



Trialforce Tutorial

This document provides a tutorial introduction to the XSELL Rewards application using a Trial ORG created from the Trialforce package in the AppExchange listing.

It is highly recommended that you look at the XSELL Rewards Overview document mentioned on the AppExchange and also look at the demonstration ORG. The demonstration ORG contains a data set that you can browse but not change.

The Trialforce package creates an ORG that contains no initial data but in this tutorial you will create your own data set and manipulate it. The intention is to give you enough understanding to integrate XSELL into your own salesforce Environment.

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Introduction

XSELL Rewards Application (XSELL) is a Loyalty Rewards application with Cross Selling Support. It is a Salesforce application available on AppExchange and has been designed to support any business and in particular the Financial Services Industry. It is fully compatible with the Salesforce Financial Services Cloud.

The XSELL Application manages rewards based on the financial products a customer holds using information about the current status of those products. It can also automatically compute daily rewards using user defined rewards rules.

It is designed to work with the existing tools of the Salesforce CRM including analytics, reporting and in particular the Flow tools to support business processes.

XSELL supports Cross Selling by allocating additional rewards points for customers who hold more than one of your products across lines of business, systems, domains and enterprises based on specified cross selling specific rules.

Key XSELL features:

- Monetises loyalty in a form of rewards calculated on a daily basis based on customer's holdings at a given moment similar to an interest rate in a bank.
- Extends existing CRM facilities allowing you to develop flows, reports, business intelligence tools etc to work with and extend the loyalty system, enhancing your business processes.
- Uses standard Salesforce permission sets that allow you to tailor access to individual parts of the loyalty system for different groups within your organisation.
- Minimises integration efforts by utilising existing established CRM data feeds from core systems to your Salesforce Platform.
- Decouples the Core Product systems from Cross Selling logic.
- Establishes a unique Reward Id, providing a single view of a customer's rewards and redemptions. For a new client the Reward id can be provided to the client via a Call Center, Company Portal, CRM or Marketing Campaign.
- Allows you to create rules for computing rewards based on a Customer's composite asset profile. XSELL Rewards Rules can be applied to both individual and business entities. Rules can be configured to know product, policy number, geography etc
- Features a rich set of RESTful APIs to support enterprise business integration use cases.
- Supports both Accounts and Contacts for rewards. It also supports both B2C and B2B scenarios.

Essential First Steps

If you have not already looked at the XSELL Overview document then it is probably a good idea to do so. You might also try the provided demo org to get a sense of the interface and data content.

Remember that in a Trial ORG you can delete all data as often as you want. Go to Setup then type 'Delete' in the quick find box and you will see 'Delete All Data'.

The Trialforce ORG has been set up for this tutorial so that you can quickly move to integrating your own data model with XSELL. It does not have an initial data set but with this document you will create that yourself. Once you have seen that you can delete the created data and start to work with your own.

Before proceeding you need to perform a couple of steps to properly set up the Trial ORG licences.

Licensing

The TrialForce package comes with 5 licences that can be assigned to users. In addition you have to manage the XSELL permission set assignments.

The steps are:

1. Add users to XSELL Rewards Licence in *Setup/Installed Packages/Manage Licences/Add Users to Licensed Users*
2. Add users to XSELL System Administrator Permission Set in the *Setup/Permission Sets* screen
3. Add users to Your Account App Admin User Permission Sets if required

Having performed steps above, you should be able to see XSELL Rewards Application.

Starting with XSELL

This section is a series of steps to show how XSELL can be integrated into your Salesforce systems.

We will be using a number of example flows that have been setup in the TrialORG together with some sample objects that are used to trigger these flows. These are intended to provide a model of how XSELL can be used.

In practice the flows have a simple sequence of steps

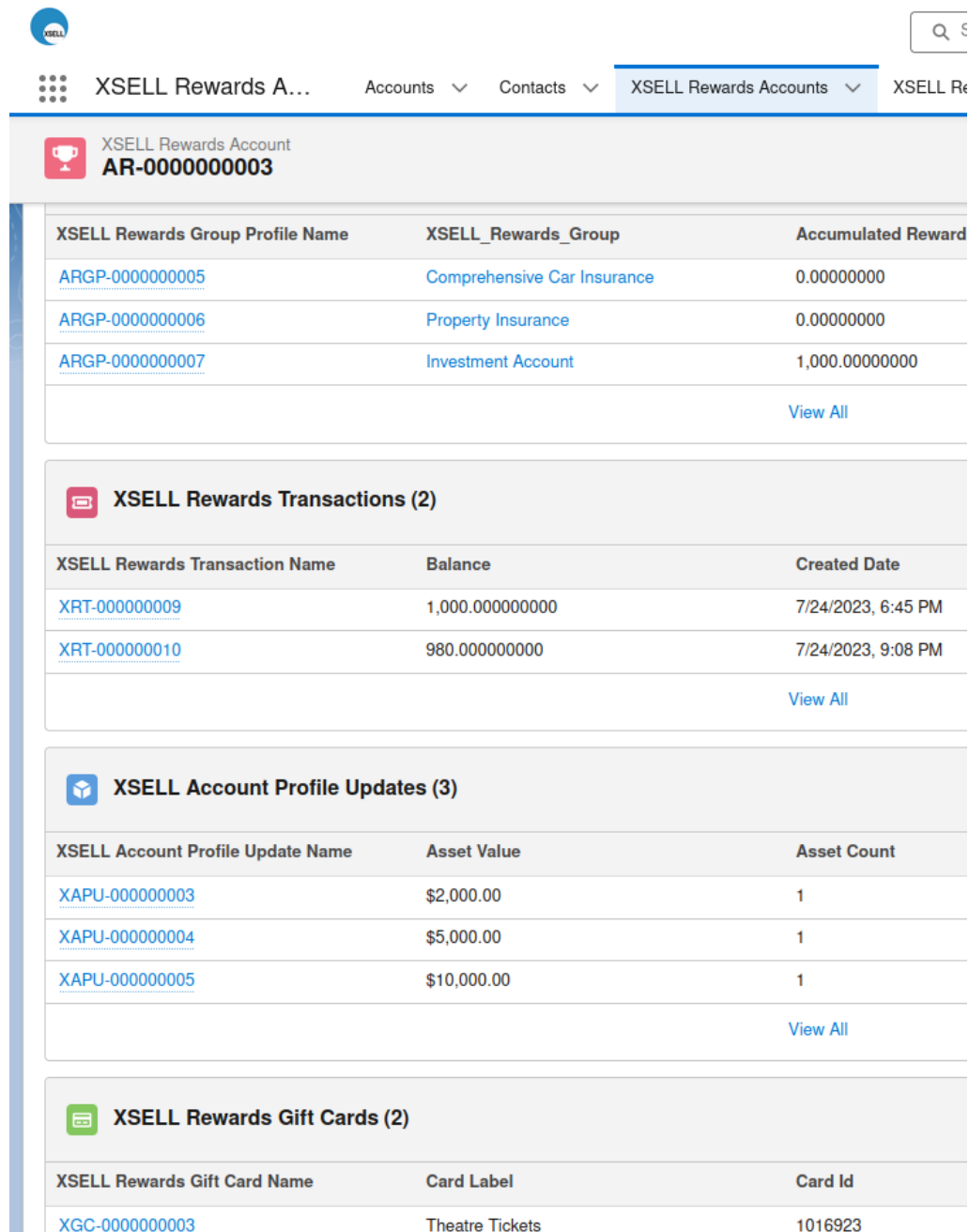
1. Flow is triggered by the creation update or deletion of an object
2. Object fields are validated
3. Internal values are computed from the input
4. An APEX invocable interface is called with the computed and object values
5. Additional objects are changed or created if needed

The key element here is the APEX invocable interface. The flows and trigger objects may change depending on your business needs but the APEX calls will not.

