Program

Best Practices Guide

ORACLE | responsys

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Chapter 1. Introduction

With Program™, you can build orchestrated, multi-stage marketing programs driven by individual behavior.

Program brings together your audience data, your message content, and all your digital channels. You can design individualized, behavior-based programs timed for every stage in a customer's lifecycle.

After you design your program and associate a list, campaigns, and filters with the elements in your program, it is a simple matter of validating and publishing the program.

As the program is running, you can analyze it in real- time so you know what's working, or where things are getting stuck.

This document describes best practices for creating orchestrated customer interactions. These practices can help you optimize the performance of your launches and data operations for targeting and personalization.

Program Terms

Data Switch
Uses profile data, behavioral data, and Program Variables to send individuals down different paths.

Allocation Switch
Randomly sends individuals down different paths based on specified percentages.

Performance Switch
Sends individuals down the path that contains the most successful campaign, based on user-defined metrics (rates).

Event
Initiates a program or stage.

Filter

Narrows down your list to the group matching specified criteria. Program uses filters in Scheduled Filters to create entries into a program, and within Data switches to send individuals down different paths.

List

A profile table associated with the program. Only members of the associated list can enter a program.

Message

Email and Oracle Responsys SMS messages. You can send both message types from the same program.

Program

Orchestrates customer interactions driven by individual behavior, including initiation, messaging, and flow control.

Program Template

Provides a starting point for creating commonly used, strategic programs.

Program Entry

Represents a single customer in a program.

Program Variable

Temporary data passed with a Program Entry for use in personalization and flow control.

Publish

To make a program live.

Timer

Implements required delays between messages. Elapsed Timers wait a specified amount of time after an individual enters the timer; Target Timers release Program Entries at a specified time.

Unpublish

To stop a program and stop processing Program Entries.

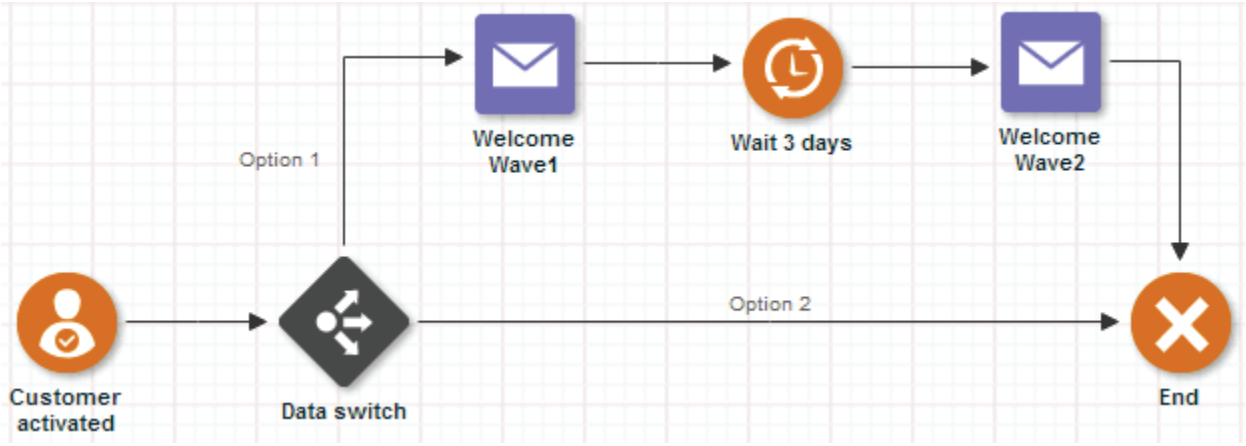
How Program Works

Program sequences and orchestrates marketing interactions with your customers. It does this by allowing you to define who you want to reach and to assemble the appropriate content and logic for how and when to reach your audience.

Use of the Program process follows these general steps:

1. Create and test your forms, campaigns, filters, and list in Oracle Responsys.
2. In Program, select an appropriate starting event.
3. Drag activities, timers, and switches onto the canvas to construct your program, which may be a simple sequence or a more complex, conditional workflow that directs different customers down different paths.
4. Associate your campaigns with the activities, enter durations for timers, and define filters within your switches.
5. Validate your program to make sure everything is in place.
6. Publish the program.

A fully assembled program might look something like this:



In the example above, each time a new name is added to the list, Program systematically sends an email message, waits three days, then sends a second message at the same time of day that the record was added to the list.

The example shows only some of the components that a program requires. Other core components include lists, filters events, and campaigns. Given so many elements, programs can become complex. It's important to optimize these elements to ensure that your programs run efficiently and provide adequate response times for your customers.

Chapter 2. Design Best Practices

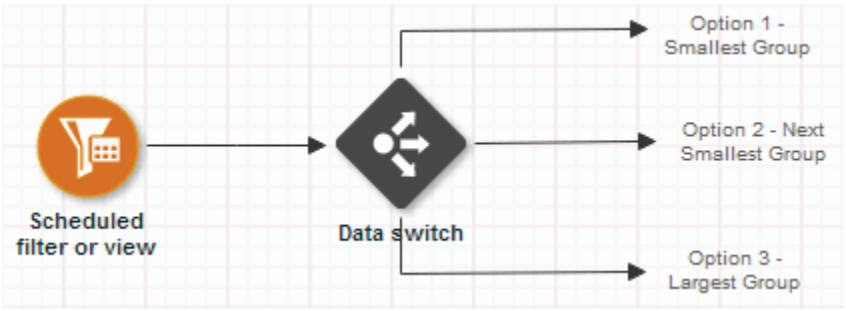
This chapter describes best practices for optimizing performance of you programs.

