Oracle® Communications Network Charging and Control

Promotion Manager User's Guide

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Contents

About This Document

Scope

The scope of this document includes all functionality a user must know in order to effectively operate the Promotion Manager feature. It does not include detailed design of the service.

Audience

This guide is written primarily for administrators who are responsible for creating and maintaining promotions. However, the overview sections of the document are useful to anyone requiring an introduction.

Prerequisites

Although there are no prerequisites for using this guide, familiarity with the target platform would be an advantage.

This manual describes system tasks that should only be carried out by suitably trained operators.

Related Documents

The following documents are related to this document:

- *Oracle Communications Network Charging and Control Advanced Control Services User's Guide*
- *Oracle Communications Network Charging and Control Charging Control Services Technical Guide*
- *Oracle Communications Network Charging and Control Charging Control Services User's Guide*
- *Oracle Communications Network Charging and Control Control Plan Editor User's Guide*
- *Oracle Communications Network Charging and Control Feature Nodes Reference Guide*
- *Oracle Communications Network Charging and Control Service Management System User's Guide*

Document Conventions

Typographical Conventions

The following terms and typographical conventions are used in the Oracle Communications Network Charging and Control (NCC) documentation.

Formatting Convention	Type of Information
Special Bold	Items you must select, such as names of tabs. Names of database tables and fields.
Italics	Name of a document, chapter, topic or other publication. Emphasis within text.
Button	The name of a button to click or a key to press. **Example:** To close the window, either click **Close**, or press **Esc**.
Key+Key	Key combinations for which the user must press and hold down one key and then press another. Example: **Ctrl+P** or **Alt+F4**.
`Monospace`	Examples of code or standard output.
`Monospace Bold`	Text that you must enter.
variable	Used to indicate variables or text that should be replaced with an actual value.
menu option > menu option >	Used to indicate the cascading menu option to be selected. Example: **Operator Functions > Report Functions**
hypertext link	Used to indicate a hypertext link.

Specialized terms and acronyms are defined in the glossary at the end of this guide.

Chapter 1

Promotion Manager

Overview

Introduction

This chapter explains the general features of the Oracle Communications Network Charging and Control Promotion Manager and how to configure Promotions.

In this chapter

This chapter contains the following topics.

Promotions

Introduction

The Promotion Manager license allows the operator to:

- Define counters which track a subscriber's usage or expenditure within a configured promotion period
- Reward the subscriber based on their expenditure, either in real time or at the end of the period
- Reward the subscriber with bonuses when they recharge
- Reward the subscriber when they activate their wallet

Tracking counters

Each counter is linked to a service (such as voice calls or SMS) and a configured rating scenario consisting of the following:

- A corresponding balance type
- Period of promotion (daily, weekly, monthly or yearly)
- The amount of activity (cash, time or number of events) which will trigger the reward

When each service and rating scenario is defined, the counters which should be updated are chosen. This gives the operator full control over which services will be used as part of the promotion.

Promotion eligibility

All subscribers that share a wallet are considered eligible for a promotion, when any one of them triggers the promotion.

Eligible subscribers are given a Tariff or Credit reward.

- With a tariff reward, subscribers are automatically moved between product types depending on their level of expenditure. Thus, a subscriber with high spending can be rewarded by being moved to a different product type which may offer cheaper tariffs. Alternatively, a low spending subscriber could be penalized by being moved to a product type which has a more expensive rate plan.
- With a credit reward, a pre-configured credit amount may be awarded to the subscriber based his expenditure pattern. For example, if the subscriber spent 10 Euros last month on calling they might receive 5 Euros of national talk time credit to be used within a specific period.

Eligible subscribers are sent SMS or DAP notifications when the promotion is applied.

Promotion calculation

The promotion reward is calculated using one of two ways:

- At the end of the promotion period when the counter expires
- In real time, when the session during which the triggering event occurs

This allows the telco to target short term usage campaigns or plan longer term strategies in cases where the promotion was spread across a month or a year.

Note: The SMS screens allow configuring promotions that apply a percentage of the triggering balance type (for example, SMS) to a different balance (for example, Cash). However, in practice, promotions should be applied to the same balance type as the triggering balance.

If mismatched promotion balances are configured the conversion will be used as follows:

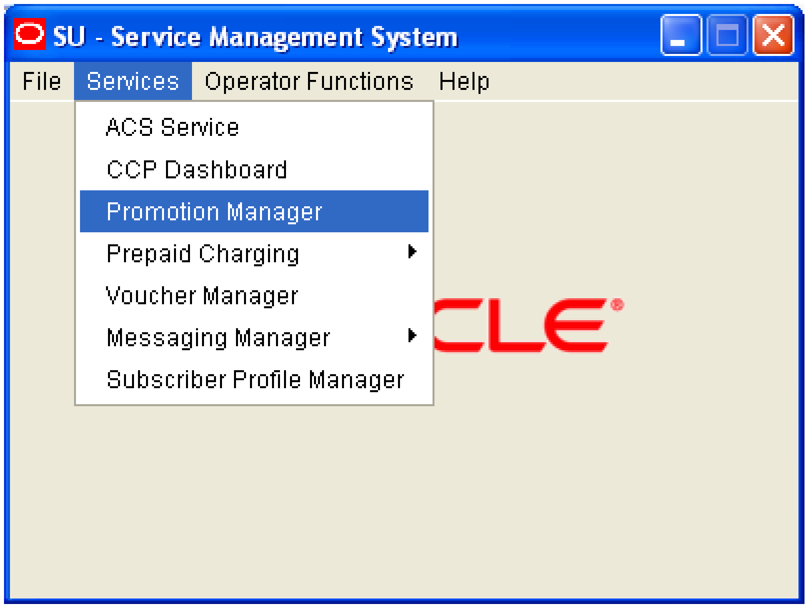
- Cash to Units as one currency minor unit (for example, cent) to one unit
- Cash to Time as one currency minor unit to 1/hundredth of a second

Promotion Manager Screen

Accessing the Promotion Manager screen

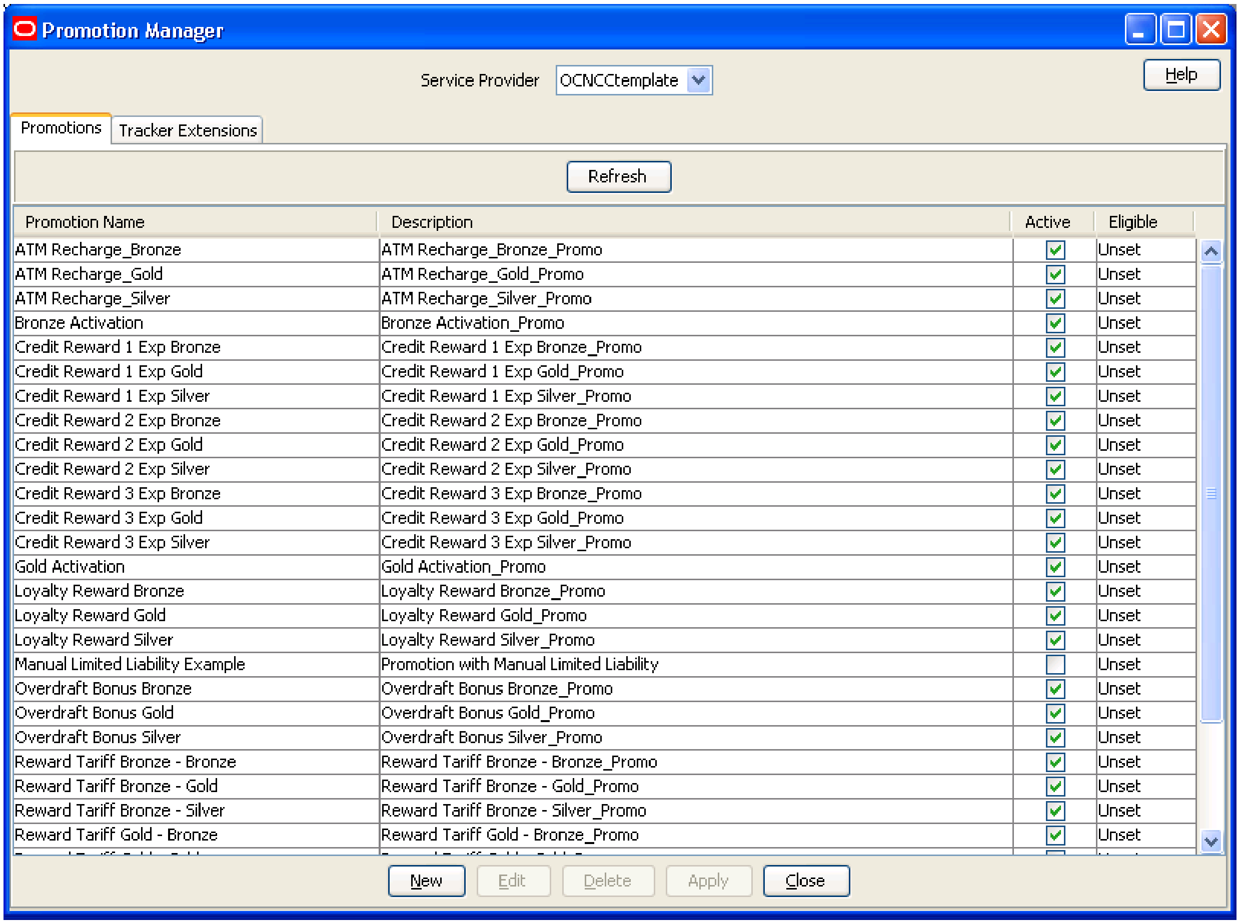
Follow these steps to open the Promotion Manager screen.

Step	Action
1	Select the **Services** menu from the SMS main screen.

Step	Action
	
2	Select **Promotion Manager.** **Result:** You see the Promotion Manager screen.

Promotion Manager screen

Here is an example Promotion Manager screen. In the **Promotions** tab, there is a grid listing the promotions defined for the currently selected Service Provider.



Promotions tab columns

This table describes the content of each column in the **Promotions** tab on the Promotion Manager screen.

Column	Description
Promotion Name	Name of the Promotion.
Description	A short description of the promotion.
Active	Indicates if the promotion is currently active. Selecting the check box will change the Active or non-active status of a promotion. See *Promotions buttons* (on page 4) to apply changes.
Eligible	Indicates the current global limited liability status. See *Details tab fields* (on page 10) for more information.

Promotions buttons

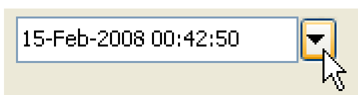
This table describes the function of each button.

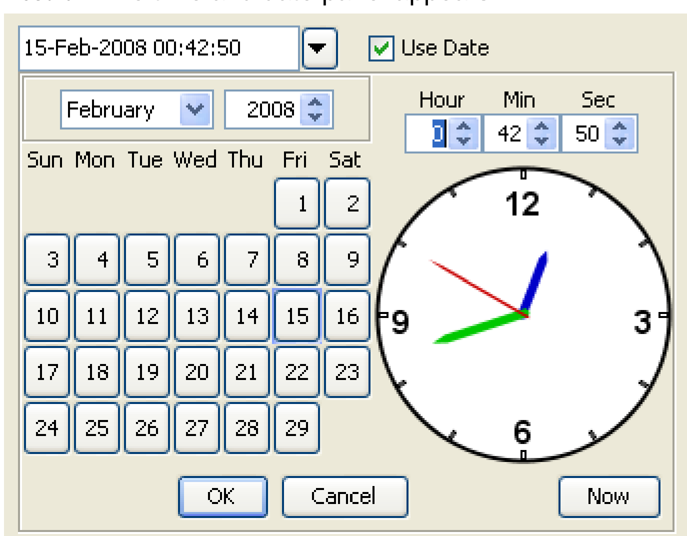
Button	Description
New	Opens the New Promotion screen used to add a new promotion.

Button	Description
Edit	Opens the Edit Promotion used to modify the selected promotion record.
Delete	Displays the Delete Confirmation prompt used to delete the selected promotion record.
Apply	Saves any changes made to the record on the current screen to the database. For example, changing the status of the **Active** check box will change the Active or non-active status of a promotion.
Close	Closes the current screen and returns you to the previous screen in the screen hierarchy. **Note:** Any changes that have been made on-screen will not be saved (unless **Apply** has been clicked previously).

Time and Date panels

Follow these steps to set a time and date field using a time and date panel.

<table>
<tr><th>Step</th><th>Action</th></tr>
<tr><td>1</td><td>At the end of the time and date field you want to define, click the down arrow.


Result: The time and date panel appears.