At first we will create a new group, add some assets to an account , give rewards to an account, and add a gift card all the while looking at the changes in the screens.

Then we will turn on automatic rewards, create some simple and complex rules and watch what happens. In the process you will see the creation of new rewards account objects, group profiles and the accumulation of transaction history.

A sample view of where we are heading is as follows



The screenshot displays the XSELL Rewards Accounts interface. At the top, there is a navigation bar with the XSELL logo, a search bar, and a menu with options: 'XSELL Rewards A...', 'Accounts', 'Contacts', 'XSELL Rewards Accounts' (selected), and 'XSELL Re...'. Below the navigation bar, the main content area is divided into several sections:

- XSELL Rewards Account** (AR-0000000003): This section shows a table of rewards group profiles.

XSELL Rewards Group Profile Name	XSELL_Rewards_Group	Accumulated Reward
ARGP-0000000005	Comprehensive Car Insurance	0.00000000
ARGP-0000000006	Property Insurance	0.00000000
ARGP-0000000007	Investment Account	1,000.00000000
- XSELL Rewards Transactions (2)**: This section shows a table of transactions.

XSELL Rewards Transaction Name	Balance	Created Date
XRT-0000000009	1,000.000000000	7/24/2023, 6:45 PM
XRT-0000000010	980.000000000	7/24/2023, 9:08 PM
- XSELL Account Profile Updates (3)**: This section shows a table of account profile updates.

XSELL Account Profile Update Name	Asset Value	Asset Count
XAPU-0000000003	\$2,000.00	1
XAPU-0000000004	\$5,000.00	1
XAPU-0000000005	\$10,000.00	1
- XSELL Rewards Gift Cards (2)**: This section shows a table of gift cards.

XSELL Rewards Gift Card Name	Card Label	Card Id
XGC-0000000003	Theatre Tickets	1016923

The hierarchy of information recorded here is

- XSELL Rewards Account
 - XSELL Rewards Group Profiles
 - XSELL Rewards Transactions
 - XSELL Account Profile Updates
 - XSELL Rewards Gift Cards

Creating a Rewards Group

A rewards group has the following fields

Name	String	Unique group name
Date of Activation	DateTime	
Status	Picklist	Active,Suspended,Closed
Usage	String	By default <i>Rewards</i>

The name field has to be unique, XSELL won't allow you to create two groups with the same name. On the positive side group names are text fields and can be up to 80 characters long. Some simple examples could be 'Insurance Policies' or 'Investment Account'.

The *Date of Activation* and *Status* fields are related to rewards rules and will be discussed in that section. For the moment we will use the default values supplied when you create a new group record.

The Usage field is intended for a later extension of XSELL. By default the value is *Rewards* for working with rules and reward points and automatically propagates reward points in a group profile to the associated account rewards profile. Just use the default value for now.

Let's create some groups, '*Comprehensive Car Insurance*', 'Property Insurance' and '*Investment Account*'. You can choose other names if you wish.

In the XSELL Rewards APP click on Rewards Groups (you may need to click on more to see it). Click on new for each item and fill in the following details leaving other fields as the default (don't forget 'Save&New' to make life easier for yourself)

Name	Group Status	Usage
Comprehensive Car Insurance	Active	Rewards
Property Insurance	Active	Rewards
Investment Account	Active	Rewards

For example

XSELL Rewards Group Investment Account	
Related	Details
XSELL_Rewards_Group Name Investment Account	Owner  John Gibbons
Group Status Active	
Usage ⓘ Rewards	
Date of Activation 7/23/2023, 6:14 PM	

When finished your groups screen should look something like this

XSELL Rewards Groups Recently Viewed  			
3 items • Updated 4 minutes ago			
☐ XSELL_Rewards_Group Name	Group Status	Usage	
1 ☐ Investment Account	Active	Rewards	
2 ☐ Property Insurance	Active	Rewards	
3 ☐ Comprehensive Car Insurance	Active	Rewards	

Adding Assets to an Account or Contact

A key part of the XSELL data set is Assets. These record, in a group profile, your business perspective of the financial relationship between you and the client in terms of asset values and counts.

Based on asset values and counts you can assign rewards points either manually, by your own created flows or by using Reward Generation Rules to automate the calculation of rewards points.

The sum total of all group profile asset values and counts are recorded in the account rewards object.

The Trial ORG comes with a sample product object and three flows to demonstrate how you can connect your products to XSELL.

The APEX Invocable Interface in this case is *Update Asset Details*, the sample object is the *XSELL Rewards Product* and the sample flows are

- *XSELL Add Products Asset Sample* - update assets when a product is created
- *XSELL Update Assets when Product is Changed* - update the assets when a product record is edited
- *XSELL Remove Product Assets on Deletion* - remove assets when a product is deleted

The changes created by these flows are reflected in the group profiles, the account rewards profiles and asset update transactions.

Before we can add assets we need to create an account or contact object to be associated with that product. In this document we will create an account for 'Samuel Clemens Pty Ltd' but you can choose whatever name you wish.

Next we will create 3 products for the account. To do this select the XSELL Rewards Product tab and click on New and you will be given a choice of account type or contact type for the product record. Choose account and fill in the details from the following table

Account	Product Count	Product Value	Product Category	Goup	External Id	External Reference Code
Samuel Clemens Pty Ltd	1	\$2000	Car Insurance	Comprehensive Car Insurance	CCI	CCI 001
Samuel Clemens Pty Ltd	1	\$5000	Property Insurance	Property Insurance	PI	PI 001
Samuel Clemens Pty Ltd	1	\$100000	Brokerage	Investment Account	IA	IA 001

At the end the Products Tab should look something like

XSELL Rewards Products		
Recently Viewed  		
3 Items • Updated 2 minutes ago		
☐	XSELL Rewards Product Name 	Account  Contact
1	☐ XARP-0000000005	Samuel Clemens Pty Ltd
2	☐ XARP-0000000004	Samuel Clemens Pty Ltd
3	☐ XARP-0000000003	Samuel Clemens Pty Ltd

with other columns for the Product Category, Count and Value.