Data Switch Techniques

Data switches in Program use queries designed using the filter designer.

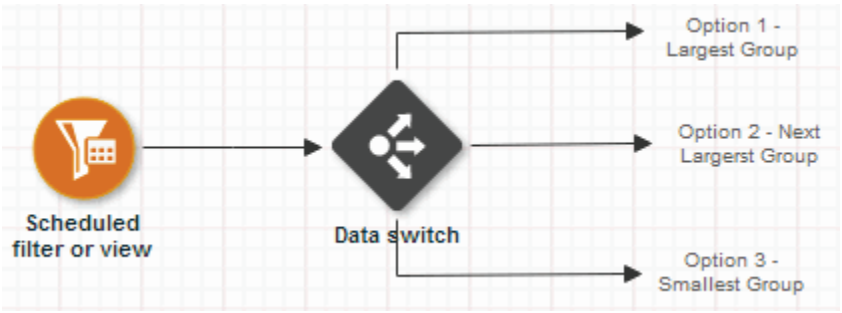
Filters can be executed over and over again within a program, so designing efficient filters is even more essential when working with Program. To ensure timely execution, take extra care to make your filters as efficient as possible. Here are a few ideas to help you improve efficiency.

A common practice in bulk filtering is to construct filters to handle fringe cases and leave the bulk of the audience to fall through to the next filter, as shown in the following illustration.



*This is **NOT** a best practice*

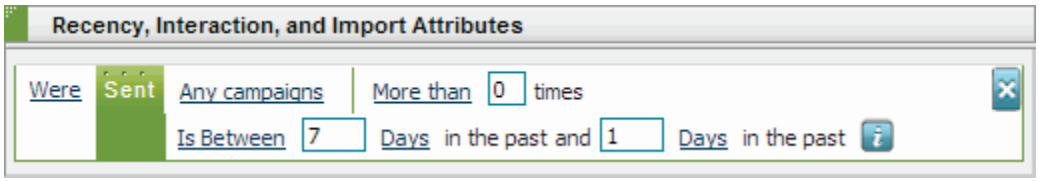
However, data switches work differently. The best way to use Data switches is to filter the largest group first, as shown in the following illustration.



*This **IS** a best practice*

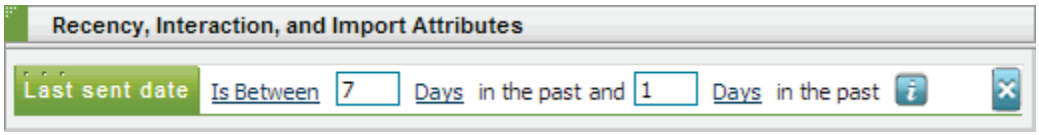
We also recommend that you follow the filter designer best practices in designing the filters and Data switches used in a program. For example, a filter with too many clauses or with CONTAINS operators can be fairly expensive and can slow down your launches and overall account performance.

Finally, be aware that more than one criterion might be available to achieve the result you want, and one might be much more efficient than the other. For instance, you have two options to determine whether a user was sent a campaign between 1 and 7 days in the past: Sent interaction attributes and the more efficient recency attributes.



*This is an example of a **Sent** interaction attribute. It is **NOT** a best practice.*

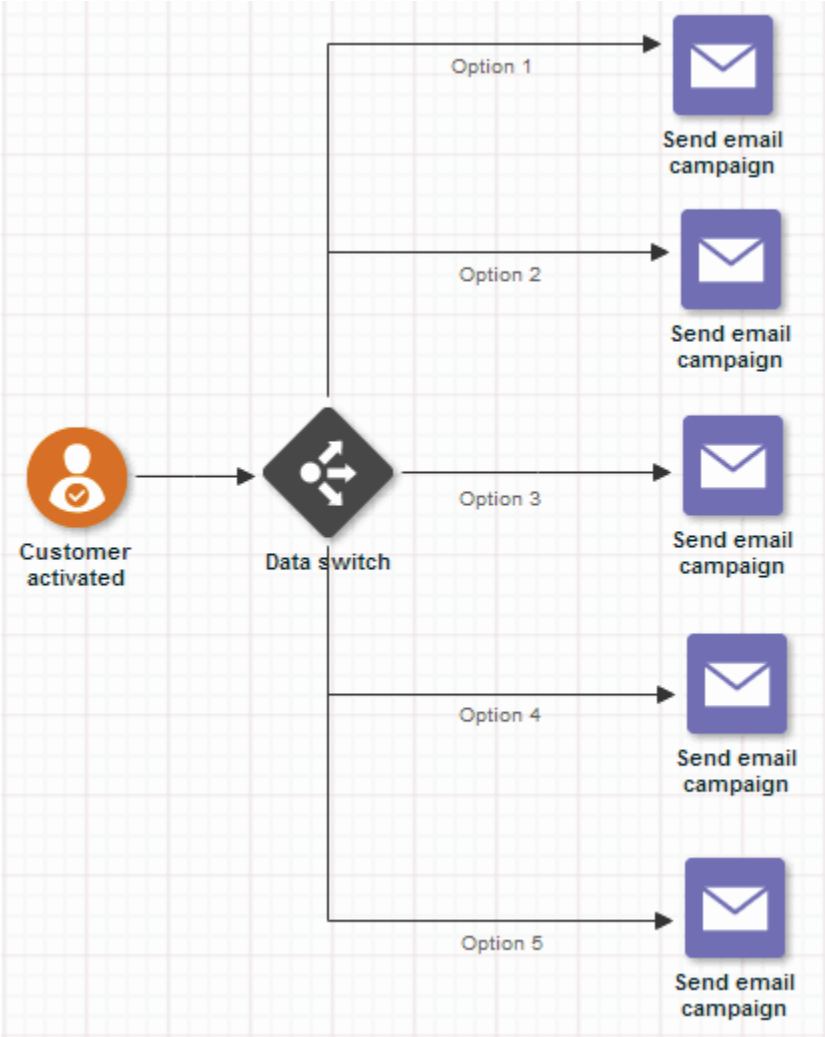
The Sent interaction attribute scans through all the sent data for every campaign in your account. If you have a lot of campaigns or a large list, this will scan a large amount of data before it can return a result. For this reason, we strongly recommend avoiding use of "were sent" clauses in program filters.



