapura	5/17/2022, 1:01 PM
<input type="checkbox"/>	ALL-7838	GAU Allocation	Rohini Krishnapura	5/17/2022, 1:01 PM
<input type="checkbox"/>	ALL-7865	GAU Allocation	Rohini Krishnapura	5/9/2022, 12:57 PM
<input type="checkbox"/>	ALL-7861	GAU Allocation	Rohini Krishnapura	5/9/2022, 12:56 PM

## After restoration

Recycle Bin My Recycle Bin				
6 items • Sorted by Deleted Date • Filtered by My recycle bin • Updated a few seconds ago				
<input type="checkbox"/>	Record Name	Type	Deleted By	Deleted Date
<input type="checkbox"/>	ALL-17070	GAU Allocation	Rohini Krishnapura	5/17/2022, 2:03 PM
<input type="checkbox"/>	PMT-10340	Payment	Rohini Krishnapura	5/17/2022, 2:03 PM
<input type="checkbox"/>	ALL-7868	GAU Allocation	Rohini Krishnapura	5/17/2022, 1:01 PM
<input type="checkbox"/>	ALL-7838	GAU Allocation	Rohini Krishnapura	5/17/2022, 1:01 PM
<input type="checkbox"/>	ALL-7865	GAU Allocation	Rohini Krishnapura	5/9/2022, 12:57 PM
<input type="checkbox"/>	ALL-7861	GAU Allocation	Rohini Krishnapura	5/9/2022, 12:56 PM

<b>Daily Sync</b>	athena-workgroup = sf-workgroup-81krh50swhn8
<b>Test Date</b>	May 19
	

<b>Weekly Sync</b>	athena-workgroup = sf-workgroup-4kio0adz2bme
<b>Test Date</b>	May 23

**Data**

Data source: sf\_data\_4kio0adz2bme

Database: public

Tables and views:

▼ Tables (24) < 1 >

- \_import\_log Partitioned
- account Partitioned

**Query 3**

1 SELECT ID FROM npsp\_\_Allocation\_\_c WHERE ID='a6u5f000000VIm5AAG';

SQL Ln 1, Col 64

**Run again** **Cancel** **Save** **Clear** **Create**

**Completed** Time in que

**Results (1)**

#	ID
1	a6u5f000000VIm5AAG

## 4.7 Scenario 7

npe01\_\_OppPayment\_\_c: a1Q5f000000fGTXE2

npsp\_\_Allocation\_\_c: a6u5f000000VKTsAAO

Deletion Scenario	Deletion Type	Replication Steps	Expected Results	Notes	Test Results		
					Daily Sync	Weekly Sync	Monthly Sync
Multiple records restored from recycle bin (i.e., reverse a cascading delete)	N/A	Complete row 5 to delete a record that triggers a cascading delete. Navigate to recycle bin and select the deleted record as well as the child records, click the "restore" button.	Records are removed from the recycle bin and now appear in the UI and API queries with IsDeleted = FALSE. The restored record will retain its original record ID.		✓	✓	-

### Before deletion:

**Payment: PMT-10341**

Payment Amount: \$50.00, Scheduled Date: 4/2/2021

**Fields**

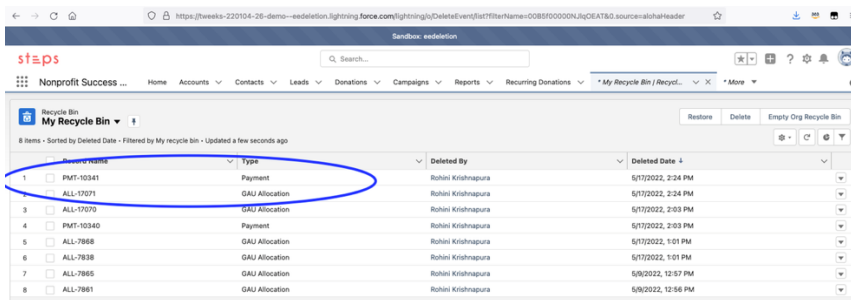
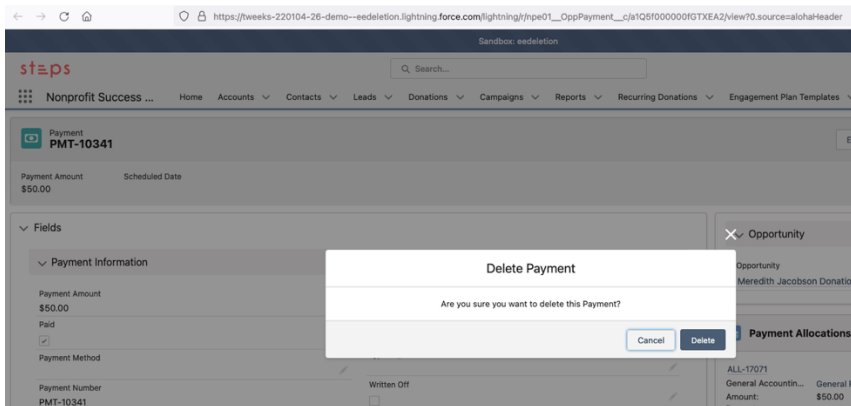
- Payment Information**
  - Payment Amount: \$50.00
  - Scheduled Date: 4/2/2021
  - Payment Method: PMT-10341
- Additional Information**
  - Check Reference Number
  - Authorized UTC Timestamp