In addition if you look at the Account Rewards tab it will look something like

XSELL Rewards Accounts				
Recently Viewed				
1 item • Updated a few seconds ago				
☐	XSELL Rewards Name	Account	Contact	Active Asset Count
1	☐ AR-0000000003	Samuel Clemens Pty Ltd		3
				\$17,000.00

If you now drill down into the account by clicking on the *XSELL Rewards Name* and then by clicking on *Related* you will see a breakdown of the *Samuel Clemens Pty Ltd* profile, detailing the asset and count values in each group profile along with a list of the account profile updates.

XSELL Rewards Account

AR-0000000003

Available Reward Points

0.00

Accumulated Reward Points

0.00000000

Total Points Redeemed

0.000000000

Active Asset Value

\$17,000.00

Active Asset Count

3

Date of Last Reward

7/24/2023, 6:06 PM

Related

Details

XSELL Rewards Group Profiles (3)

XSELL Rewards Group Profile Name	XSELL_Rewards_Group	Accumulated Reward Points	Active Asset Value
ARGP-0000000005	Comprehensive Car Insurance	0.00000000	\$2,000.00
ARGP-0000000006	Property Insurance	0.00000000	\$5,000.00
ARGP-0000000007	Investment Account	0.00000000	\$10,000.00
View All			

XSELL Rewards Transactions (0)

XSELL Account Profile Updates (3)

XSELL Account Profile Update Name	Asset Value	Asset Count	Rewards Group
XAPU-0000000003	\$2,000.00	1	Comprehensive Car Insurance
XAPU-0000000004	\$5,000.00	1	Property Insurance
XAPU-0000000005	\$10,000.00	1	Investment Account
View All			

At the top you can see the total active asset values and counts across all groups. The group profiles record the total values in each group while the profile updates record the changes.

Giving Rewards to an Account or Contact

In this Section we will show how to add Rewards points manually to a XSELL Rewards Account. In a later section we will show you how to automate rewards generation using rules and group sets.

The XSELL Application comes with an example flow (*XSELL Add Rewards Based on Approved Request*) for adding rewards to an Account or Contact. This flow is triggered on the creation of an 'XSELL Rewards Add Request' custom object.

XSELL Rewards Add Request	
Field	Description
<i>RecordType</i>	Differentiates between Account or Contact
<i>Account</i>	Id of the account (or empty)
<i>Contact</i>	Id of the contact (or empty)
<i>Status</i>	Used to allow a BPM style workflow approach
<i>Group</i>	Which group associated group profile get the points
<i>Points</i>	The number of points to add

The associated APEX Invocable Interface is *Add Account Rewards*.

Go to the *XSELL Rewards Add Request* Tab and click 'New' to create an *XSELL Rewards Add Request* object.

As with XSELL Product object You will be given a choice of account type or contact type. Choose the contact type and fill in the following details leaving other fields as the default:

XSELL Rewards Add Request	
Field	Value
<i>RecordType</i>	Account
<i>Account</i>	Samuel Clemens Pty Ltd
<i>Status</i>	Approved
<i>Group</i>	Investment Account
<i>Points</i>	1000

Click 'Save'.

The result should look like the following


XSELL Rewards Add Request
ARR#0000000002

Related

Details

Account

[Samuel Clemens Pty Ltd](#)

Point Value

1,000.0000

Status

Completed

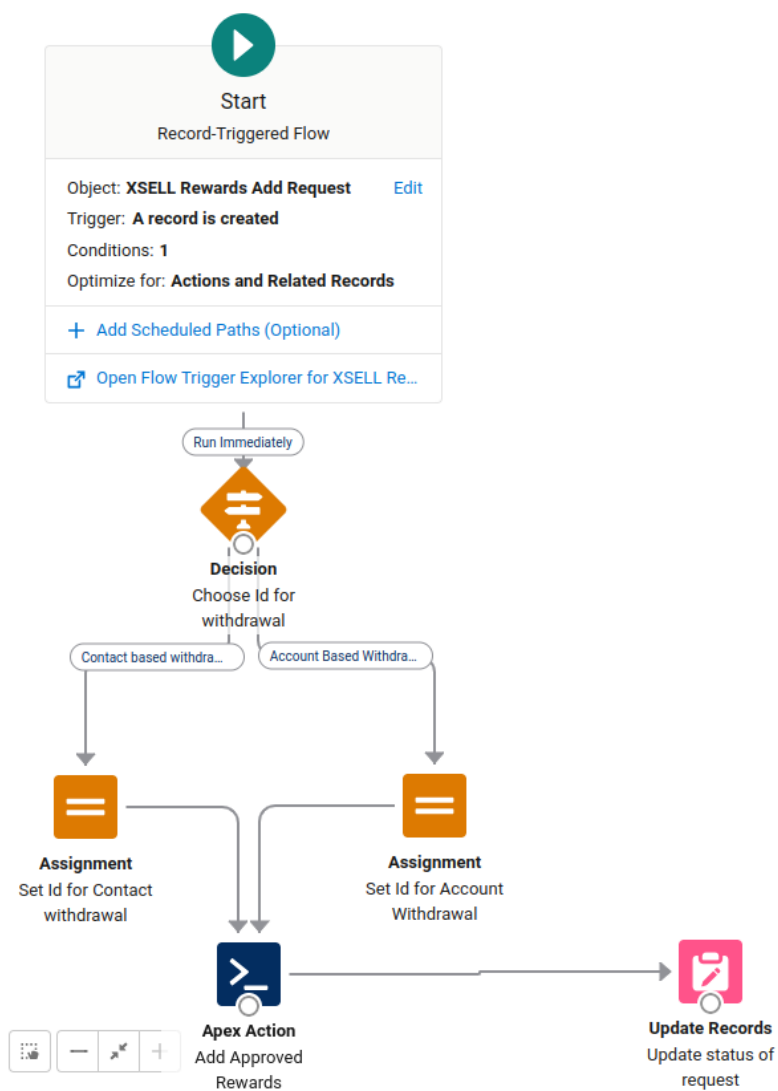
XSELL Rewards Request Name

ARR#0000000002

XSELL_Rewards_Group

[Investment Account](#)

The flow only adds rewards if the Status field text has the value 'Approved'. There would usually be a business process associated with a rewards request that allowed for control of who could add rewards. The other flows are not present here as that business process would be tailored to individual organisations.