*This is an example of a **Recency** attribute, which is more efficient. It **IS** a best practice.*

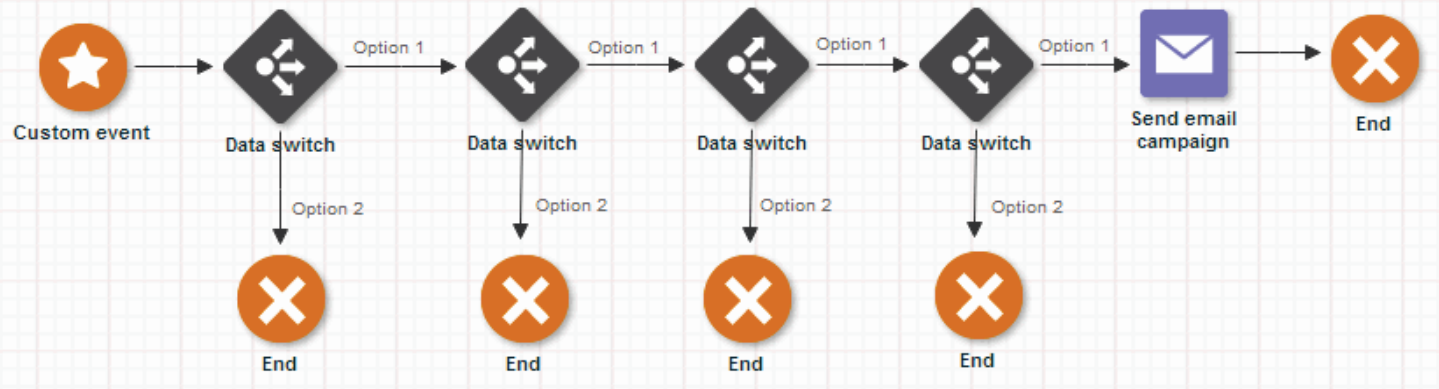
Recency attributes are summarizations of the sent data. These attributes scan much less data and do not become slower as the number of campaigns increases; hence, using recency attributes is the recommended method to filter for people who have been sent or not sent campaigns, and in many cases, can provide the same functionality.

Switches can have multiple paths, as shown in the following illustration.



*This **IS** a best practice.*

A single Data switch containing all criteria as shown above produces the same result and is generally more efficient than a series of Data switches in which each tests the same audience for a single criterion, as shown in the following illustration.



*This is **NOT** a best practice.*

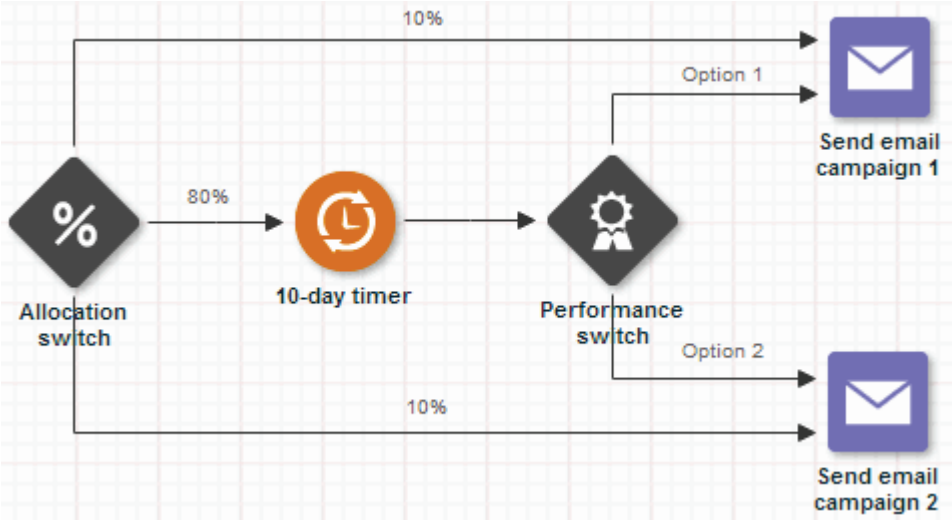
Split Tests and Winner Selection

A key feature of Program is the ability to test and compare marketing strategies with ease.