</td></tr>
<tr><td>2</td><td>To quickly set the date to today and the time to the current time, click Now.
Otherwise, set the date and time as described in steps 3-5.</td></tr>
<tr><td>3</td><td>Set the month and year for the date using the month and year selection boxes.</td></tr>
<tr><td>4</td><td>Click on the number for the day of the month.</td></tr>
<tr><td>5</td><td>Set the time using the Hour, Min and Sec selection boxes.
Tip: To set the time using the clock face, click and drag the clock hands to the required time.</td></tr>
<tr><td>6</td><td>Click OK.</td></tr>
</table>

Configuring Promotions

Promotion options

Here is the list of Promotion options that must be set up for configuring a promotion. They are available using the New Promotion and the Edit Promotion screens.

- *Details* (on page 9)
- *Events* (on page 12)
- *MSISDN Ranges* (on page 15)
- *Segments* (on page 19)
- *Rewards* (on page 28)
- *Notification* (on page 35)

Adding a new promotion

Follow these steps to add a new promotion.

Step	Action
1	In the Promotion Manager screen, select the service provider from the drop down box. **Result:** The table below displays the promotions currently defined for this service provider.
2	Click **New**. **Result:** You see the New Promotion screen, with the **Details** (on page 9) tab selected.
3	Fill in the fields, as described in the *Details tab fields* (on page 10).
4	Configure the other tabs in the following order: • *Segments* (on page 19) • *Rewards* (on page 28) • *Notification* (on page 35)
5	Click **Save**. **Note:** After saving a promotion, you can configure MSISDN black lists and exceptions lists for the promotion. See *Configuring MSISDN ranges black lists and exceptions lists* (on page 18)

Editing a promotion

Follow these steps to edit an existing promotion.

Step	Action
1	In the Promotion Manager screen, select the service provider from the drop down box. **Result:** The table below displays the promotions currently defined for this service provider.
2	Select the promotion to edit in the grid, and click **Edit**. **Result:** You see the Edit Promotion screen, with the **Details** (on page 9) tab selected.
3	Edit the fields to reflect the changes you need to make. For more information about the fields on this screen, see *Details tab fields* (on page 10).
4	Edit fields on the other tabs, if needed:

Step	Action
	• *Events* (on page 12) • *MSISDN Ranges* (on page 15) • *Segments* (on page 19) • *Rewards* (on page 28) • *Notification* (on page 35)
5	Click **Save**.

Deleting a promotion

Follow these steps to delete a record from the Promotion Manager screen.

Step	Action
1	In the Promotion Manager screen, select the service provider from the drop down box. **Result:** The table below displays the promotions currently defined for this service provider.
2	Select the promotion to delete in the grid and click **Delete**. **Result:** You see the Delete Confirmation prompt.
3	Click **OK**. **Result:** The field is removed from the table.

Configuring legacy expiry rewards

Follow these steps to configure the equivalent of a legacy expiry reward that could previously be set up on the CCS Wallet Management screen, **Rewards** tab.

Step	Action
1	Select the following values on the **Events** (on page 12) tab: • Promotion Type: **Tracker Promotion** • Event Category: `Tracker Expiry` • Balance Type: an expenditure balance type, such as `Monthly Exp` • Balance Condition: **Balance Value** is `In Range` with the required values configured
2	Select the following values on the **Segments** (on page 19) tab: • Segment Group: `All Of` • Segment Fragment: `Product Type: In Set` and the required product type configured
3	On the **Rewards** (on page 28) tab: • Configure the required **Reward Product Type** • Select the Balance Type for the Multi-Balance record as `General Cash`
4	On the **Notification** (on page 35) tab: • Configure the required Announcement Set / Entry • Configure the required *Pre-promotion notifications* (on page 37)

Configuring legacy real-time rewards

Select the following values to configure the equivalent of a legacy Real-Time Reward that could previously be set up on the CCS Wallet Management screen, **Rewards** tab.

Select the following values on the **Events** (on page 12) tab:

- Promotion Type: **Tracker Promotion**
- Event Category: `Tracker Threshold`.
- Balance Type: an expenditure balance type, such as `Monthly Exp`
- Balance Condition: **Balance Value** is `Threshold` with the required values configured

Configuring legacy activation credits

Follow these steps to configure the equivalent of a legacy Activation Credits that could previously be set up on the CCS Subscriber Management screen, **Product Type** tab.

Step	Action
1	Select the following values on the **Details** (on page 9) tab: • Configure the required promotion start date and/or end date
2	Select the following values on the **Events** (on page 12) tab: • Promotion Type: **Flash Promotion** • Event Category: `Wallet Activation`
3	Select the following values on the **Segments** (on page 19) tab: • Segment Group: `All Of` • Segment Fragment: `Product Type: In Set` and the required product type configured.
4	Select the following values on the **Rewards** (on page 28) tab: • Configure the Multi-Balance records with the required Credit Amounts and Expiry Dates/Offsets.

Configuring legacy recharge bonus

Follow these steps to configure the equivalent of a legacy Recharge Bonus that could previously be set up on the CCS Wallet Management screen, **Bonus Values** and **Bonus Types** tabs.

Step	Action
1	Select the following values on the **Events** (on page 12) tab: • Promotion Type: **Flash Promotion** • Event Category: `Balance Recharge` • Balance Type: a chargeable balance type, such as `General Cash`. • Channel: `Any`, or `ATM`, or `Other` (as required). • Reference: the component/reference as configured in the invoking system. • Balance Condition: **Delta Value** is `In Range` with the required values configured.
2	On the **Rewards** (on page 28) tab, configure the required Multi-Balance records with one of the following: • a *Promotional* Balance Type (as required) and a **Credit Amount** and Expiry Offset (as previously configured in the Voucher Type screen) • a *Promotional* Balance Type (as required) and a Credit Percentage with the required **Credit Percentage** value as **Of Delta** percentage type and a Balance Expiry Policy of **Do Not Modify**.

Note: As with the legacy Bonus Values, the entries in a Bonus Set must cover the full range of values from 0 to the highest End value. If there is a gap in the covered values, the Bonus Set will fail, that is, if a contiguous range is not configured, a recharge may slip through the configured range.

For Example: To create a Bonus Value which applies a 5% discount to all Voucher recharges of more than $20, you must also configure a Bonus Value which applies a 0% discount to recharges of $0 to $19.

Configuring Manual Limited Liability

You can define a “manually limited liability” promotion, where the limit is enforced by the presence of a separate unit balance in the subscriber’s wallet. As it is a manually managed limit, there is no automatic renewal of the limit, nor is there any global maximum specified for the limit.

A non-recurring limited promotion eligibility may be used to span multiple promotion definitions. Existing limited liability bonuses may be migrated into the Promotion Manager framework.

Here is the process for manual limited liability promotions:

1. Operator defines a limited liability balance type for eligibility to a promotion.
2. Operator can associate a limited liability balance type with multiple promotions.
3. Subscriber becomes eligible for 1 or more promotions and limited liability balance type.
4. Promotion applied and the balance type is decremented.
5. Promotion will only be applied if the balance type value is greater than 0.

Once the liability limit balance has been consumed or the expiration date has passed, the promotion eligibility will expire and not be reinstated automatically.

The balance type may be associated with a wallet through a recharge definition, BPL etc, but shall not be automatically regenerated.

The liability balance will continue to be decremented until all promotion definitions are satisfied or the balance reaches 0.

Details

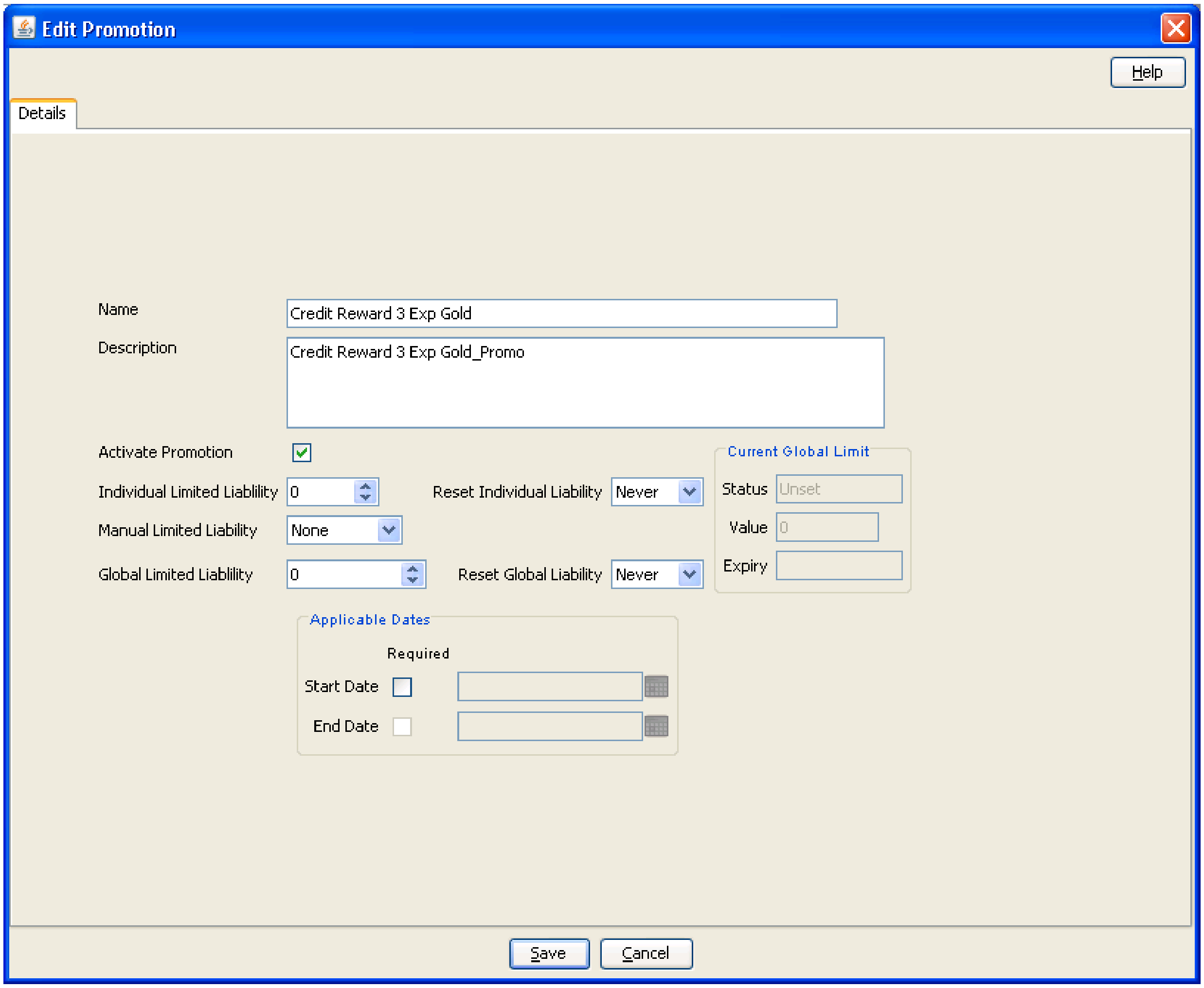
Introduction

The **Details** tab allows you to temporarily activate or deactivate a promotion. In addition, you can define the following configuration for a promotion:

- A start and end date can be defined for all types of promotions
- Individual limited liability values for a reward
- Global limited liability values for a reward

Details tab screen

Here is an example **Details** tab on a Promotion screen of Promotion Manager.



Details tab fields

This table describes the function of each field.

Field	Description
Name	A unique name for the promotion. This field is mandatory.
Description	A short description for the new promotion.
Activate Promotion	Select this check box to allow a promotion to be activated. **Note:** Any new promotions created are by default in the inactive state and must be activated to take effect. This may be overridden on a per promotion basis, if required.
Individual Limited Liability	The number of times a reward can be applied to an individual wallet. This field is optional.
Reset Individual Liability	How often the individual liability limit is reset. Select one of: • Never • Every Day

Field	Description
	• Every Week • Every Month • Every Year This field is optional.
Manual Limited Liability	Select a Manual Limited Liability balance type. The list is configured on the Wallet Management, **Balance Types** tab. **Note:** This field is available only if permission is set in a template on the SMS **Template Creation** tab. Refer to *SMS User's Guide*.
Global Limited Liability	The number of times a reward can be applied across all subscribers for the current service provider. This field is optional.
Reset Global Liability	How often the global liability limit is reset. Select one of: • Never • Every Day • Every Week • Every Month • Every Year This field is optional.
Current Global Limit	Displays the current global limited liability **Status**, **Value** and **Expiry** on the Edit Promotion screen. The possible values for Status are defined as: • Unset: Zero limit configured • Eligible: Configured limit above current value • Not Eligible: Configured limit equal to or below current value
Applicable Dates	The **Start** and **End** dates and time for the promotion to apply. This is an optional field. **Note:** The promotion will be applied only if the current date is within the defined Start and End date and time.