Now go back to the account rewards tab, click on *Samuel Clemens Pty Ltd* and drill down as before. You will then see

 XSELL Rewards Account AR-0000000003				
Available Reward Points	Accumulated Reward Points	Total Points Redeemed	Active Asset Value	Active
1,000.00	1,000.00000000	0.000000000	\$17,000.00	3

Related Details		
 XSELL Rewards Group Profiles (3)		
XSELL Rewards Group Profile Name	XSELL_Rewards_Group	Accumulated Reward Points
ARGP-0000000005	Comprehensive Car Insurance	0.00000000
ARGP-0000000006	Property Insurance	0.00000000
ARGP-0000000007	Investment Account	1,000.00000000
		View All

 XSELL Rewards Transactions (1)		
XSELL Rewards Transaction Name	Balance	Created Date
XRT-0000000009	1,000.00000000	7/24/2023, 6:45 PM
		View All

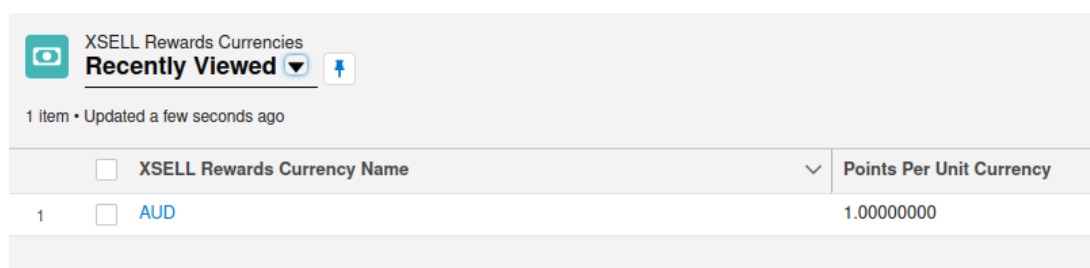
The account now has accumulated 1000 rewards points and a rewards transaction object has been added to reflect that.

Gift Cards, Gift Card Requests and Currency Objects

Currency objects specify the monetized value of a Rewards Point in a particular Currency.

For our examples we will create a single currency object. Click on the currency object tab and then on *New*.

Use AUD (Australian Dollars) for the name, leave the *Points per Unit Currency* as 1.0 and click Save. Then select the currency tab again and you should see



XSELL Rewards Currencies		
Recently Viewed		
1 item • Updated a few seconds ago		
	XSELL Rewards Currency Name	Points Per Unit Currency
1	AUD	1.00000000

The *Gift Card* custom objects comprise two parts of the standard gift card model

1. Recording and tracking gifts that you may give to a client such as theatre or sporting event tickets or awarding cards from a pool that you have already purchased
2. Connecting XSELL to a gift card provider such as Prezzy or Amazon Incentives in order to convert rewards points to a purchasing card.

XSELL provides an example method for part 1 together with an example approach to part 2. In a future release we will provide more functionality in this domain.

The *XSELL Gift Card* provides a sample custom record to allow you to track gifts that you may give to an account. This record is provided to show the capabilities of XSELL and is intended to be generic as the information it contains is highly specific to individual business needs and may not suit your particular business focus.

The details of a gift card object are

XSELL Rewards Gift Card		
Name	Type	Description
<i>Account/Contact</i>	Id	Reference to account
<i>Card Id</i>	Text(64)	Card Type Name field
<i>Card Label</i>	Text(128)	Identifier within type
<i>Card Status</i>	Text(16)	Current status of this gift card
<i>Claim Code</i>	Text(64)	Code needed to reclaim the gift if present
<i>Comments</i>	Text Area	Multiline description of additional card details
<i>Value</i>	Currency	The value of this gift
<i>Currency Code</i>	Text(8)	International currency code for value field (e.g. USD, AUD etc)
<i>Expiration Date</i>	DateTime	Card expiration date
<i>Origin Code</i>	Text(128)	Name of the source
<i>Origin Id</i>	Text(128)	Identifier within source
<i>Status</i>	Text(16)	Internal status of this record

Gift Cards are created either manually, as part of a flow or via the RESTful Web Service API that XSELL provides.

A sample Gift Card entry is as follows

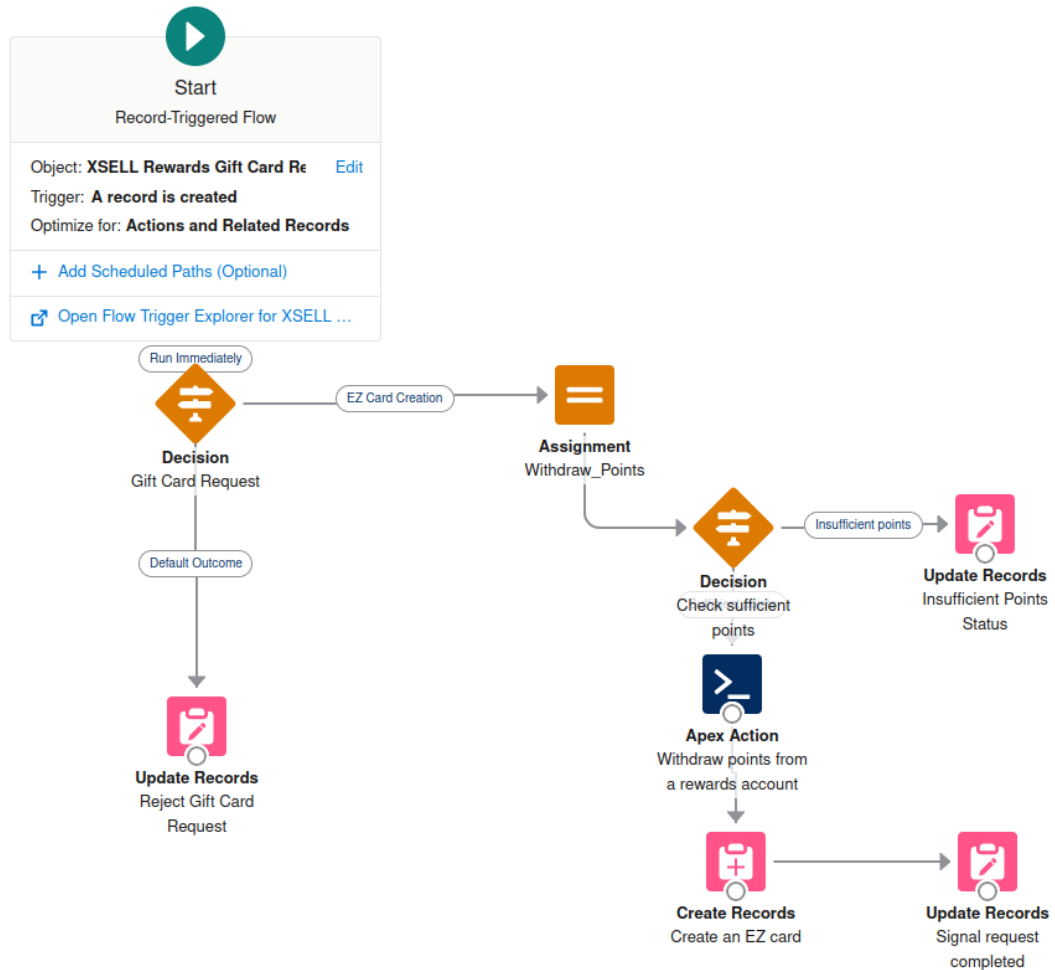
XSELL Rewards Gift Card XGC-0000000003	
Related	Details
XSELL Rewards Gift Card Name	XGC-0000000003
Card Label	Theatre Tickets
Status	Active
Value	\$100.00
Currency Code	AUD
Card Id	1016923
Claim Code	0
Expiration Date	7/24/2023, 12:00 PM
Comments	
Origin Id	TKM1016923
Origin Code	TKM
Card Status	Active
XSELL Rewards	AR-0000000003

XSELL also provides a sample custom object (*XSELL Rewards Gift card Request*) and a sample flow (*XSELL Process Gift card Request*) that is triggered on the creation of a gift card request object.