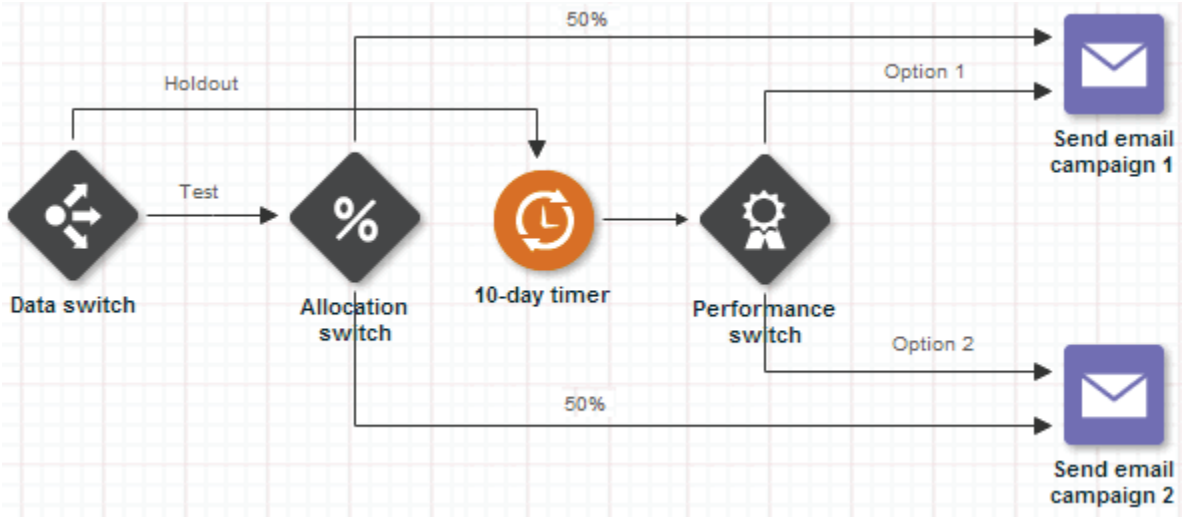
The Allocation switch randomly directs program entries down various exit paths based on percentages you define. You can use an Allocation switch to create a simple random split test, but you would have to remember to identify the winning campaign, adjust the percentages, select the winning path, and republish the campaign.

The Performance switch provides a much more dynamic and robust winner selection capability. Used in conjunction with an Allocation switch and either an Elapsed Timer or a Target Timer, a Performance switch allows you to send a small subset of your audience to two or more “test” paths, hold the remainder until the winning path is identified, and then release that majority of your audience to the winning path.

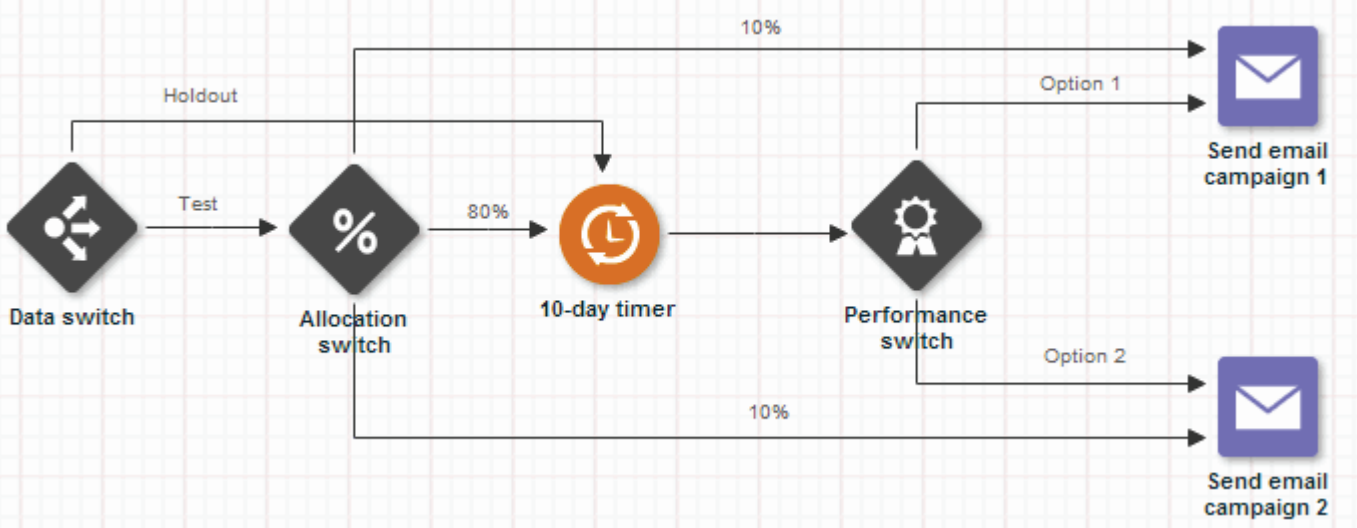
In the following example, the test and holdout groups are determined at random in the Allocation switch:



To create a specific holdout group, just add a Data switch filter that sends most customers past the Allocation switch as shown in the following illustration:



If the holdout group is small, and you want to send the majority of your other customers to the winning path as well, you can combine both concepts:



Note that a Performance switch must have one or more entry points and two or more uniquely named exit points.