Adding details

Follow these steps to configure basic Details for a new promotion.

Step	Action
1	Follow the steps listed in *Adding a new promotion* (on page 6) to display the New Promotion screen. **Result:** You see the New Promotion screen, with the **Details** tab selected.
2	Enter data in the fields to configure this record. For more information about the fields on this screen, see *Details tab fields* (on page 10).
3	Go to *Events* (on page 12) tab to continue configuring the new Promotion.

Editing details

Follow these steps to edit the Details information of an existing promotion.

Step	Action
1	Follow the steps listed in *Editing a promotion* (on page 6) to display the **Ed**it Promotion screen.
2	Select the **Details** tab.
	Result: You see the Details information configured for the selected promotion.
3	Edit the fields with the required changes.
	For more information about the fields on this screen, see *Details tab fields* (on page 10).
4	Click **Save**.

Events

Introduction

The **Events** tab allows you to configure details for the event that triggers the promotion. Different event categories are available for Flash and Tracker Promotions.

Flash promotion

This type of promotion is applied when a selected triggering event occurs.

The following events can trigger flash promotions:

Events	Promotion triggered when a...
Balance Charge	Specific balance value changes on a prepaid or post-paid wallet and when the balance conditions (if any) have been met
Balance Recharge	Specific balance value changes on a prepaid wallet, that is, when the balance is recharged, and when the balance conditions (if any) have been met
Balance Expiry	Specific balance expires and when the conditions (if any) have been met
Wallet Activation	Subscriber’s wallet changes state from `Pre-Use` to `Active`
Wallet Expiry	Subscriber’s wallet changes from any state to `Terminated`

Tracker promotion

This promotion is triggered when the configured tracker event occurs. The following events can trigger tracker promotions:

- Tracker Thresholds: promotion applies when threshold on selected balance type is reached.
- Tracker Expiry: promotion applied when tracker balance expires.

A tracker can be associated to a promotion. For more information on how operators can use trackers during promotions, see *Promotions* (on page 1).

Event conditions

The following configured event condition elements are all evaluated together; a promotion is only triggered if all event condition elements are satisfied:

- Bearer
- Channel

- Reference
- Balance Conditions

When an event condition is configured, the above fields are combined to create an event condition and the promotion is only triggered if the incoming event matches all of the above parts.

For Example: The following elements form a single event condition of all elements must match for the promotion to apply:

```
bal value: 10, type: value, operator: >, bearer: voice, channel: ATM, reference REF1
```

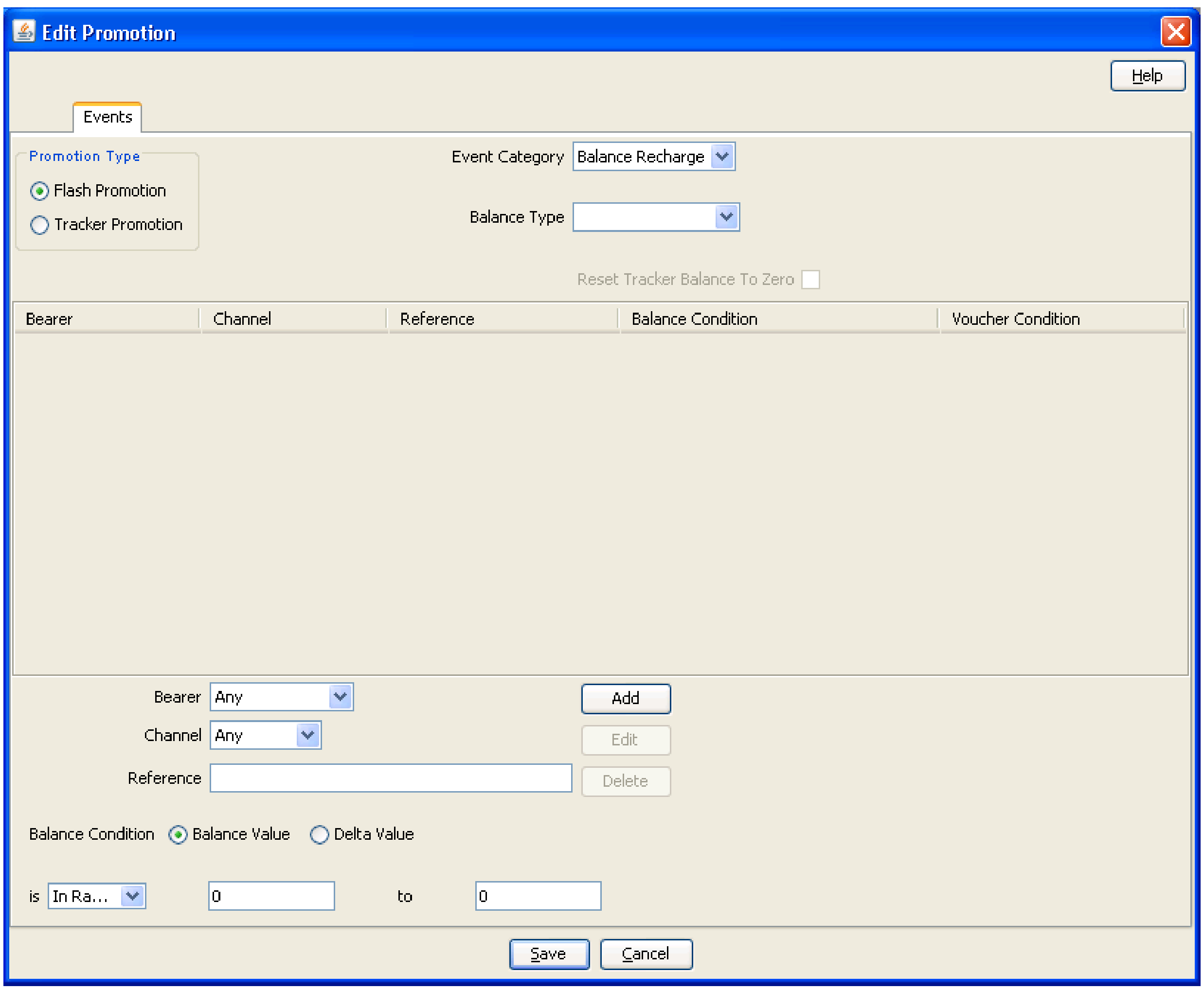
A promotion can have multiple even conditions associated with it. However, each separate event condition for a promotion is considered separately when the promotion is triggered. The promotion is applied if at least one of the configured event conditions matches.

For Example: The following are separate event conditions, and any one may match for the promotion to apply:

```
bal value: 10, type: value, operator: >, bearer: voice, channel: ATM, reference REF1
bal value: 10, type: value, operator: >, bearer: SMS, channel: ATM, reference REF1
bal value: 10, type: value, operator: >, bearer: voice, channel: ATM, reference REF2
```

Events tab screen

Here is an example **Events** tab on a Promotion screen of Promotion Manager.



Events tab fields

This table describes the function of each field.

Field	Description
Promotion Type	Indicates if the promotion is triggered by balance and wallet events, or tracker events. Select one of the following: • Flash Promotion • Tracker Promotion This field is mandatory.
Event Category	The event that will trigger the promotion. This field is mandatory. **Note:** Event category options are based on the Promotion Type selected.
Reset Tracker Balance to Zero	Select this check box to control whether the balance type of the expenditure tracker is reset to zero when the promotion is applied (after the segment has been evaluated and before the reward has been applied). **Note:** This is an optional field, available for a Tracker Promotion where the Event Category selected is `Tracker Threshold`. The tracker balance is reset automatically when it expires.
Balance Type	The Balance Type to which the promotion applies. **Note:** Balance Type options are based on the Promotion Type and Event Category selected. For Tracker Promotions, only Expenditure Balances can be selected. For Flash Promotions, only Chargeable Balances can be selected.
Bearer	The bearer for the Balance Recharge event. This indicates the type of service used for performing the recharge. **Note:** This is an optional field, available only for a Flash Promotion where Event Category selected is B`alance Recharge`.
Channel	The channel for the Balance Recharge event. This indicates the mechanism used for performing the recharge. **Note:** This is an optional field, available only for a Flash Promotion where Balance Type selected is `Balance Recharge`.
Reference	The reference text that may be provided by the caller of the web service. You can optionally use the specified reference to restrict the promotion for eligibility. Promotions will only be applied if the channel and reference, along with any other filter criteria, are satisfied. You can include the * and ? wild card characters for regular expressions in the **Reference** field to apply rewards to subscribers based on the matching reference prefix. For example, if you specify **`MPOS_V*?`** in the **Reference** field, then rewards sent with the reference `MPOS_V1`, or `MPOS_V2` are applied. **Note:** This field is not available if the Channel selected is `Voucher`.
Balance Condition	This is a combination of fields used to narrow down events by changes to balance or delta values, for example. The promotion will only apply to events that satisfy the specified balance or delta conditions. • Balance Value: Indicates the current balance value after applying the event.

Field	Description
	• Delta Value: Indicates the value by which event will have changed the current balance. **Note:** This field is optional. It is available for Balance Charge, Balance Recharge and Tracker Threshold events.
Voucher Condition	Select the voucher type from the drop down list. **Note:** This field is only visible if the Channel selected is `Voucher`.

Note: To understand how event conditions work, see *Event conditions* (on page 12).

Adding events

Follow these steps to configure Events details for a new promotion.

Step	Action
1	Follow the steps listed in *Adding a new promotion* (on page 6) to display the New Promotion screen.
2	On the New Promotion screen, select the **Events** tab. **Result:** You see the Event configuration options.
3	Enter data in the fields to configure this record. For more information about the fields on this screen, see *Events tab fields* (on page 14).
4	Click **Add**, or **Edit**, or **Delete** to apply the configured event to the promotion.
5	Go to **MSISDN Ranges** (on page 15) tab to continue configuring the new Promotion.

Editing events

Follow these steps to edit the Events information of an existing promotion.

Step	Action
1	Follow the steps listed in *Editing a promotion* (on page 6) to display the Edit Promotion screen.
2	On the Edit Promotion screen, select the **Events** tab. **Result:** You see the Events details configured for the selected promotion.
3	Edit the fields with the required changes. For more information about the fields on this screen, see *Events tab fields* (on page 14).
4	Click **Add** to apply the configured changes to the promotion.
5	Click **Save**.

MSISDN Ranges

Introduction

The **MSISDN Ranges** tab allows you to control subscriber eligibility for a promotion:

- The black list specifies the MSISDNs that are not allowed to receive the promotion.
- The exceptions list specifies the MSISDNs in the black list that are allowed to receive the promotion.

Each promotion may have a set of black and exceptions list entries and each black or exceptions list entry relates to a single MSISDN or a range of MSISDNs.

You can search for a range of MSISDNs that you can then add to, or remove from, a black list or an exceptions list. See *Searching for MSISDNs and MSISDN Range* for more information.

Note: Black lists and exceptions lists can be imported and exported from the command line. See *CCS Technical Guide* for more information.