The object and flow are provided to show how you might connect XSELL to an external Gift Card provider.

The flow performs a number of steps in creating a card (EZ Card) that includes

1. Selecting the logic based on the label of the card to be created
2. Determining if sufficient rewards points are available in the nominated currency to complete the request
3. Withdrawing the points from the account
4. Creating the Gift Card object
5. Updating records



The structure of this request object is

XSELL Rewards Gift Card Request		
Field	Type	Description
<i>Rewards Account Id</i>	Id	Id of XSELL Rewards Account
<i>Card Label</i>	Text	Name of card/institution
<i>Currency Value</i>	Currency	The value of this gift
<i>XSELL Rewards Currency</i>	Text	International currency code for value field (e.g. USD, AUD etc)
<i>Comments</i>	Text Area	Additional information
<i>Origin Code</i>	Text	Name of the source
<i>Origin Id</i>	Text	Identifier within source
<i>Status</i>	Text	Internal status of this record

Let's create a gift card request. Click on the *XSELL Rewards Gift Card Request* tab then click *New* and fill in the values shown in the table. Both the XSELL Rewards and Rewards Currency fields will give you a drop down list for selection.

Field	Value
Rewards Account Id	XSELL Rewards Account created for Samuel Clemens Pty Ltd
Card Label	EZ card
XSELL Rewards Currency	AUD
Status	Approved
Currency Value	20
Comments	Text Area
Origin Id	Sample001
Origin Code	Sample

Make sure you get the Card label correct ('EZ Card') as this corresponds to the selection path in the flow.

Then save it.

The flow will run and go through the following steps:

1. Decide how to proceed based on the Card Label, if 'EZ Card' then proceed otherwise exit.
2. Compute the number of points required based on the currency value and the supplied currency which relates points to currency values
3. Check if the rewards account has sufficient points available to proceed. If no then issue a message and exit
4. Withdraw the points from the account
5. Create a gift card with the details

The result should look like the following

XSELL Rewards Gift Card Request	
 XGCR-0000000002	
Related	Details
XSELL Rewards Gift Card Request Name	
XGCR-0000000002	
XSELL Rewards	
AR-0000000001	
Card Label	
EZ Card	
Comments	
Sample flow to create a gift card	
XSELL Rewards Currency	
AUD	
Status	
Request Completed	
Currency Value	
\$20.00	
Origin Id	
Sample001	
Origin Code	
Sample	

Then go back to the related objects tab of the XSELL Rewards Account for 'Samuel Clemens Pty Ltd'.

XSELL Rewards Transactions (2)			
XSELL Rewards Transaction Name	Balance	Created Date	Points
XRT-000000009	1,000.000000000	7/24/2023, 6:45 PM	1,000.000000000
XRT-000000010	980.000000000	7/24/2023, 9:08 PM	-20.000000000
View All			

XSELL Account Profile Updates (3)			
XSELL Account Profile Update Name	Asset Value	Asset Count	Rewards Group
XAPU-000000003	\$2,000.00	1	Comprehensive Car
XAPU-000000004	\$5,000.00	1	Property Insurance
XAPU-000000005	\$10,000.00	1	Investment Account
View All			

XSELL Rewards Gift Cards (2)			
XSELL Rewards Gift Card Name	Card Label	Card Id	Currency Code
XGC-000000003	Theatre Tickets	1016923	AUD
XGC-000000004	EZ Card	a09Ho00000CMLlulAH	AUD
View All			

Note that a gift card has been created and that the sample flow used the record Id of the request for the id field of the gift card.

Also note that a new transaction record has been created and the balance of available rewards points has been decreased.

Generating Rewards With Rules

As stated before you can manually give rewards to your customers, you can create flows that reward your customers or you can automate the process using rewards rules that can be run either from a flow or from a running background process.

All of these alternatives are related in that they call similar APEX routines to perform their work

In this section we will start with rules that are run by a screen flow so that you can get immediate results and see the effects on the rewards accounts.

In Appendix B there are instructions for creating the test flow. Please go there now and create this flow. Alternatively you can enable scheduled background processing described in Appendix A and wait for that to run overnight.

The background process is the primary way to calculate rewards. When that process is run the date and time up to which rewards are calculated is the date and time that the process runs.

When you use the approach with the flow described in Appendix B you will be specifying a date and time in the future and that will appear on the XSELL Screens. If you have both running this will not create problems as the calculation will take into account the date and time at which rewards were last given before performing the calculation.

A rewards rule defines the number and conditions under which rewards points will be given to the group of profiles associated with the same rewards group as the rule.

Each rewards rule is tied to a specific rewards group and will only generate rewards for an account/contact if they have a rewards group profile for the same rewards group. In addition the rule can specify the minimum asset value and asset count that both the group profile and its rewards account must have before the rule will apply. This is a simple rule.

In addition a rule can reference a group set which is a collection of up to 10 group set entries, each of which can provide requirements, together with a composite criterion 'and/or/not' logical relation. This allows for complex cross selling rules.

The structure of a rewards rule is as follows

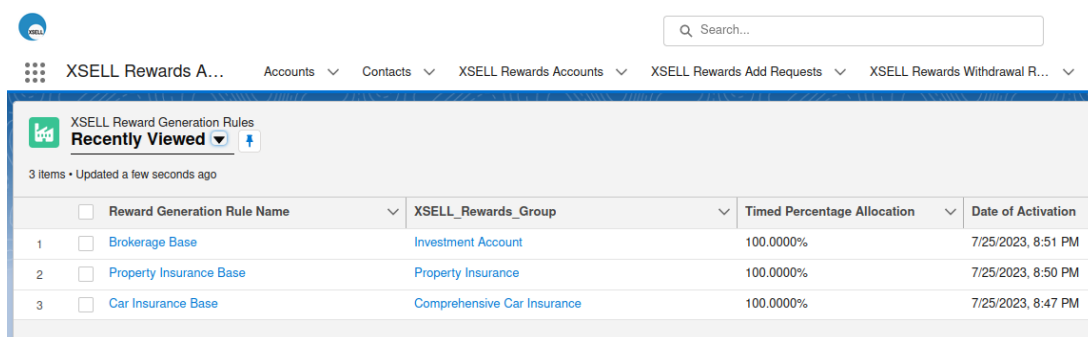
XSELL Reward Generation Rule		
Field	Type	Description
<i>Rewards Group</i>	Lookup	The group to which this rule belongs
<i>Date of Activation</i>	DateTime	Starting datetime for this rule
<i>Date of Expiry</i>	DateTime	Ending datetime for this rule
<i>Timed Percentage Allocation</i>	Percent(12,4)	Annual percentage of points to be allocated from group assets
<i>Required Overall Asset Value</i>	Number(18,2)	Minimum value of all Assets across all group profiles for a rewards account for this rule to apply
<i>Minimum Account Assets Required</i>	Number(18,0)	Minimum number of assets across all group profiles for a rewards account for this rule to apply
<i>Required Group Asset Value</i>	Number(18,2)	Minimum asset value required in the group profile for this rule to apply
<i>Asset Count Required</i>	Number(8,0)	Minimum number of assets that must be present in the Group for this rule to apply
<i>Additional Required Groups</i>	Lookup(Rewards Group Set)	A set of additional groups with a composite condition on group profiles for this rule to apply

When you call the APEX Invocable Interface to run all rewards rules you specify the end date and time for the calculation. Rewards are generated up to that time from a starting point defined by the date of last rewards of a group profile and the date of activation of each rule.