For a Performance switch, you can select the email addresses to be notified when the winning campaign is identified, select the winning campaign either automatically or manually, select the metric by which automatic selection will be made, the campaigns to be tested, and clear the collected data and start over when the program is published.

Working with Supplemental Tables

Staying with the theme of filters, with Program you can trigger a program entry in a number of ways:

- Customer Activated
- Customer Deactivated
- Scheduled Filter or View
- Custom Event

- Connect Event
- SMS Received Event (if Responsys SMS is enabled for your account)

You can design Scheduled Filters with a combination of profile data and campaign interaction data specific to a recipient. At present, Scheduled Filters cannot directly query data held in supplemental tables (such as raw site analytics data or lists of products or transactions); however, you still can use a Custom Event to trigger a program during a file upload if that file refers to specific customer information (and thus includes a customer ID or recipient ID).

This method can be applied, for example, for entering "shopping cart abandoners" into a program. To do this, you need to merge your list of abandoners with the profile list, as is typically done in standard web analytics integrations. When you upload the file using Connect and merge the data with the contact list, you can select a Custom Event to trigger for each of the records in the file. Each program that listens for that Custom Event will create an entry for each record.

Swapping or Editing Campaigns in a Published Program

Program uses campaigns, lists, and filters to perform tasks, but it does not control these assets. In theory, you can use a single campaign for both a program stage and a bulk mailing. This means that if anyone within your organization changes the campaign, those changes will automatically take effect in any program that uses the campaign. If someone deletes a campaign a program uses, the program will be blocked until you assigned a new campaign.

For that reason, we encourage you to create campaigns specifically for use by programs and to keep them organized in different folders from campaigns used for other purposes.

If you do need to change a campaign that a published program uses, the best way to do this is as follows:

1. Do not unpublish the program.
2. Create a new campaign.
3. Associate the new campaign with the appropriate Send Campaign activity.
4. Save the modified diagram. This creates a draft version.
5. Validate the draft version.
6. Publish the draft version.

When the draft version is published, existing entries will not be interrupted. All entries passing through the modified Send Campaign Action will receive the new campaign.

You should keep the old campaign—even though it is not in use—to preserve and make sense of the delivery and response data captured by Program while the old campaign was used.

Editing Published Programs

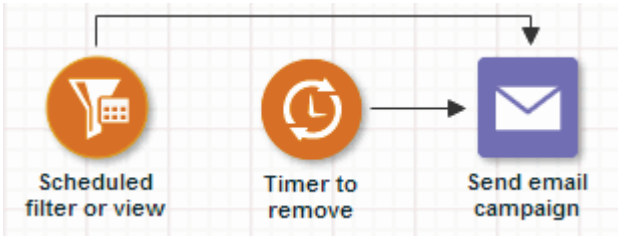
When you edit a published program, Program creates a draft version that you can save and validate without affecting the execution of the published program. This means that you have the freedom to make changes to your program at any time.

That said, be careful when modifying a program, because some changes have consequences that might not be immediately obvious. For example, if a timer in your published program has 100 entries waiting in it, removing the timer will cause Program to terminate those entries when the program is published.

When you make changes, try to leave the existing elements and paths intact, and build any adjustments around them.

For example, if you want to remove a timer, it would be best to do so in two steps:

1. Reroute the flow around the timer, leaving the timer in place (as shown below), and publish your changes.



   This preserves a location and exit path for entries already in the timer, while preventing new entries from being routed to the timer.

2. When all entries have exited the timer, remove the timer and the exit path entirely, and publish the program again.

This two-stage modification technique is effective and safe, but it is absolutely necessary only for timers where entries stay in one stage for a period of time. Switches and Actions perform a task and pass entries along to the next stage as quickly as possible, therefore this technique is not required.

Each entry into a program is a high-value engagement. Make every effort to preserve its place in the program by making thoughtful, systematic changes to your program sequences.

Segmentation Techniques

The Set Data activity allows you to record transient data (program entry variables) for individuals in a program, passed in via a Custom event. For example, if you are entering someone into a program immediately after they make a purchase on your site, you can store information about the purchase with their entry in the program. This allows you to "segment" individuals as they progress through a program.

The Set Data activity also allows you to set values of specific profile fields that can be stored indefinitely. For example, you can set an "IS_ACTIVE" field for a specific individual to "True" or "False" based on whether they ended up in one branch or another after a Data switch. Unfortunately, it is very tempting to use filters to define

segment groups and use Set Data to write segment values to the Profile table. Taken to an extreme, you might consider creating a program exclusively to set data values or one that sets data values over and over again as a program progresses. While expedient, this is highly inefficient and can have an adverse impact on general system performance, causing your launches and user experience to slow down.