Processing logic

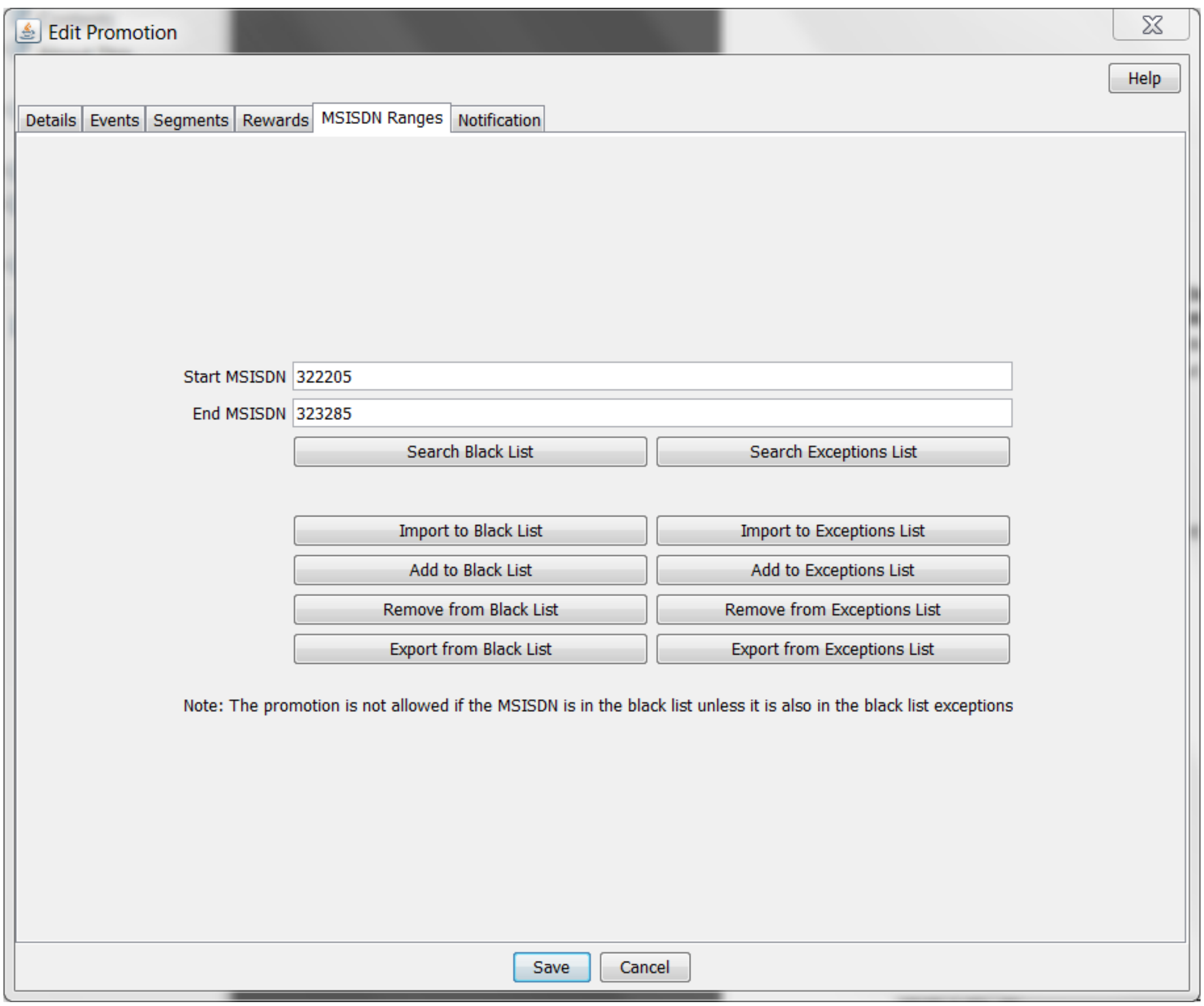
When the promotion is applied, the subscriber's MSISDN is checked against the list entries.

The following list processing logic is used.

1. If the MSISDN is not in the black list, the promotion is allowed.
2. If the MSISDN is in the black list, the promotion is not allowed.
3. If the MSISDN is in the exceptions list, promotion is allowed.

MSISDN Ranges tab screen

Here is an example **MSISDN Ranges** tab in the Promotion Manager, Edit Promotion screen.



MSISDN Ranges fields

The following table describes the function of each field or button.

Field or Button	Description
Start MSISDN	Enter a single MSISDN or enter the start number of a range of MSISDNs to add, remove, or search for in either list.
End MSISDN	Enter the end number of a range of MSISDNs to add, remove, or search for in either list.
Search Black List	Displays the search result dialog box of the black lists for the single MSISDN or MSISDN range.
Search Exceptions List	Displays the search result dialog box of the exceptions list for the single MSISDN or MSISDN range.
Import to Black List	Displays the **Import to Black List** dialog box that allows you to select the storage directory file and configuration file to import that contains the stored list of MSISDNs. **Note:** Importing a black list will overwrite the existing black list for the promotion in the database.
Import to Exceptions List	Displays the **Import Exceptions List** dialog box that allows you to select the storage directory file and configuration file to import that contains the stored list of MSISDNs. **Note:** Importing an exceptions list will overwrite the existing exceptions list for the promotion in the database.
Add to Black List	Displays the **Add To Black List** dialog box for adding the MSISDNs to the black list.
Add to Exceptions List	Displays the **Add To Exceptions List** dialog box for adding the MSISDNs to the exceptions list.
Remove from Black List	Deletes the selected MSISDNs from the black list.
Remove from Exceptions List	Deletes the selected MSISDNs from the exceptions list.
Export from Black List	Displays the **Export Black List** dialog box to export a black list configuration to an external text file. **Note:** You will be prompted to enter a file name and location on any local or mapped drive on the machine to save the current black list.
Export from Exceptions List	Displays the **Export Exceptions** dialog box to export an exceptions list configuration to an external text file. **Note:** You will be prompted to enter a file name and location on any local or mapped drive on the machine to save the current black list exceptions.

Note: Materialized View CCS_PMX_MSISDN_WHITE_BLACK_MV is used for blocklist and allowlist. By default, refresh is set to ON DEMAND (when refresh is manually triggered in the SMS, BE, and SCP, materialized view will have the latest data).

For changing materialized view refresh, run the following SQL commands in SMS, BE, and SCP DB.

For changing to ON COMMIT, run the following SQL command:

```
alter materialized view CCS_PMX_MSISDN_WHITE_BLACK_MV refresh FAST ON COMMIT
WITH ROWID;
```

To schedule refresh to one hour, run the following SQL command:

```
alter materialized view CCS_PMX_MSISDN_WHITE_BLACK_MV refresh on demand
start with sysdate+0 NEXT sysdate + 1/24;
```

Searching for MSISDNs or an MSISDN Range

You can search for an MSISDN or a range of MSISDNs in either the black list or the exceptions list. If no results are returned, you can add the specified MSISDN or range of MSISDNs to the list. If the search finds the MSISDNs, you can remove them from the lists.

Follow these steps to search for MSISDNs or a range of MSISDNs.

Step	Action
1	Follow the steps listed in *Editing a promotion* (on page 6) to display the **Edit Promotion** screen.
2	On the **Edit Promotion** screen, select the **MSISDN Ranges** tab.
3	In the **Start MSISDN** field, enter the subscriber's MSISDN data to search for a particular MSISDN. For a range of MSISDNs, enter the data in the **Start MSISDN** and **End MSISDN** fields.
4	Click **Search Black List** or **Search Exceptions List**.
	Result: The search result dialog box appears for the MSISDN or the MSISDN range. The status field displays whether the MSISDNs are already defined in the list, and their status. You can perform the following based on the search result: • If the MSISDN or a range of MSISDNs is undefined, click **Add to List** to add the MSISDNs to the black list or exceptions list. • If the MSISDN or a range of MSISDNs is defined, click **Remove from List** to remove the MSISDNs from the black list or exceptions list. • If the range of MSISDNs are defined, click **Remove whole range from list** to remove the range of MSISDN from the black list or exceptions list. • Click **Cancel** to close the search results dialog box without updating the list.

Configuring MSISDN ranges black lists and exceptions lists

Follow these steps to configure MSISDN ranges black lists and exceptions lists for an existing promotion.

Step	Action
1	Follow the steps listed in *Editing a promotion* (on page 6) to display the Edit Promotion screen.
2	On the Edit Promotion screen, select the **MSISDN Ranges** tab.
	Result: You see the MSISDN range configuration options.
3	Enter data in the fields to configure this record.
	For information about the fields on this screen, see *MSISDN Ranges fields* (on page 17).
4	Click **Save**.

Segments

Introduction

The **Segment** tab is used to graphically configure complex conditions and segment equations for a promotion. This segmentation is displayed in the form of a tree structure, called Promotion Expression.

The tab is divided into two main areas:

- Toolbar containing Node icons
- Control area for configuring the Promotion expression

The segment expression is made up of promotion segments or fragments and logic groupings which are represented in the toolbar as icons. You can select these icons and place them into the control area as nodes to create a tree hierarchy that forms a complex Promotion Expression. Multiple segment fragments can be configured and a combination of logic groupings can be used to build sub-expressions.

Promotion segmentation

Each of the following promotion segments or segment fragments must be set up as nodes on the Promotion Expression tree before they can be configured:

- Product Type
- Wallet State
- Wallet Date (Activation, Expiry)
- Balance Value
- SPM Field

Notes:

- To set up the nodes and configure the Promotion Expression tree, see Adding segments.
- To configure the promotion segments, see *Segment fragments* (on page 22).

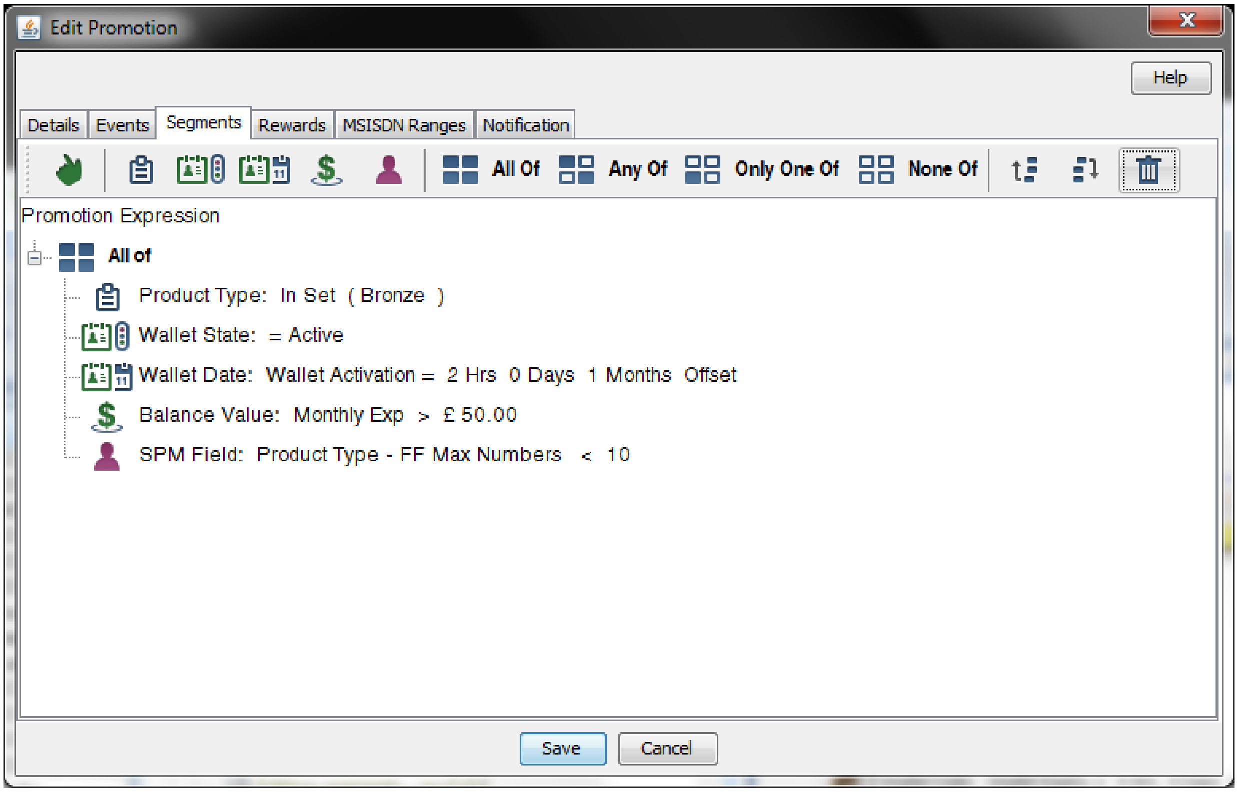
Logical groupings

The following logical groupings are available to build the Promotion Expression tree.

- All Of (AND)
- Any Of (OR)
- Only One Of (XOR)
- None Of (NOR)

Segments tab screen

The following example screen shows a configured promotion expression on the **Segments** tab in the Promotion Manager, Edit Promotion screen.



Segment button toolbar

The following table describes the functions of the toolbar buttons on the **Segments** tab.

Button	Function
Clear Pointer	Use to de-select the current icon selected and return the mouse cursor to a normal pointer.
Product Type	Represents the Product Type node which configures a set of product types eligible for the promotion.
Wallet State	Represents the Wallet State node that allows specific wallet states to be selected for the promotion.
Wallet Date	Represents the Wallet Date node that configures wallet activation or expiry dates for the promotion.
Balance Value	Represents the Balance Value node that allows a specific balance type to be selected for the promotion.
SPM Field	Represents the SPM Field node that allows any existing Profile Details (Profile Tag) entry to be configured for the promotion.
All Of	Logical grouping node indicating that all grouped entries must be true for the promotion to apply.
Any Of	Logical grouping node indicating that the promotion will apply if any of the grouped entries is true.

Button	Function
Only One Of	Logical grouping node indicating that the promotion will apply if only one of the grouped entries is true.
All Of	Logical grouping node indicating that all grouped entries must be false for the promotion to apply.
Move Selected Node Up	Use to move a selected node up in the segment hierarchy.
Move Selected Node Down	Use to move a selected node down in the segment hierarchy.
Delete Selected Node	Use to remove a selected node from the segment tree.

Adding segments

Adding segments to build a Promotion Expression is a three-stage process:

1 Build the segment conditions, that is, the *Logical groupings* (on page 19)
2 Add segment fragments, that is, the *Promotion segmentation* (on page 19)
3 Configure the *Segment fragments* (on page 22)

Follow these steps to build a new Promotion Expression tree.