**Oppportunity: ALL-17071**

**Details**

- Information**
  - SAU Allocation Name: ALL-17071
  - General Accounting Unit: General Fund
- Related Records**
  - Recurring Donation: PMT-10341
  - Opportunity: ALL-17071
  - Campaign: PMT-10341
- Additional Fields**

## Deleting payment record for cascade delete



## After restoration

Recycle Bin			
My Recycle Bin			
6 Items • Sorted by Deleted Date • Filtered by My recycle bin • Updated a few seconds ago			
Record Name	Type	Deleted By	Deleted Date
ALL-17070	GAU Allocation	Rohini Krishnapura	5/17/2022, 2:03 PM
PMT-10340	Payment	Rohini Krishnapura	5/17/2022, 2:03 PM
ALL-7868	GAU Allocation	Rohini Krishnapura	5/17/2022, 1:01 PM
ALL-7838	GAU Allocation	Rohini Krishnapura	5/17/2022, 1:01 PM
ALL-7865	GAU Allocation	Rohini Krishnapura	5/8/2022, 12:57 PM
ALL-7861	GAU Allocation	Rohini Krishnapura	5/8/2022, 12:56 PM

Daily Sync	athena-workgroup = sf-workgroup-81krh50swhn8
Test Date	May 19

	<div><div><div><div>Data</div><div><div><div>Query 1 ×</div><div>Query 2 ×</div><div>Query 3 ×</div></div><div>1 SELECT ID FROM npe01__OppPayment__c WHERE ID='a1Q5f00000fGTxEA2';</div><div>SQL Ln 1, Col 65</div><div><div>Run again</div><div>Cancel</div><div>Save ▾</div><div>Clear</div><div>Create ▾</div></div><div>Completed Time in queue: 0.59</div><div>Results (1)</div><div>Search rows</div><div><div># ▾</div><div>ID</div></div><div>1 a1Q5f00000fGTxEA2</div></div></div></div></div>
	<div><div><div><div>Data</div><div><div><div>Query 1 ×</div><div>Query 2 ×</div><div>Query 3 ×</div></div><div>1 SELECT ID FROM npsp__Allocation__c WHERE ID='a6u5f00000VKTsAA0';</div><div>SQL Ln 1, Col 64</div><div><div>Run again</div><div>Cancel</div><div>Save ▾</div><div>Clear</div><div>Create ▾</div></div><div>Completed Time in queue: 0.59</div><div>Results (1)</div><div>Search rows</div><div><div># ▾</div><div>ID</div></div><div>1 a6u5f00000VKTsAA0</div></div></div></div></div>

**Weekly Sync** athena-workgroup =  
sf-workgroup-4kio0adz2bme

**Test Date** May 23

	<div><div><div><div>Data</div><div><div><div>Query 1 ×</div><div>Query 2 ×</div><div>Query 3 ×</div></div><div>1 SELECT ID FROM npe01__OppPayment__c WHERE ID='a1Q5f00000fGTxEA2';</div><div>SQL Ln 1, Col 65</div><div><div>Run again</div><div>Cancel</div><div>Save ▾</div><div>Clear</div><div>Create ▾</div></div><div>Completed Time in queue: 0.59</div><div>Results (1)</div><div>Search rows</div><div><div># ▾</div><div>ID</div></div><div>1 a1Q5f00000fGTxEA2</div></div></div></div></div>
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The screenshot displays the AWS Glue console interface for running a query. On the left, the 'Data' section is active, showing the data source 'sf\_data\_4kio0adz2bme' and the database 'public'. Below this, a list of tables and views is shown, including '\_import\_log' and 'account'. The main area shows the execution of 'Query 3' with the following SQL statement:

```
1 SELECT ID FROM npsp__Allocation__c WHERE ID='a6u5f000000VKTsAAO';
```

The query has been completed successfully, as indicated by the 'Completed' status and the 'Results (1)' section. The results table shows one row with the ID 'a6u5f000000VKTsAAO'.

<b>Monthly Sync</b>	athena-workgroup <b>sf-workgroup-psmfjm8gslzo</b>	=
<b>Test Date</b>	Monthly sync needs to be checked on June 6th for final results	