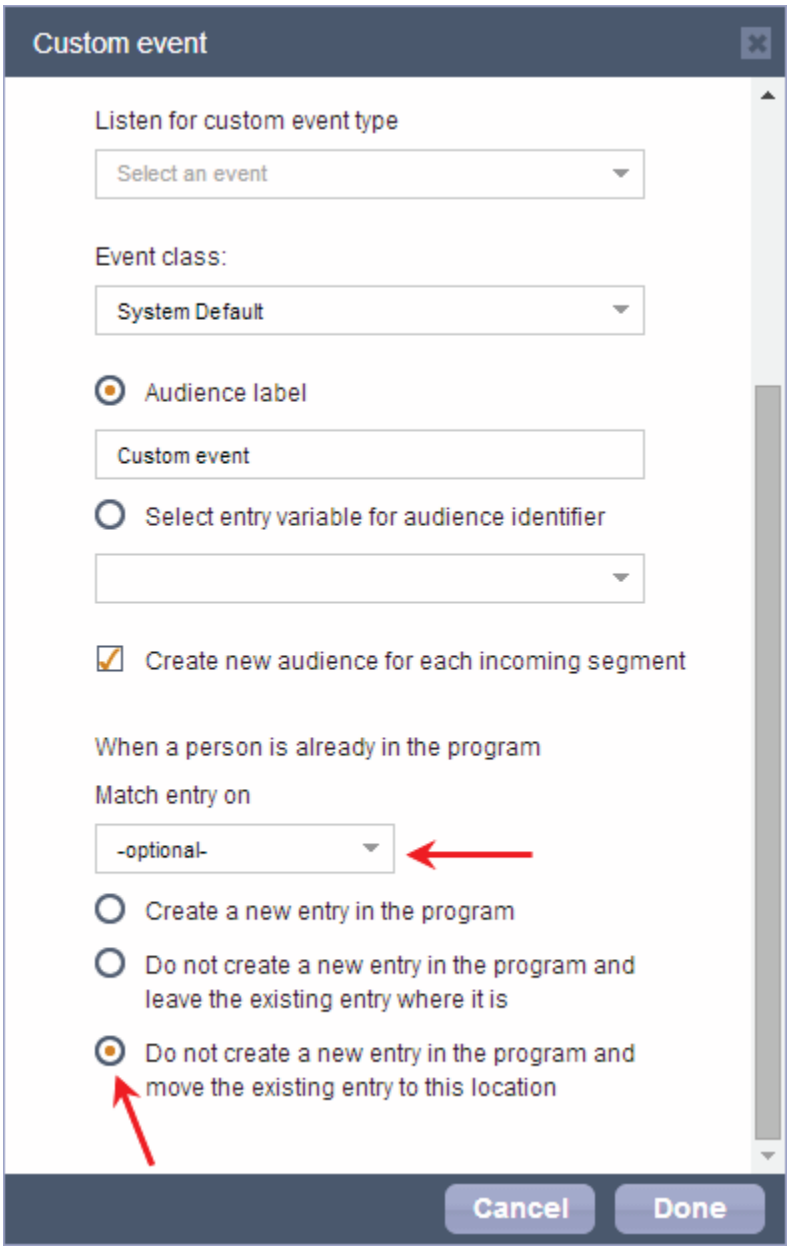
Please note that Program was designed for automated marketing interactions which include the sending of messages, not for segmentation alone. Responsys does not support “segmentation only” programs at the present time.

Set Data is a very powerful capability of Program, but it should be used thoughtfully. We encourage you to contact Responsys Support before publishing a program that makes heavy use of Set Data.

Processing Multiple Program Entries

Program provides mechanisms to control the circumstances under which a customer can enter a single program more than once. For example, an airline uses a program that begins when a reservation is confirmed and continues until the date of travel; an acknowledgment is sent immediately upon confirmation, weather and security updates are sent one week prior to the trip, and a courtesy itinerary is sent the day before the trip. Customers who make more than one trip reservation are in the program for each reservation. If a customer changes an existing itinerary, the airline doesn’t want to create a new Program Entry.

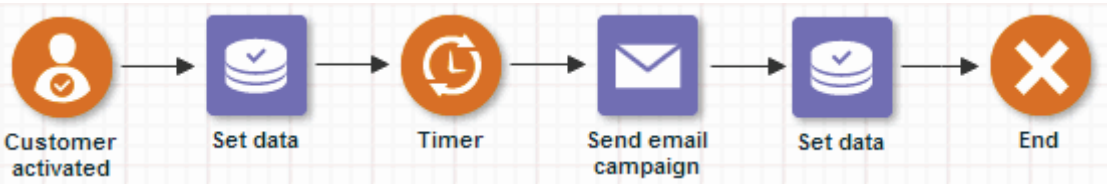
Program supports this through Custom events. In the Custom event, you can match Program Entries based on the itinerary number and select the “Do not create a new entry in the program and move the existing entry to this location” option as shown in the following illustration.



Creating Exclusivity

Sometimes you want to prevent a person who enters a program from being sent promotional (batch) campaigns or from entering a different program. For instance, if a customer enters a Welcome program, you may wish to prevent that customer from receiving any other campaigns until that customer exits the Welcome program.

The most generally applicable method in such cases is to use Set Data. In this case, you would add a column to your profile list and use Set Data at the beginning and end of the program to indicate that the customer is in the program. Then, you can test against the profile field to determine whether the customer should be excluded from any other messages.



NOTES:

- It is a good idea to index the profile column to make queries more efficient.
- Set Data writes to the profile table. List merges also write to the profile table. If both happen concurrently, processing will slow down for both the list merge and your program.

In addition, you can use the following methods:

- If the customer will only enter the program one time—and you initiate the program with a scheduled filter—the system provides two filter criteria to perform this check: *Has Entered Program* and *Has Ended Program*.
- If the program begins with a Send Email Message action, you can use Has Been Sent Campaign X, less than Y days in the past (where Y is the total duration of the sequence). Campaign X is the email that is sent immediately upon entry to the exclusive program.