Step	Action
1	On the New Promotion screen, select the **Segments** tab. **Result:** The configuration options for segments display on the toolbar.
2	To build the Promotion Expression tree, select a logical grouping node on the toolbar. **Result:** The mouse cursor takes on the shape of the selected node.
3	Move the icon under the Promotion Expression text and click to anchor it within the control area. **Result:** The logical grouping node representing the promotion condition is now available for use.
4	To build the segment fragment, select a promotion segment node on the toolbar. **Result:** The mouse cursor takes on the shape of the selected node.
5	Move the icon under the logical grouping node and click to anchor it within the Expression tree. **Result:** The segment fragment node is now available for configuration. **Note:** To configure the selected segment fragment node, see *Segment fragments* (on page 22).
6	Repeat steps 2-6 to add multiple segment fragments or to create sub-expressions. **Tip:** You can change the position of the nodes in the segment hierarchy or delete them using the toolbar buttons.
7	Go to *Rewards* (on page 28) tab to continue configuring the new promotion.

Editing segments

Follow these steps to edit the Promotion Expression tree of an existing promotion.

Step	Action
1	Follow the steps listed in *Editing a promotion* (on page 6) to display the **Edit** Promotion screen.
2	On the Edit Promotion screen, select the **Segments** tab.
	Result: You see the Expression tree configured for the selected promotion.
3	Edit the nodes with the required changes.
	To edit the Expression tree, use the buttons on the segment toolbar.
	To configure the segment fragments, see *Segment fragments* (on page 22).
4	Click **Save**.

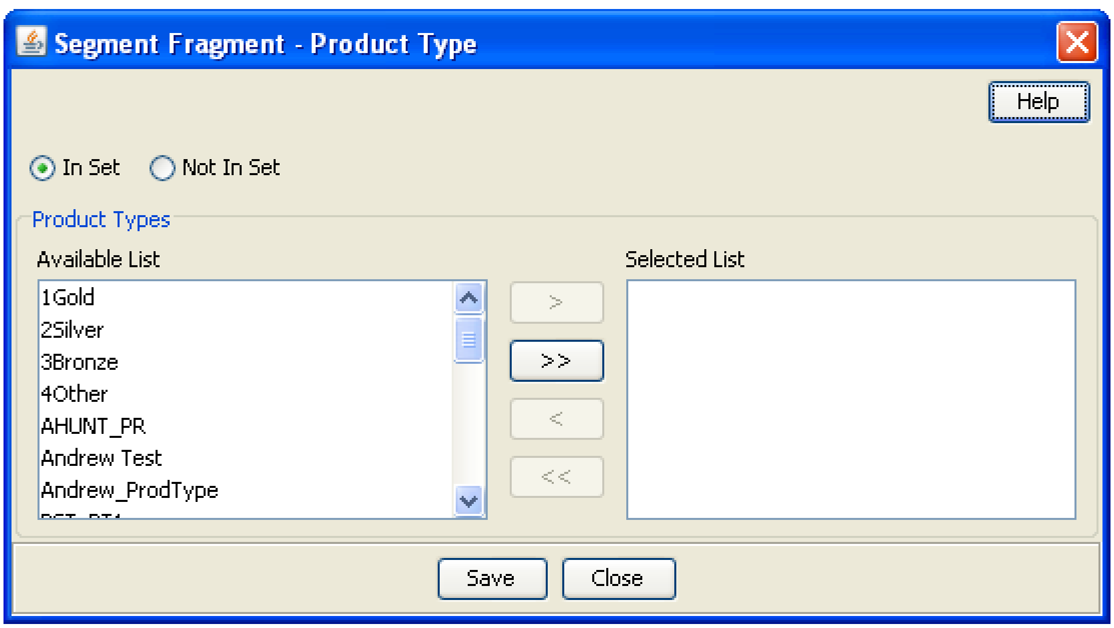
Segment fragments

This topic explains how to configure the individual segment fragment. For a complete list of available segment fragments, see *Promotion segmentation* (on page 19).

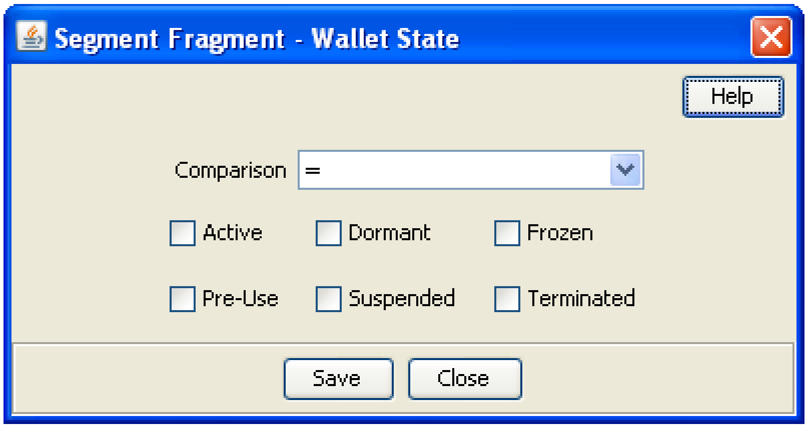
Segment configuration panels

Here are examples of the segment configuration panels.

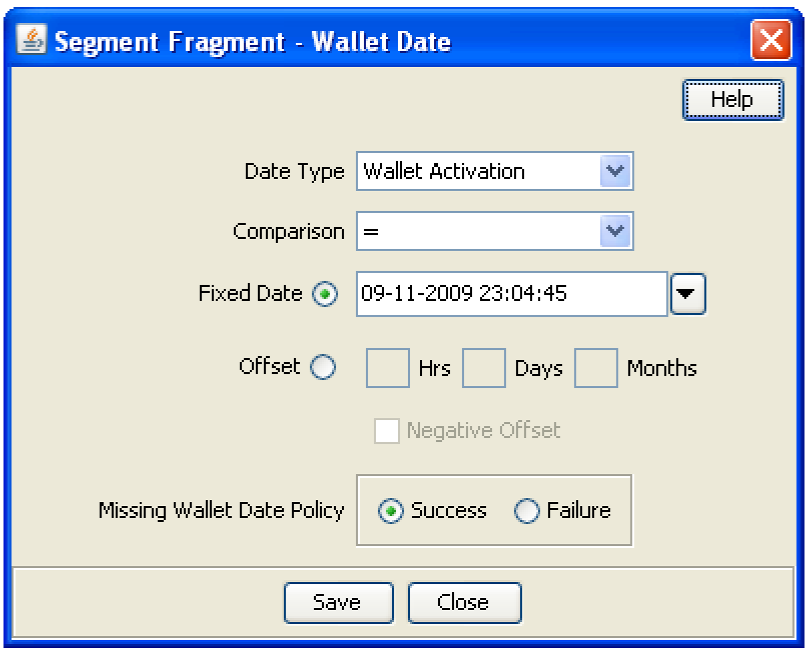
Product Type configuration



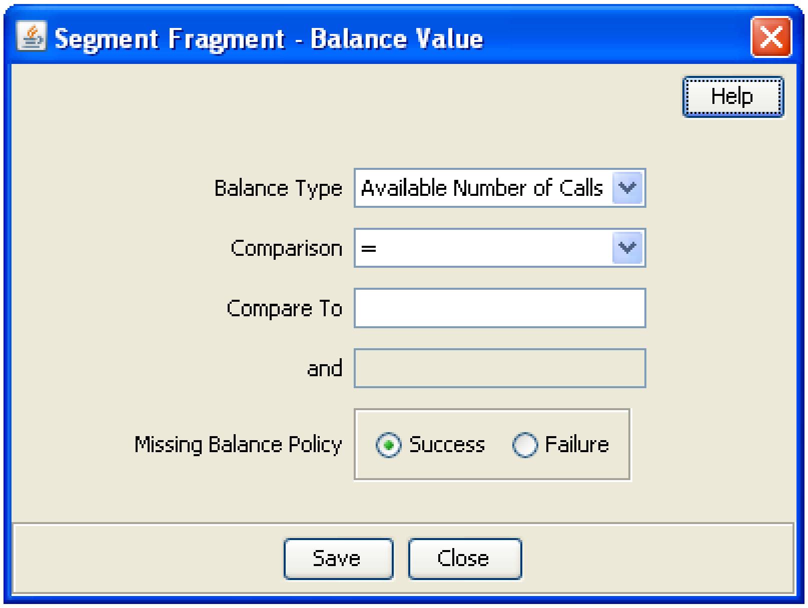
Wallet State configuration



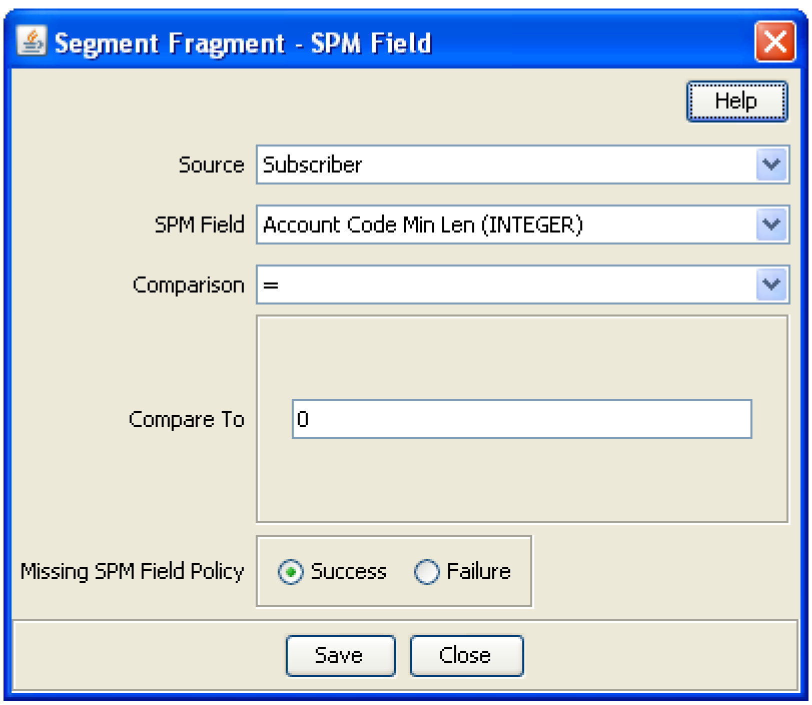
Wallet Date configuration



Balance Value configuration



SPM configuration



Configuring segment product type

The Product Type fragment allows a set of product types to be selected from all of the existing product types for the current service provider.

Follow these steps to configure a Product Type fragment.

Step	Action
1	Go to the **Segments** tab on the New Promotion or Edit Promotion screen.

Step	Action
2	Select the Product Type node placed within the control area and double-click the icon. If the node is not already available in the control area, select it from the Segments toolbar. **Result:** You see the Segment Fragment - Product Type screen.
3	Select one of: • **In Set** - subscriber will receive the promotion if using one of the selected product types • **Not In Set** - subscriber will receive the promotion if not using any of the selected product types
4	From the **Available List**, select the product type to associate with the promotion, either as In the Set or Not In the Set of defined product types.
5	Click the **>** button. **Result:** The selected product type will be moved to the **Selected List**. **Note:** To move all entries listed in Available list to Selected list, click the **>>** button.
6	To remove a product type from the Selected List, select the entry and click the **<** button. **Note:** To remove all entries listed in Selected list, click the **<<** button.
7	Click **Save**.

Note: A maximum of two product type fragments may be configured per promotion.

Configuring segment wallet state

The Wallet State fragment allows a specific wallet state/s to be selected for the promotion. The wallet state is evaluated before the triggering flash action is applied.

Follow these steps to configure a Wallet State fragment.

Step	Action
1	Go to the **Segments** tab on the New Promotion or Edit Promotion screen.
2	Select the Wallet State node placed within the control area and double-click the icon. If the node is not already available in the control area, select it from the Segments toolbar. **Result:** You see the Segment Fragment - Wallet State screen.
3	Select a **Comparison** operator from the drop-down list.
4	Select the wallet state you want to include in the promotion. **Example:** The promotion will only apply if: `Wallet State = Active`.
5	Click **Save**.

Note: A maximum of six wallet state fragments may be configured per promotion.

Configuring segment wallet date

The Wallet Date fragment allows a specific wallet date to be selected.

Follow these steps to configure a Wallet Date fragment.

Step	Action
1	Go to the **Segments** tab on the New Promotion or Edit Promotion screen.
2	Select the Wallet Date node placed within the control area and double-click the icon. If the node is not already available in the control area, select it from the Segments toolbar. **Result:** You see the Segment Fragment - Wallet Date screen.