Let's create some simple rewards rules. Find the Tab for Reward Generation Rules, click 'New' to create a rule and fill in the data as per table below (with an expiry date 2 years from now) leaving all other fields as defaults and the additional required groups field empty. Don't forget 'Save&New'.

Reward Generation Rule Name	Timed Percentage Allocation	Group	Additional Required Groups	Required overall Asset Count
Car Insurance Base	100%	Comprehensive Car Insurance	0	1
Property Insurance Base	100%	Property Insurance	0	1
Brokerage Base	100%	Investment Account	0	1

The result will look like



The screenshot shows the XSELL Rewards Management interface. At the top, there is a search bar and navigation tabs for 'XSELL Rewards A...', 'Accounts', 'Contacts', 'XSELL Rewards Accounts', 'XSELL Rewards Add Requests', and 'XSELL Rewards Withdrawal R...'. Below the navigation, the 'XSELL Reward Generation Rules' section is active, showing a 'Recently Viewed' filter and a table with 3 items. The table has columns for 'Reward Generation Rule Name', 'XSELL_Rewards_Group', 'Timed Percentage Allocation', and 'Date of Activation'.

	Reward Generation Rule Name	XSELL_Rewards_Group	Timed Percentage Allocation	Date of Activation
1	☐ Brokerage Base	Investment Account	100.0000%	7/25/2023, 8:51 PM
2	☐ Property Insurance Base	Property Insurance	100.0000%	7/25/2023, 8:50 PM
3	☐ Car Insurance Base	Comprehensive Car Insurance	100.0000%	7/25/2023, 8:47 PM

Now let's run the 'Test Compute Rewards' flow described in Appendix B which allows us to immediately compute rewards points up to a nominated point in time for a particular rewards account using all the rules.

Go to *Setup/Home* as discussed earlier and type 'Flows' in the quick find box. Then select Flows and find the Test Compute Rewards flow. Click on that to get to the Flow and then click *Run* to get to the following screen

Test Compute Rewards

* Compute Rewards to

Dec 31, 1899



4:00 PM



Click on the *Rewards Time* entry box and pick tomorrow or any time in the future as the date and time. Then click on *Next* and the flow will run. When it finishes it will

clear the entry boxes and give you another chance to run the flow. Ignore it and go back to the XSELL application window.

If you navigate back to the rewards account for Samuel Clemens Pty Ltd you will see a screen similar to that below. The actual values will differ depending on the date and time that you picked.


XSELL Rewards Account
AR-0000000003

Available Reward Points	Accumulated Reward Points	Total Points Redeemed	Active Asset Value	Active
987.56	1,007.56145252	20.000000000	\$17,000.00	3

Related
Details


XSELL Rewards Group Profiles (3)

XSELL Rewards Group Profile Name	XSELL_Rewards_Group	Accumulated Reward Points
ARGP-0000000005	Comprehensive Car Insurance	0.90373045
ARGP-0000000006	Property Insurance	2.22684583
ARGP-0000000007	Investment Account	1,004.43087624
		View All


XSELL Rewards Transactions (6+)

XSELL Rewards Transaction Name	Balance	Created Date
XRT-0000000009	1,000.000000000	7/24/2023, 6:45 PM
XRT-0000000010	980.000000000	7/24/2023, 9:08 PM
XRT-0000000011	980.733498935	7/26/2023, 12:00 AM
XRT-0000000012	984.313217608	7/26/2023, 12:00 AM
XRT-0000000013	986.114484657	7/26/2023, 12:00 AM
XRT-0000000014	986.284716170	7/26/2023, 12:44 AM
		View All

Note that points have been added to all group profiles and several transactions have been added.

If you now click on a rewards transaction object you will see the details associated with that transaction. Note the category '*Reward Rules*', the rules involved '*Brokerage Base*' and the rewards group '*Investment Account*'.


XSELL Rewards Transaction
AR-0000000003

Category	Balance	Type	Points	Reference
Reward Rules	984.313217608	Reward	3.579718673	N/A

Related
Details

XSELL Rewards
[AR-0000000003](#)

XSELL Rewards Transaction Name
XRT-000000012

Created
7/26/2023, 12:00 AM

Type
Reward

Category
Reward Rules

Points
3.579718673

Group
Investment Account

Status
Active

Reference
N/A

Comments

Balance
984.313217608

Rules Involved
Brokerage Base

Now lets create an additional cross selling rule to reward clients if they have both Car and Property insurance.

In order to do this we will create a rule that uses a Group Set object named *Car and Property* together with two Group Set Entries named *CCI Loyalty Test* and *PI Loyalty*.

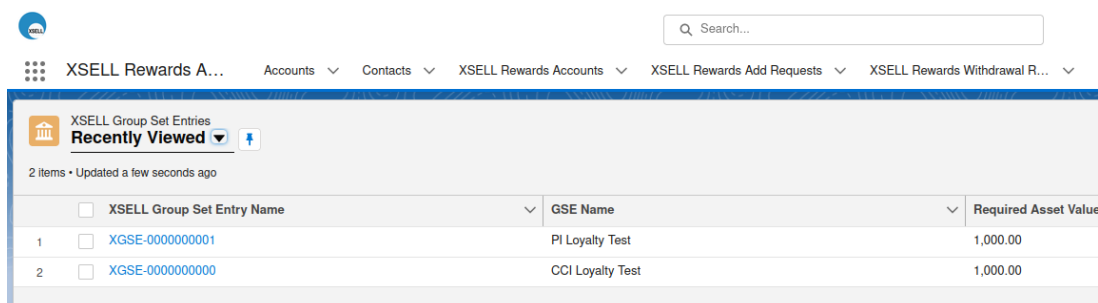
For ease of understanding we will take the long route, creating the group set entries first, then the group set and then create the rule.

Group Set Entries are just a named set of asset value and count requirements for a group profile.