NOTE: Sent data can be a large data set. When you use this method, be aware that querying large amounts of data or creating complex criteria containing Sent clauses can slow down processing.

Speed Considerations

Some features require more computing time than others. If you use one of the following features, you should allow for additional processing time:

- Set Data

  Set Data writes to the profile table.

  If you choose to write a value to a field that requires validation (EMAIL_ADDRESS_, EMAIL_FORMAT_, EMAIL_PERMISSION_STATUS__, POSTAL_STREET_1_, POSTAL_PERMISSION_STATUS_, MOBILE_NUMBER_, or MOBILE_COUNTRY_, MOBILE_PERMISSION_STATUS), the system must process those one at a time. Additionally, if you choose to set a profile field to the current system time, the system must perform a calculation.

  In either case, these options will take longer to process than, say, setting a profile field to a fixed number.

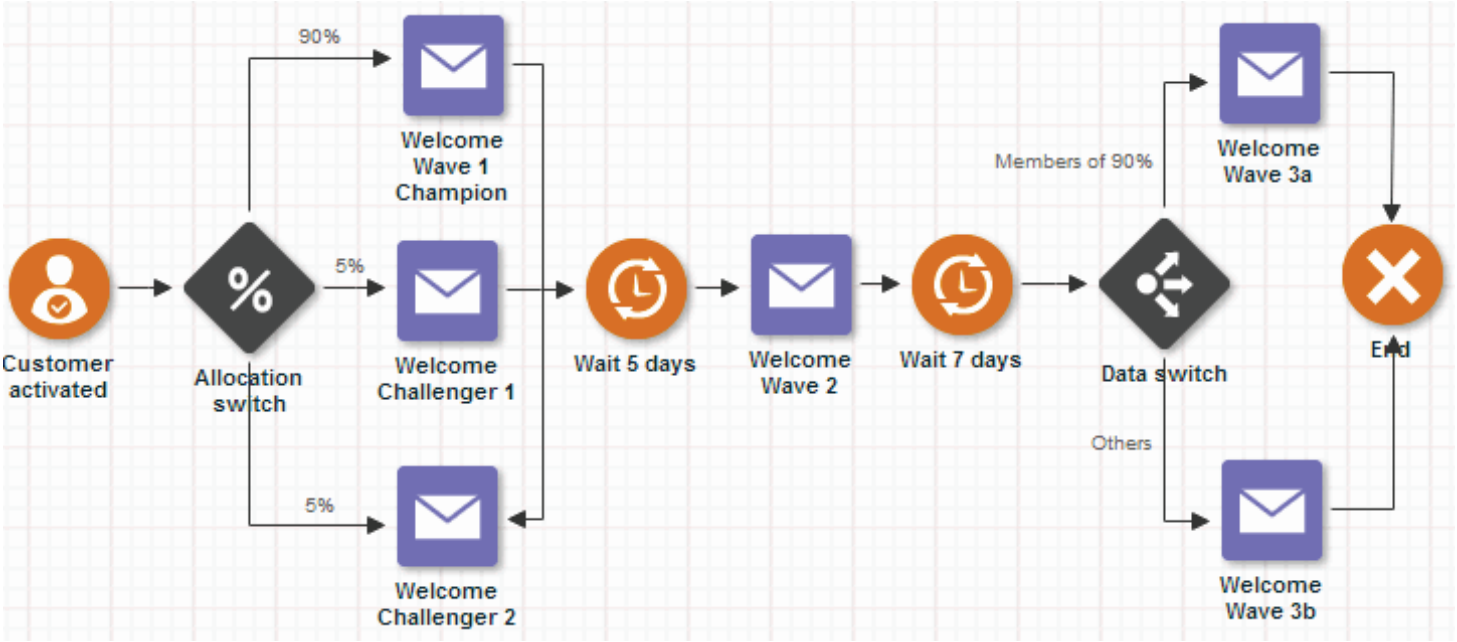
- Target Timer

  When you set a Target Timer to release its Program Entries relative to a date stored in the profile table, the system must calculate the release time independently for each Program Entry.

We recommend that you use these features sparingly and consider the size of your audience before implementing either one. Please contact Responsys Support for further guidance on these features.