Step	Action
3	Select the **Date Type** that will be evaluated for the promotion. Choose one of either: • Wallet Activation • Wallet Expiry
4	Select a **Comparison** operator from the drop-down list.
5	You can configure a Fixed Date or an Offset period to which the wallet date type is compared. To configure: • Fixed date, select the **Fixed Date** option and select a time and date to associate with the promotion. For more information about setting dates, see *Time and Date panels* (on page 5). • Offset period, select the **Offset** option and specify the number of hours, days or months by which the wallet date type should be extended from the current system date for comparison.
6	Tick the **Negative Offset** check box to compare the wallet date against a date in the past. **Note:** This option is only available when configuring an Offset period for the wallet date type.
7	Select a Missing Wallet Date Policy which will apply if the wallet does not have a date of the specified type. • **Success** - the fragment will be treated as a successful evaluation, in case a suitable wallet date is missing. • **Failure** - the fragment will be treated as a failed evaluation, in case a suitable wallet date is missing.
8	Click **Save**.

Note: A maximum of two wallet date fragments may be configured per promotion.

Configuring segment balance value

The Balance Value fragment allows a specific balance type to be selected for the promotion.

Follow these steps to configure a Balance Value fragment.

Step	Action
1	Go to the **Segments** tab on the New Promotion or Edit Promotion screen.
2	Select the Balance Value node placed within the control area and double-click the icon. If the node is not already available in the control area, select it from the Segments toolbar. **Result:** You see the Segment Fragment - Balance Value screen.
3	Select a **Balance Type** to include in the promotion. **Notes:** • The balance type drop-down list displays balance values from any existing balance type (irrespective of the balance category) for the current service provider. • The current balance value of the selected balance type is compared to the fixed value configured, after applying any recharge value that triggered the promotion.
4	Select a **Comparison** operator from the drop-down list.
5	In the **Compare To** field, specify a fixed balance value to which the eligible balance value will be compared.
6	Select a Missing Balance Policy which will apply if the wallet does not have a balance of the specified type.

Step	Action
	• **Success** - the fragment will be treated as a successful evaluation, in case a suitable wallet balance is missing. • **Failure** - the fragment will be treated as a failed evaluation, in case a suitable wallet balance is missing.
7	Click **Save**.

Note: A maximum of ten balance value fragments may be configured per promotion.

Configuring segment SPM field

The SPM Field fragment allows an entry, consisting of existing Profile details mainly sourced from a Profile Tag, to be selected for the promotion.

Follow these steps to configure a SPM Field fragment.

Step	Action
1	Go to the **Segments** tab on the New Promotion or Edit Promotion screen.
2	Select the SPM Field node placed within the control area and double-click the icon. If the node is not already available in the control area, select it from the Segments toolbar. **Result:** You see the Segment Fragment - SPM Field screen.
3	In the **Source** field, select the profile block that contains the required profile tag. The Source Profile Block can be selected from the following values: • Subscriber • Product Type • Service Provider
4	In the **SPM Field**, select the relevant profile tag which contains the profile value to be compared.
5	Select a **Comparison** operator from the drop-down list.
6	In the **Compare To** field, specify a fixed profile value to which the eligible SPM Field will be compared. **Notes:** • The format of this field will change depending on the tag type of the SPM field value. For example, If the tag type for the SPM Field value is `Date`, an option will be provided to specify if the profile tag date is compared to a **Fixed Date** or an **Offset** period from the current date. • When configuring an offset period, the **Negative Offset** check box is available so the profile date can be compared against a date in the past. • If the tag type is `Prefix Tree` either the contents or size may be evaluated. • Additional allowed profile tag types are: String, Integer, Numeric String.
7	Select a Missing SPM Field Policy which will apply if the source profile does not contain a profile entry with the specified tag. • **Success** - the fragment will be treated as a successful evaluation, in case a suitable profile tag is missing. • **Failure** - the fragment will be treated as a failed evaluation, in case a suitable profile tag is missing.
8	Click **Save**.

Note: A maximum of five SPM Field fragments may be configured per promotion.

Rewards

Introduction

The **Rewards** tab allows you to assign rewards to a promotion that is triggered by the specific event configured on the *Events* (on page 12) tab.

Rewards may be associated with a promotion as a set of multi-balance definitions that provide a fixed reward amount, or a bonus percentage of the incoming recharge event that is assigned to an expenditure, or chargeable balance. Optionally, a reward product type can be configured whereby the subscriber's product type will be swapped to the selected product type when the promotion is applied.

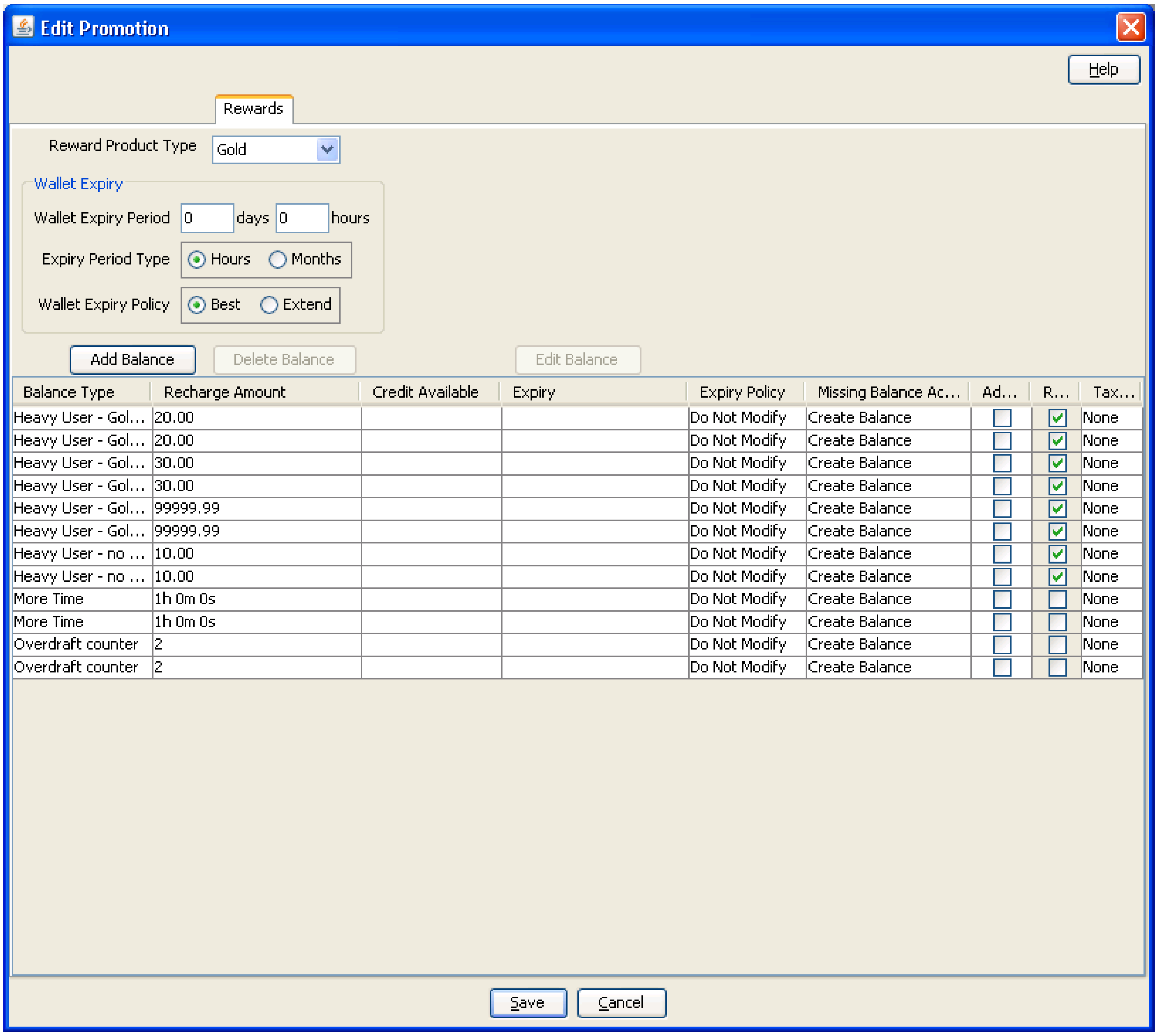
If a wallet has a defined expiration date, you may define an extension to the existing expiration date for the promotion. This will extend the existing promotion definition functionality allowing you to provide extensions to the wallet for required business scenarios, such as a free annual extension of the wallet subscription if the customer utilizes their account sufficiently enough.

The wallet is checked for promotional eligibility, that is, balance type defined. If eligible, the promotion is applied to the wallet and if an extension is defined, and the wallet has an expiration date set, the wallet's expiration date is extended according to the definition and policies defined. However, if a wallet is defined as never expires, the promotion does set an expiration date and the extension within the promotion definition is ignored.

Note: Modifying the promotion event category affects the multi-balance reward definitions, a warning message is displayed to the user when this occurs. When the user saves the promotion record, automatic changes are made to some multi-balance definitions where possible. The multi-balance definitions that cannot be fixed automatically will be marked as invalid and the save will fail.

Rewards tab screen

Here is an example **Rewards** tab on a Promotion screen of Promotion Manager.



Rewards fields

This table describes the function of the fields available on the tab.

Field	Description
Reward Product Type	The product type to which the subscriber's current product type will be changed when the promotion is applied. This is an optional field. If `NO PRODUCT` is selected, no swap will be performed.
Wallet Expiry Period	The period (in days and hours, or months, depending upon the `Expiry Period Type`) between the wallet being activated and when it will expire.

Field	Description
Expiry Period Type	The unit the Wallet Expiry Period is calculated in. Select either: • Hours - the Wallet Expiry is calculated in days and hours • Months - the Wallet Expiry is calculated in months
Wallet Expiry Policy	Which date to calculate the Wallet Expiry Period from. Select either: • Best - extends expiry from the date the voucher is redeemed (this will only apply if there is a positive effect). • Extend - extends expiry from the current expiry date.

Adding rewards

Follow these steps to configure rewards details for a new promotion.

Step	Action
1	Follow the steps listed in *Adding a new promotion* (on page 6) to display the New Promotion screen.
2	On the New Promotion screen, select the **Rewards** tab. **Result:** You see the Rewards configuration options.
3	Enter data in the fields to configure this record. For more information about the fields on this screen, see *Rewards fields* (on page 29). To add multiple balances to the reward, see *Adding multi-balance reward* (on page 34).
4	Go to *Notification* (on page 35) tab to finish configuring the new promotion.

Editing rewards

Follow these steps to edit the rewards details of an existing promotion.

Step	Action
1	Follow the steps listed in *Editing a promotion* (on page 6) to display the Edit Promotion screen.
2	On the Edit Promotion screen, select the **Rewards** tab. **Result:** You see the Rewards information for the selected promotion.
3	Edit the fields with the required changes. For more information about the fields on this screen, see *Rewards fields* (on page 29). To edit multiple balances to the reward, see Editing multi-balance reward.
4	Click **Save**.

Multiple balance type

You can add more than one balance type to a reward type. When a reward is triggered, all balance types associated with the reward type are recharged. This can include both monetary balance types (such as general cash or promotional cash) and non-monetary balance types (such as free SMS or time).

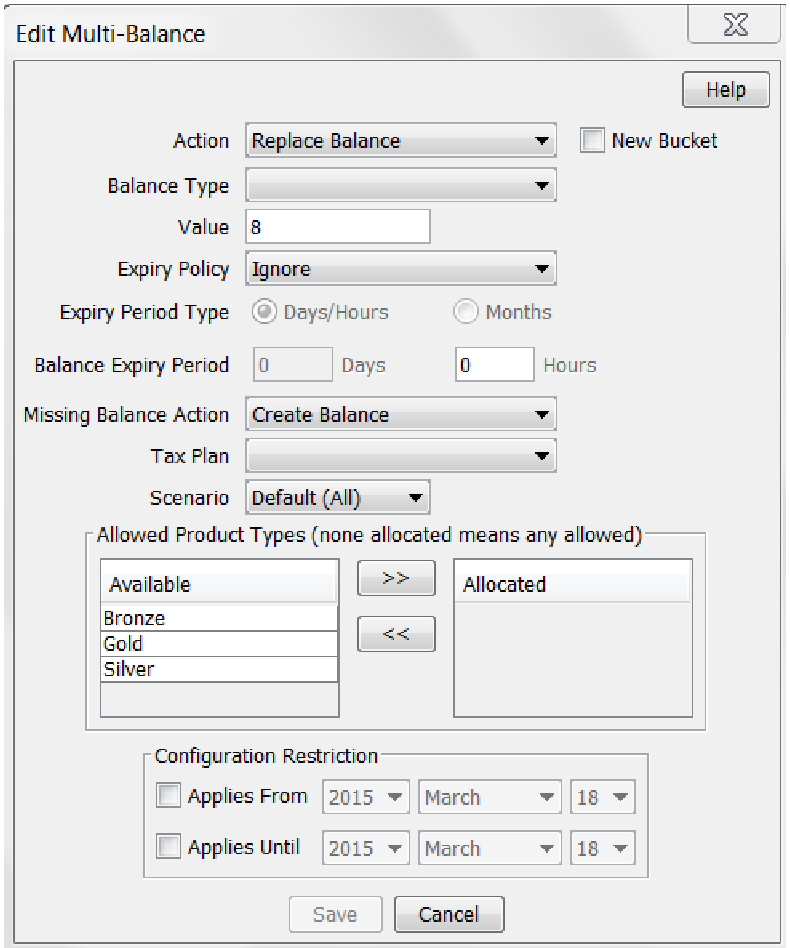
More than one entry can be added for the same balance type, with different details for each entry, including:

- Balance values and balance policies

- Unique expiry dates and extension policies
- Balance availability dates that will be applied when the selected balance type entry is recharged

Multi-Balance Reward panel

Here is an example of a Multi-Balance Reward panel.