So we create two group set entries from the following table

GSE Name	Asset Value	Asset Count
CCI Loyalty Test	1000.0	1
PI Loyalty Test	1000.0	1

Click on the XSELL Group Set Entry tab, click New and fill in the above values twice to match the following screenshot



The screenshot shows the 'XSELL Group Set Entries' section with a 'Recently Viewed' filter. It displays two entries in a table:

	XSELL Group Set Entry Name	GSE Name	Required Asset Value
1	☐ XGSE-0000000001	PI Loyalty Test	1,000.00
2	☐ XGSE-0000000000	CCI Loyalty Test	1,000.00

Next we create a group set that references those two and establishes the requirement that both criteria must be met.

Click on the *XSELL Rewards Group Sets* tab, click New and fill in the following fields

Field	Value
Group Set name	Car and Property
Group Set Entry 0	Choose 'CCI Loyalty Test' from dropdown
Group Set Entry 1	Choose 'PI Loyalty Test' from dropdown
Selection Logic	0 AND 1

Leave the remaining fields unchanged and click **Save** and you will get the following

XSELL Rewards Group Set Car and Property	
Related	Details
XSELL Group Set Name	Car and Property
Selection Logic	0 AND 1
RPN Instructions	01a
XSELL Group Set Entry 0	XGSE-0000000000
XSELL Group Set Entry 1	XGSE-0000000001
XSELL Group Set Entry 2	
XSELL Group Set Entry 3	
XSELL Group Set Entry 4	
XSELL Group Set Entry 5	
XSELL Group Set Entry 6	
XSELL Group Set Entry 7	
XSELL Group Set Entry 8	
XSELL Group Set Entry 9	

Note that a group set can contain up to 10 group set entries numbered 0 through 9 and the *Selection Logic* field is a combination of the group set entry numbers and the operations AND, OR, NOT with sub-expressions allowed using parentheses.

Rules are bound to groups and act on the associated group profiles of a rewards account when generating rewards. A Group Set Entry brings in conditions on other group profiles (via the group set entries and their asset requirements together with the selection logic of the group set) of the rewards account.

Some examples of logic are

Expression	Meaning
0	Condition 0 is met
0 AND 1	Both Conditions are met
0 OR 1	Either Condition is met
NOT 0	Condition 0 is not met
(0 AND 1) OR (0 AND 2)	Either 0 and 1 are met or 0 and 2 are met

Now, let's create the rule itself as per the table below.

Reward Generation Rule Name	Timed Percentage Allocation	Group	Additional Required Group	Required overall Asset Count
Car Insurance and Property Insurance	10%	Comprehensive Car Insurance	Car and Property	1

You have already done this earlier and the only difference is the additional field additional required groups. The result will look like

XSELL Reward Generation Rule

Car Insurance and Property Insurance

Related
Details

Date of Activation	7/26/2023, 1:19 AM
Date of Expiry	7/3/2025, 12:00 PM
Required Overall Asset Count ?	1
Required Group Asset Count ?	1
Reward Period	Daily
Timed Percentage Allocation	10.0000%
Reward Generation Rule Name	Car Insurance and Property Insurance
XSELL_Rewards_Group	Comprehensive Car Insurance
Required Group Asset Value ?	0.00
Required Overall Asset Value ?	0.00
Status	Active
Required Active Groups	0
Additional Required Groups	Car and Property

Now that we have created our cross selling rule we can run the screen flow again to test it. Each group profile contains the date and time when it last received rewards. Since we have already run the screen flow with a date in the future we will have to pick a date/time further in the future to see the effect of this rule.

Go to the 'Test Compute Rewards' screen flow and enter a new date and click 'Next'.

The flow runs and if you look at the account rewards tab in the App (and refresh) you will see that rewards points have appeared in the accounts.

If you now go back to the account rewards tab and drill down to the rewards transaction list you will find a rewards transaction like the following

 XSELL Rewards Transaction AR-0000000003				
Category	Balance	Type	Points	Reference
Reward Rules	991.814519197	Reward	4.253066678	N/A

Related	Details
---------	----------------

XSELL Rewards
AR-0000000003
XSELL Rewards Transaction Name
XRT-000000017
Created
7/26/2023, 5:44 PM
Type
Reward
Category
Reward Rules
Points
4.253066678
Group
Comprehensive Car Insurance
Status
Active
Reference
N/A
Comments
Balance
991.814519197
Rules Involved
Car Insurance Base, Car Insurance and Property Insurance

Note that the Rules Involved field now includes both *Car Insurance Base* and *Car Insurance and Property Insurance*.

Appendix A. Activating the Batch Process for Rewards Generation

In its normal mode XSELL will generate rewards points on a daily basis, usually overnight, using rules that you have defined on a daily basis.

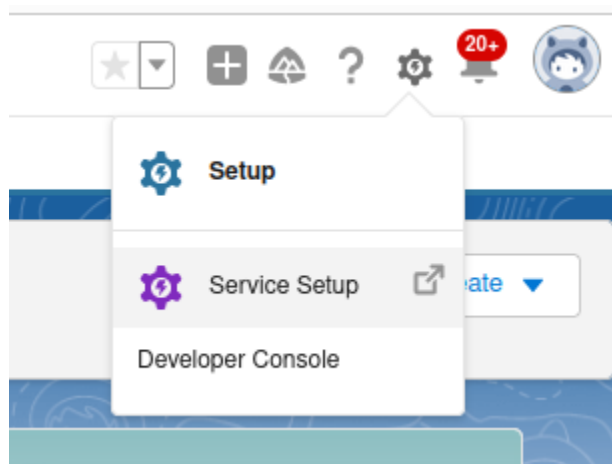
However, this is a tutorial and because you may not want to wait overnight to see these effects we have provided a screen flow that will trigger an immediate computation of rewards points, for all accounts and contacts, up to a nominated time and date.

You can choose to run the background process, use the screen flow or do both.

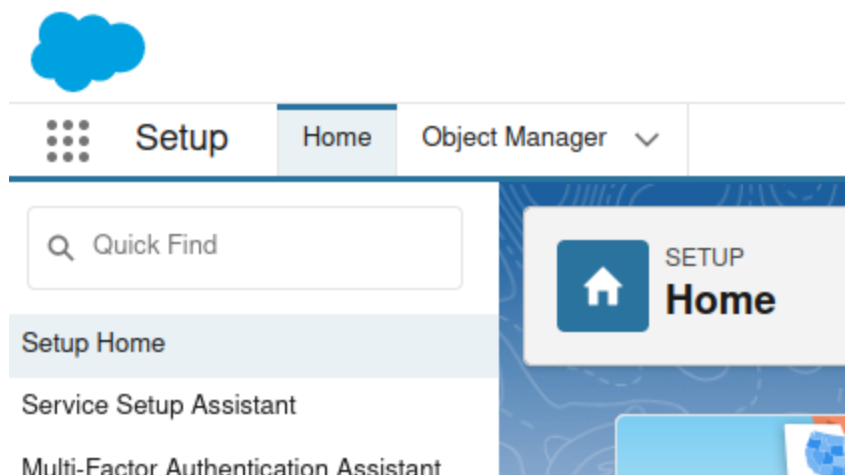
In order to start this background process of calculating and allocating rewards points based on Rules you need to perform two steps.