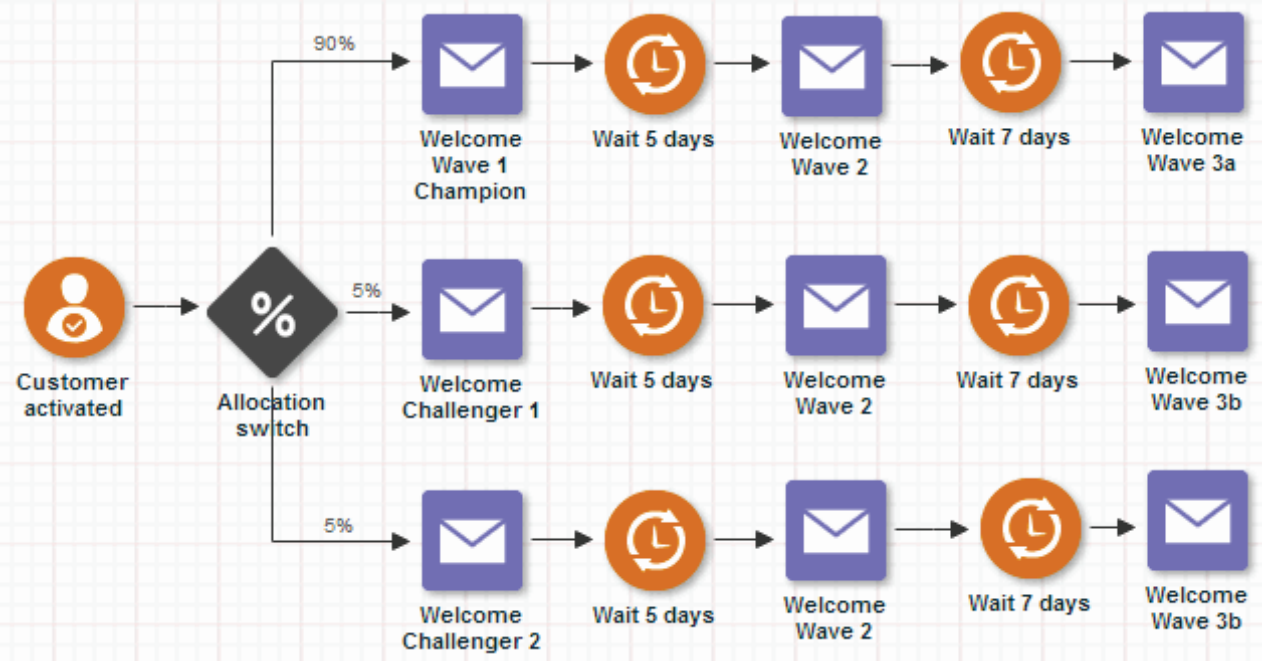
Managing Multiple Program Paths

In some cases, you might need to split your audience, rejoin them, and split them a second time, as shown in the following illustration.



To properly split your audience in the Data switch shown above, you need to know which path each customer took coming out of the Allocation switch. One option is to use Set Data to indicate what path was taken, and then use those values as criteria in the subsequent Data switch. If you feel you must do this, rather than creating a new profile column and setting the value in the profile, consider defining a program entry variable in Program Settings and setting that value for the program entry variable. This method stores the value only as long as the customer is in the program and is much more efficient than writing to the profile table.

An even better approach is to keep the paths separate and not rejoin them. This method eliminates the need to set data or query it later, improving the performance of your programs.



*NOTE: This **IS** a best practice.*

Guiding Design Principles

Program is optimized for highly individualized campaign sequences. Some aspects of the system behave differently from similar features used in bulk launches. Small gains in efficiency can pay big dividends in performance.

Be specific

Your chances of success are much better if you send tailored messages to a specific audience rather than a general message to a large audience.

It is better to have many programs, each speaking to a specific audience, than to have one program that attempts to speak to your entire audience.

- Develop campaign sequences targeted at small, profitable segments.

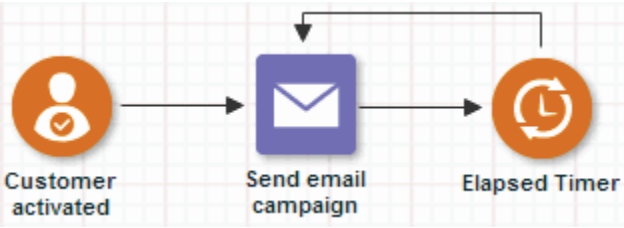
Do not create long programs

Few marketers feel good about marketing to an audience using data that is a year old; preferences change, economics change, etc. Similarly, a predefined sequence of messages spread out over a long period of time eventually gets stale.

- Build programs that have a reasonable duration.
- Do not build programs that keep a customer in the program for months.

Have a goal

Most marketers would agree that sending the same messages repeatedly to a customer segment will yield diminishing returns. It's best to keep the message fresh. That's why we recommend that you create programs that have a start and end date. That means avoiding programs that recycle the audience through the same message sequence over and over with no exit path.



*This is **NOT** a best practice.*

If you must use Program for recurring messages, use a scheduled filter that runs at an appropriate interval, send the appropriate messages, and then release the customer from the program.

*This **IS** a best practice.*

- Create programs that start and end.
- Do not create recurring mailings with no exit path.

Be relevant

While there is no system limitation on how many paths you can include in a program, many alternate paths might mean whether the program is truly targeted or merely a catchall.

- Develop each campaign sequence with a clear and focused purpose.
- Do not build a program that attempts to address many different audiences.

Reporting

The Analyze tab displays the volumes of people that have traversed through your program paths and elements relative to a user-defined time window. However, except for campaigns associated with Performance switches, the standard metrics for the campaigns used by a program are available only through campaign-specific reports in Insight.

If you want to associate several campaigns used by a single program, we recommend that you define a marketing strategy or marketing program properties for each program through your account settings and associate the marketing strategy or marketing program characterization with each of the campaigns in the program. Insight then allows you to filter reports down to

specific campaigns that are part of one program using these two properties as filtering criteria. You can quickly create and save a report that maps only to a specific program's interactions.

Audience Size

Program is certified with audiences up to 5 million. If you plan to send more than 5 million customers through a scheduled filter or triggered from a data load, please contact Responsys, so we can ensure that your program will perform as desired.