Multi-balance reward fields

This table describes the function of each field.

Field	Description
Action	Provides three actions: • **Recharge**: the recharge value will be added to the current balance value • **Replace Balance**: the recharge value will replace the current balance value • **Reload Counter**: the balance value is a counter for the number of reloads of the selected balance type
New Bucket	Whether to create a new bucket for the balance type when the voucher is redeemed.
Balance Type	The balance type to recharge when vouchers of this type are redeemed. This field is populated by the records on the Balance Types tab.

Field	Description
	Note: Any valid balance type can be selected. This includes non cash balance types, such as time.
Credit Amount	A fixed amount for the Multi-Balance Reward value.
Credit Percentage	The Multi-Balance Reward value expressed as a percentage. The Percentage is calculated as: • **Of Delta** – The delta value of the Balance Charge, Recharge or Tracker Threshold event. • **Of Balance** – The whole of the current balance value. • **Of Delta Above Threshold** – This is calculated as: Delta above threshold = Value at Expiry - Threshold Amount **Note:** The Credit Percentage option is only enabled when the promotion event is one of: • Balance Charge • Balance Recharge • Tracker Threshold • Tracker Expiry
Credit Available	Select one of the following: • **Now** - Credit is available immediately • **In** - Activates **Dates/Hours** and **Months**, from which you can set when credit becomes available in specified number of days and hours, or months • **On** - Activates the date selector, from which you can set the exact date when credit becomes available **Note:** You can only specify **Credit Available** for chargeable or cross balance types.
Balance Expiry Date	Option to configure a fixed date when the balance will expire using the *Time and Date panels* (on page 5).
Balance Expiry Policy	How to apply the expiry period for this balance type when vouchers of this type are redeemed. Select: • **Best** - The system will select the best policy option for the subscriber depending on their particular circumstances. • **Extend -** The current expiry period is extended by the specified days and hours. • **Ignore** - No change is made to the current expiry period. • **Extend From Today -** The current expiry period to be extended the specified number of days and hours from today's date. The following fields exist when the `jnlp.ECEExtensions` application property is true. Select: • **First Use with Offset -** The expiry is set a number of months or hours after the first use of the balance • **First Use** - Account Cycle - The expiry is set to the date of the first use of the balance, plus a number of account cycles • **First Use** - Bill Cycle - The expiry is set to the date of the first use of the balance, plus a number of billing cycles

Field	Description
Balance Expiry Period	The period between when the voucher is activated and when the balance will expire. Enter one of the following: • Days • Hours
Expiry Period Type	The unit the balance expiry period is calculated in. Select either: • Days/Hours - the balance expiry is calculated in days and hours. • Months - the balance expiry is calculated in months.
Use Wallet Expiry Date	Option to configure the Balance Expiry Date to be the same as the Wallet Expiry Date.
Missing Balance Action	What to do, if this balance type does not already exist in the wallet when the voucher is redeemed. Select one of the following: • **Create Balance** - the system will create the balance type and redeem the voucher. • **Fail Recharge** - the voucher redemption will fail. • **Skip Balance** - the voucher is redeemed, but the system will not create the balance type.
Tax Plan	The tax plan associated with this voucher type. **Note:** For inclusive tax, the tax component will be removed before crediting the subscriber.
Scenario	The scenario which will apply this balance. **Notes:** • This field will only be visible in the screen if the scenarios functionality has been activated. For more information on activating scenarios see *CCS Technical Guide*. • Only required if more than one scenario has been defined for this voucher type. • The scenario value '`Default(All)`' indicates that the balance type applies to all scenarios. If scenarios have been defined, you cannot use the default scenario. • If only one scenario has been defined, you do not have to specify a scenario.
Allowed Product Types	The product types which vouchers of this type can recharge for this balance type. **Tip:** An empty **Allocated** list means that the balance type can be recharged for all product types.
Replace Balance	Whether to replace the existing balance for the balance type with the new value when the reward is applied.
New Bucket	Whether to create a new bucket for the balance type when the reward is applied.

Field	Description
Configuration Restriction	Restricts the day, month and year that a balance starts and ends. Select the following: • **Applies From** - Sets the date when balances of this type can be redeemed by vouchers of this type. To activate this field, select the check box to the left of the field, then, in the date selection boxes, select the day, month and year for the end date. • **Applies Until** - Sets the date when balances of this type can no longer be redeemed by vouchers of this type. To activate this field, select the check box to the left of the field, then, in the date selection boxes, select the day, month and year for the end date.

Expiration Date Behavior

Reward balance expiration dates behave as described in this section.

Not selecting **Create New Bucket** and **Replace Existing Balance** results in a reward applying to the existing resource bucket. This configuration determines the following expiration date behaviors:

- If the existing balance in the bucket has an expiration date already set, including an infinite expiration date, NCC will not set a new expiration date for the resource that is less than the bucket balance's existing expiration date.
- When you set everything directly through operator screens or a PI command, creating a new reward into an existing bucket cannot set an expiration date if the original resource does not have an expiration date set. However, when you use Promotion Manager screens to add or edit a multi-balance reward, the **Set** option for **Balance Expiry Policy** allows you to set a balance expiration date when a previous date does not exist.

In general, rewards cannot reduce existing balance expiration dates.

When selecting **Create New Bucket** or **Replace Existing Balance**, setting an earlier expiration date is allowed because:

- Creating a new bucket allows the reward expiration date means to be set while not affecting existing buckets.
- Replacing and existing bucket specifies an explicit choice to replace the existing bucket in which case the new expiration date can be set.

Adding multi-balance reward

Follow these steps to configure Multi-Balance Rewards for a new promotion.

Step	Action
1	Go to the **Rewards** tab on the New Promotion or Edit Promotion screen.
2	Click **Add Balance**. **Result:** You see the Add Multi-Balance Reward screen.
3	Enter data in the fields to configure this record. For more information about the fields on this screen, see Multi-balance reward fields.
4	Click **Apply**. **Result:** You will be returned to the **Rewards** tab and the new record will be displayed in the balance type grid.

Editing multi-balance reward

Follow these steps to edit the Multi-Balance Reward for an existing promotion.

Step	Action
1	Go to the **Rewards** tab on the New Promotion or Edit Promotion screen.
2	Select the required Multi-Balance reward in the grid and click **Edit Balance**.
	Result: You see the Edit Multi-Balance Reward screen.
3	Edit the fields with the required changes.
	For more information about the fields on this screen, see Multi-balance reward fields.
4	Click **Apply**.
	Result: You will be returned to the **Rewards** tab and the new record will be displayed in the balance type grid.

Deleting multi-balance reward

Follow these steps to remove a Multi-Balance Reward record for an existing promotion.

Step	Action
1	Go to the **Rewards** tab on the New Promotion or Edit Promotion screen.
2	Select the Multi-Balance reward to delete in the grid and click **Delete Balance**.
	Result: You see the Delete Confirmation prompt.
3	Click **OK** to delete the record from the database.

Notification

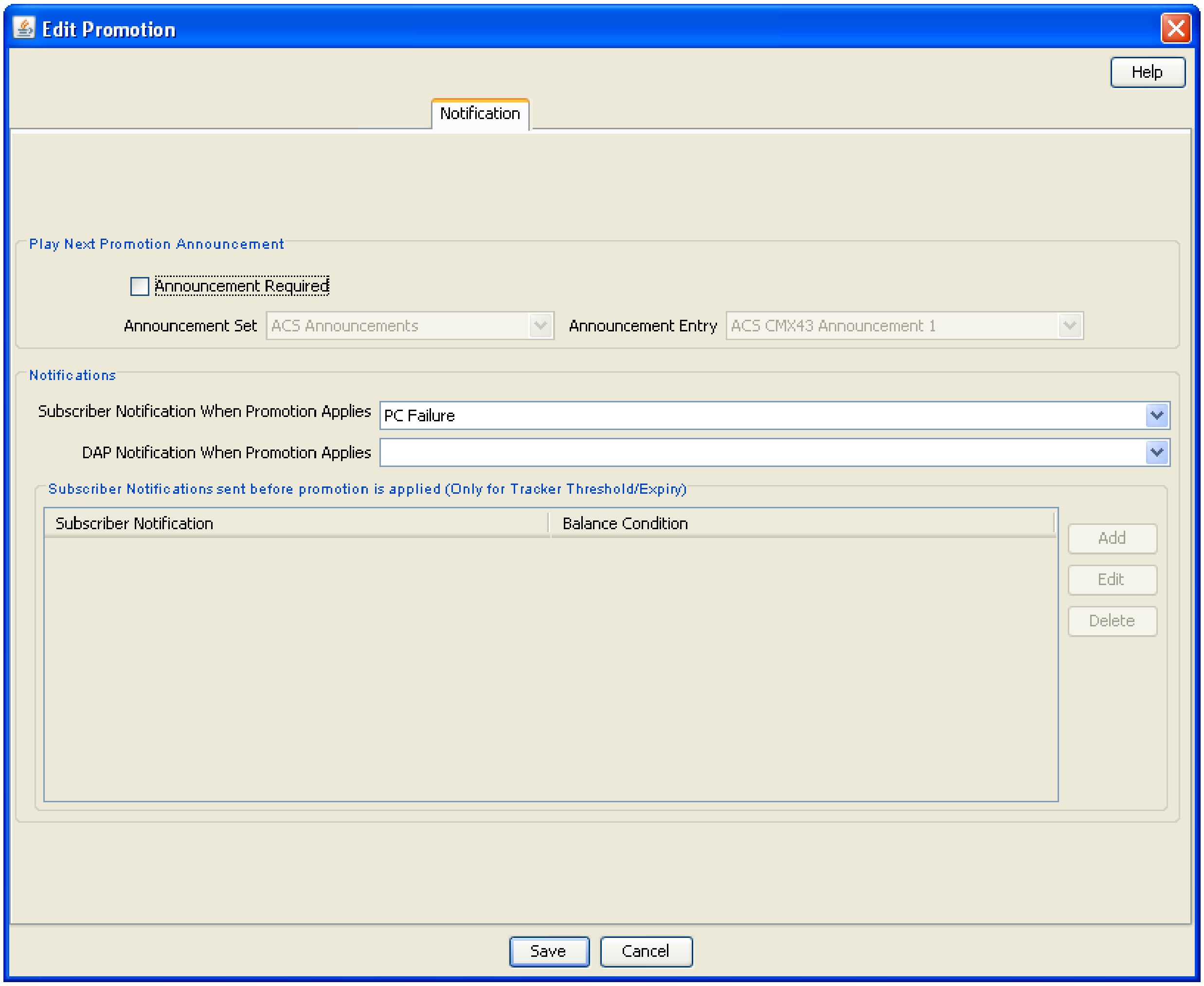
Introduction

Use the **Notification** tab to define the following for a promotion:

- Announcements to play for a promotion
- Subscriber notifications that can be sent when the promotion is applied
- Pre-promotion notifications for Tracker Threshold or Tracker Expiry events

Notification tab screen

Here is an example **Notification** tab on a Promotion screen of Promotion Manager.



Notification fields

This table describes the function of each field.

Field	Description
Announcement Required	Allows you to select an announcement to be played by the Play Next Promotion feature node for this promotion. Tick the check box to enable the Announcement Set and Announcement Entry fields. **Note:** If you want to play the announcement configured here, ensure that on the Play Next Promotion feature node, the Play Announcement check box is selected in the Promotion Announcement area. For more information, see *CCS Feature Node User's Guide*.
Announcement Set	The ACS Announcement set which contains the announcement to play for this promotion.
Announcement Entry	The announcement to play for this promotion.