1. Activate the 'Initiate Batch Processing' process via the Process Builder
2. Create a Rewards Manager object with the desired time settings.

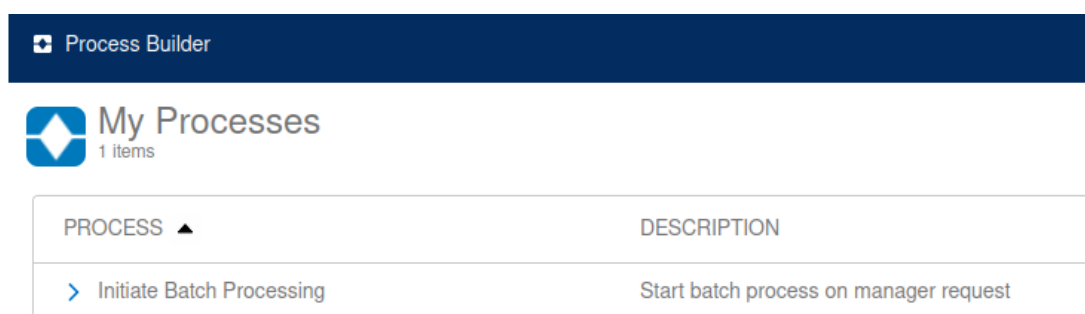
If you don't already have a Setup window open in your browser click on the cog wheel on the top right hand side of your XSELL application window and then click on Setup within the pop up window that appears.



This will bring up another window in your browser, switch to that window.



In the quick find box on the top left type *Process Builder* and you will see an option *Process Builder*, click on that and the next screen will be



On the right you will see the status is *Inactive* so click on the > symbol, the screen will change and on the right you will see an *Activate* action illuminated. Click on this and confirm the activation request and the screen will change to the above screen with the status changed to *Active*.

Go back to the XSELL Application and navigate to XSELL Rewards Manager Tab. Click on New and fill in the fields as shown in the image below.

Information

* XSELL Rewards Manager Name

Manager

Owner



Creation Date

* Date

7/25/2023



* Time

6:11 PM



Background Processing

* Current JobID

None

* Background Action

Start Background Processing

* Batch Processing Interval

3

* Hour of Day 

0

* Minute of Hour 

0

* Second of Minute 

0

Notification Details

* Notification Level

INFO


XSELL Rewards Manager
Manager 0

Related
Details

XSELL Rewards Manager Name

Manager 0

Creation Date

7/25/2023, 6:16 PM

▼ **Background Processing**

Current JobID

08eHo00001hHhn4

Background Action

No Action

Batch Processing Interval

3

Hour of Day ⓘ

0

Minute of Hour ⓘ

0

Second of Minute ⓘ

0

▼ **Notification Details**

Notification Level

INFO

Please note that you cannot stop the background process from the Rewards Manager, or from any APEX code for that matter.

You can only stop the background process by going to *Setup/Scheduled Jobs* and If you want to restart the process go to the *Rewards managers* tab select the manager entry and change the *Background Action* field to '*Start Background Processing*' and then click *Save*.

Appendix B. Creating a Test Flow to Generate Rewards

You probably do not want to wait overnight to see the results so we will short circuit this process with a simple flow to get immediate results. Please note that this functionality is only available to Salesforce Administrators in default Security setup. If required XSELL Rewards Permission Set can be cloned and permission given to create and edit Flows to any user assigned.

Now we are going to create a small screen flow that we can run to show rewards being generated.

Go to setup and enter 'Flows' in the quick find box. Then click 'New Flow' in the upper right hand corner, choose 'Screen Flow' for the type and click 'Create'.

We need to add a screen with a date/time entry box and an action that calls the APEX interface to generate rewards from the rule.

Click on the small circle between the start and end and add a 'Screen'. First name 'Screen' by selecting '[Flow Label]' and typing "Rewards Time Screen". Click on the API field and let Salesforce generate the value. Next, from the Components menu on the left select 'Date&Time'. Fill in as follows and click done

The screenshot shows the 'Edit Screen' interface in Salesforce. On the left is a 'Components' sidebar with a search bar and a list of components including 'Input (39)', 'Action Plan Template', 'Add Visitors', 'Address', 'Budget', 'Call Script', 'Checkbox', 'Checkbox Group', 'Choice Lookup', 'Currency', 'Data Table', 'Date', 'Date & Time', 'Dependent Picklists', 'Display Image', 'Display Search Results', 'Display Verification Results', and 'Email'. The main area is titled '[Flow Label]' and contains a 'Date & Time' component. This component has two input fields: 'Date' and 'Time'. Below these fields are 'Pause', 'Previous', and 'Finish' buttons. On the right side of the main area, there is a configuration panel for the 'Date & Time' component. It includes a 'Label' field with the value 'Rewards Time', an 'API Name' field with the value 'Rewards_Time', a checked 'Require' checkbox, a 'Default Value' field with the value 'MMddyyyy, hh:mm a', and expandable sections for 'Set Component Visibility', 'Validate Input', and 'Provide Help'. At the bottom right of the interface are 'Cancel' and 'Done' buttons.

Then click on the small circle before 'End' and add an 'Action' entry. Change filter to *Type* and select *Apex Action*.

Then click on '*Compute All Rewards*' and fill in the action as follows.

New Action

Filter By

Type ▼

Core Action

Apex Action

Apex Action (Legacy)

Email Alert

+ Create HTTP Callout

Action

Compute All Rewards

Use values from earlier in the flow to set the inputs for the "Compute All Rewards" Apex action. To use its outputs later in the flow, store them in variables.

* Label

Generate

* API Name

Generate

Description

Set Input Values for the Selected Action

batching ⓘ

{!\$GlobalConstant.False}

Include

computeTime ⓘ

{!Rewards_Time}

Include

> Advanced

Cancel

Done

Finally click on 'Done' then 'Save' and give it the name 'Test Compute Rewards', click 'Done' and then click on 'Activate' in the main Flow Screen right upper corner.

About Us

The founders of XSELL Rewards are experienced IT professionals with proven track records in a range of industries including Insurance, Wealth Management, Banking, Finance, Retail and Telecommunications. We have worked in R&D, Product Development, Transformation and as core Open Source Developers.

Our backgrounds cover Business Development, IT Architecture and Development. We are especially skilled at building and integrating complex enterprise systems and establishing working relationships with clients, business stakeholders and staff.

Our Technology experience includes Digital Experience, Web Services, Messaging Systems, Rules Engines, Agent Based Systems, APIs, Workflow Management Systems and many others. We have built successful systems in both Cloud and Corporate Data Centre environments and integrated systems across these two environments.

Oria Pty Ltd provides following services:

- XSELL application development
- XSELL application installation and configuration assistants
- XSELL application ongoing support and maintenance
- XSELL integration and client bespoke development
- Program and Project Management, Architecture and Development

Contact:

Oria Pty Ltd ABN 48 110 300 877

Sydney, Australia

info@xsellreward.com

www.xsellreward.com