Field	Description
Subscriber Notification When Promotion Applies	Notification sent to subscriber informing them when the promotion applies. **Note:** This field is populated from ACS Notifications subsystem.
DAP Notification When Promotion Applies	DAP Notification sent to subscriber informing them when the promotion applies. **Note:** To use the DAP notifications, you must have Data Access Pack installed.
Subscriber Notifications sent before promotion is applied	This grid displays the pre-promotion notifications configured for Tracker Threshold or Tracker Expiry promotions. For more information, see *Pre-promotion notifications* (on page 37).

Adding notifications

Follow these steps to add Notification details for a new Promotion.

Step	Action
1	In the New Promotion screen, select the **Notification** tab. **Result:** You see the notification configuration options.
2	Enter data in the fields to configure this record. For more information about the fields on this screen, see *Notification fields* (on page 36). To add Pre-promotion notifications, see Adding pre-promotion notification.
3	Click **Save**. **Result:** You return to the Promotion Manager screen with the new Promotion listed in the grid.

Editing notifications

Follow these steps to edit Notification details for an existing promotion.

Step	Action
1	Follow the steps listed in *Editing a promotion* (on page 6) to display the Edit Promotion screen, **Promotion** tab.
2	Edit the fields with the required changes. For more information about the fields on this screen, see *Notification fields* (on page 36). To edit Pre-promotion notifications, see Editing pre-promotion notification.
3	Click **Save**.

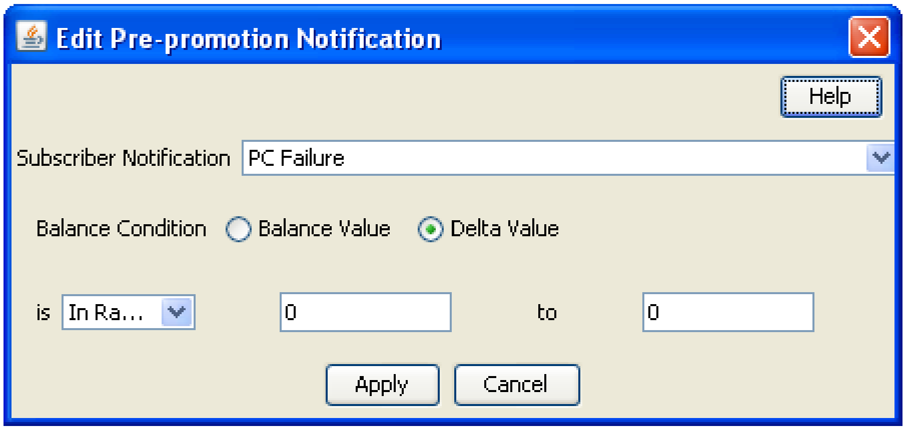
Pre-promotion notifications

A set of subscriber notifications can be sent before the Tracker Threshold or Tracker Expiry promotion is applied.

Note: Pre-promotion subscriber notifications cannot be configured for promotions which are not associated with Tracker Threshold or Tracker Expiry event types.

Pre-promotion Notification panel

Here is an example Pre-promotion Notification panel for Promotion Manager Notifications.



Pre-promotion notification fields

This table describes the function of each field.

Field	Description
Subscriber Notification	Type of pre-promotion notification sent to subscriber.
Balance Condition	Applicable for tracker threshold promotions. A combination of fields used to configure notifications by changes to balance or delta values, that is, the notification will only be sent to subscribers who have met the specified balance or delta conditions. • **Balance Value** – Indicates the current balance value • **Delta Value** – Indicates the value by which event will have changed the current balance

Adding pre-promotion notification

Follow these steps to configure a Pre-promotion notification.

Step	Action
1	Go to the **Notification** tab on the New Promotion or Edit Promotion screen.
2	Click **Add**. **Result:** You see the Add Pre-promotion Notification screen.
3	Enter data in the fields to configure this record. For more information about the fields on this screen, see *Pre-promotion notification fields* (on page 38).
4	Click **Apply**. **Result:** You will be returned to the **Notification** tab and the new record will be displayed in the subscriber notifications grid.

Editing pre-promotion notification

Follow these steps to edit a Pre-promotion notification.

Step	Action
1	Go to the **Notification** tab on the New Promotion or Edit Promotion screen.
2	Click **Edit**.
	Result: You see the Edit Pre-promotion Notification screen.
3	Edit the fields with the required changes.
	For more information about the fields on this screen, see *Pre-promotion notification fields* (on page 38).
4	Click **Apply**.
	Result: You will be returned to the **Notification** tab and the new record will be displayed in the subscriber notifications grid.

Deleting pre-promotion notification

Follow these steps to remove a Pre-Promotion record for an existing promotion.

Step	Action
1	Go to the **Notification** tab on the New Promotion or Edit Promotion screen.
2	Select the pre-promotion notification to delete in the grid and click **Delete**.
	Result: You see the Delete Confirmation prompt.
3	Click **OK** to delete the record from the database.

Chapter 2

Tracker Extensions Management

Overview

Introduction

This chapter explains how to configure Tracker Extensions for Oracle Communications Network Charging and Control Promotion Manager.

In this chapter

This chapter contains the following topics.

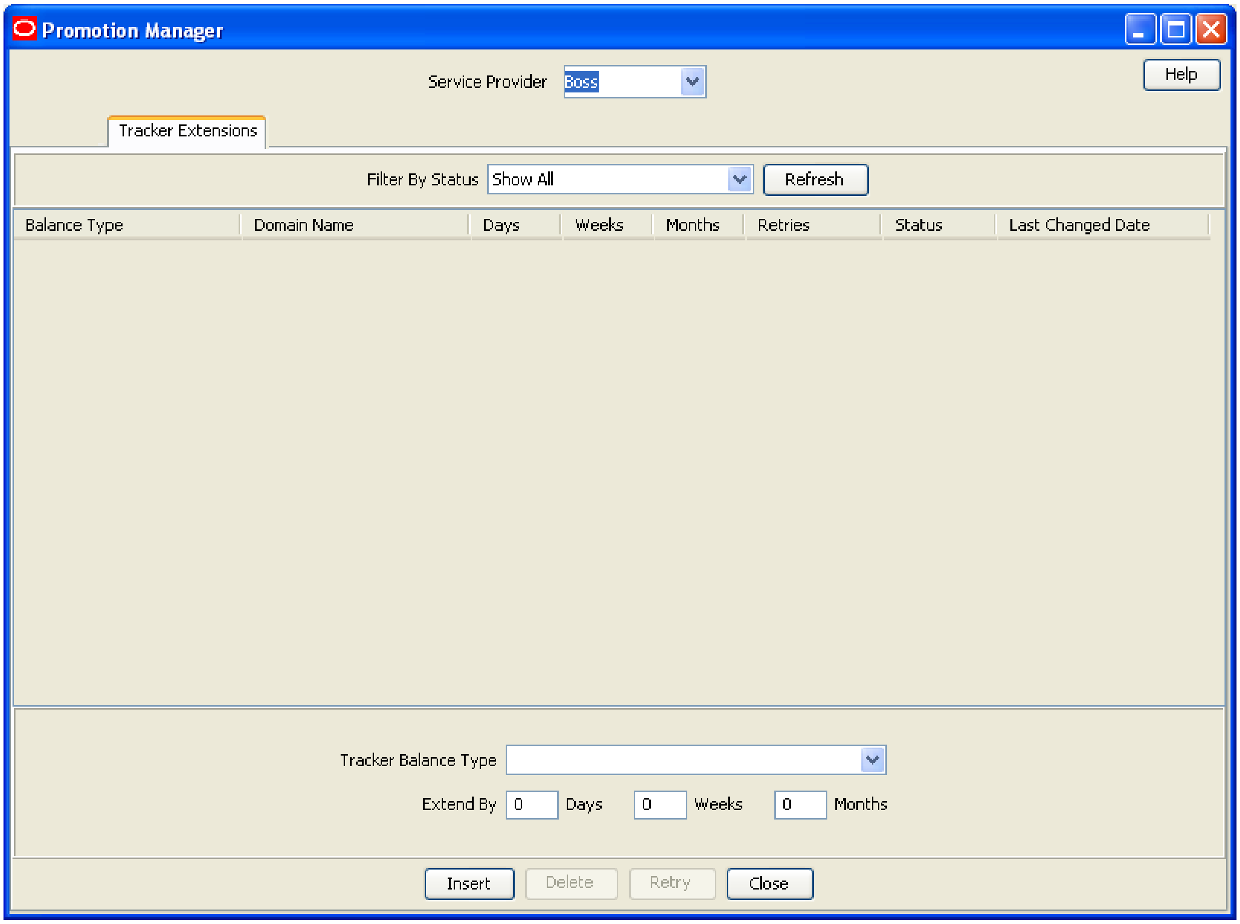
Tracker Extensions Module

Introduction

The Promotion Manager **Tracker Extension** tab is used to configure extension period of the expiry date for the expenditure tracker balances.

Tracker Extensions tab

Here is an example **Tracker Extensions** tab.



Tracker Extensions tab columns

This table describes the content of each column.

Column	Description
Balance Type	Name of the balance type used by the tracker.
Domain Name	Name of the domain linked to the expenditure tracker.
Days	The number of days by which the expiry period is extended.
Weeks	The number of weeks by which the expiry period is extended.
Months	The number of months by which the expiry period is extended.
Retries	The number of times a failed tracker extension entry was retried.
Status	Indicates the extension status, that is, if the expiry date is: • In progress (currently being extended) • Completed (extension completed) • Failed • If the entry is scheduled for a retry
Last Changed	The date indicating when the entry was created or last modified.

Tracker Extensions buttons

This table describes the function of each button.

Button	Description
Insert	Use to create new tracker extension records.
Update	Use to update existing tracker extension records. The button is only enabled if an entry has been selected in the table which has a **Status** value of `Completed`. See *Editing tracker extension entry* (on page 44) for more information.
Delete	Use to delete the selected tracker extension record.
Retry	Use to force a failed tracker extension entry to try again. The button is only enabled if an entry has been selected in the table which has a **Status** value of `Failed`. See *Retrying failed entry* (on page 44) for more information.
Close	Use to close the current screen and return to the previous screen in the screen hierarchy. **Note:** Any changes that have been made on-screen will not be saved (unless **Insert** or **Update** has been clicked previously).

Tracker Extensions tab fields

This table describes the function of each field.

Field	Description
Filter By Status	List of valid status values for tracker extension entries to be sorted by in the main table. Select a status value and click **Refresh** to display matching records in the table.
Tracker Balance Type	List of balance types currently not associated with a tracker extension. **Note:** Once a expiry date is extended for a balance type, it will not be available in this drop-down list.
Extend	Period by which the expiry date is extended by expressed in: • Days • Weeks • Months

Adding tracker extension entry

Follow these steps to add a new tracker extension entry.

Step	Action
1	On the **Tracker Extensions** tab, select the service provider from the drop down box. **Result:** The table below displays the tracker extension entries currently defined for this service provider.
2	Select the required **Tracker Balance Type** from the drop-down list.
3	Enter the **Extend By** period.

Step	Action
4	Click **Insert**. **Result:** A warning is displayed informing of a possible delay in updating the subscriber wallets.
5	Click **Yes** to continue. **Result:** The new record will be displayed in the subscriber notifications table.

Note: For more information on the fields available on this screen, see *Tracker Extensions tab fields* (on page 43).

Editing tracker extension entry

Follow these steps to update an existing tracker extension entry.

Note: Only those entries in the table which have the status value of `Completed` can be updated.

Step	Action
1	On the **Tracker Extensions** tab, select the service provider from the drop down box. **Result:** The table below displays the tracker extension entries currently defined for this service provider.
2	Select an entry from the table with status of `Completed`.
3	Enter the new **Extend By** period.
4	Click **Update**. **Result:** The modified record will be displayed in the subscriber notifications table.

Note: For more information on the fields available on this screen, see *Tracker Extensions tab fields* (on page 43).

Retrying failed entry

Follow these steps to trigger a failed entry to try again.

Note: Only those entries in the table which have their status value of `Failed` can be retried.

Step	Action
1	On the **Tracker Extensions** tab, select the service provider from the drop down box. **Result:** The table below displays the tracker extension entries currently defined for this service provider.
2	Select an entry from the table with status as `Failed`.
3	Click **Retry**. **Result:** The record will be displayed in the subscriber notifications table with Status value of `Retry`.

Note: For more information on the fields available on this screen, see *Tracker Extensions tab fields* (on page 43).

Deleting tracker extension entry

Follow these steps to delete a tracker extension entry from the main table.

Step	Action
1	On the **Tracker Extensions** tab, select the service provider from the drop down box. **Result:** The table below displays the tracker extension entries currently defined for this service provider.

Step	Action
2	Select the tracker extension entry to delete in the table and click **Delete**. **Result:** You see the Delete Confirmation prompt. **Note:** Only entries with status of `Completed` or `Failed` may be selected for deleting.
3	Click **OK** to delete the record from the database.