Oracle® Communications Network Charging and Control Subscriber Event Service Help





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1

SES Configuration Screens

This chapter explains the functions of each SES configuration screen.

The topics are presented in the recommended sequence of configuration.

This chapter contains the following topics.

Messages

Inbound General Messages

Inbound Messages

Outbound General Messages

Outbound Messages

Trigger Rules

Contact History

Messages

This tab is enables you to configure all the messages available within SES, including their availability dates and whether they are priority or not. You must add messages using this tab first, so that they will be available on the other message tabs.

There are two types of messages that a handset roaming into or out of the network can receive:

- General messages: those that can be sent to any handset
- Messages: those that can be sent to country and network specific handsets

Messages tab columns

This table describes the content of each column.

Field	Description
Name	A user friendly message name.
Priority	Indicates if this message is priority or not priority.
	Note: Priority messages are always looked at first to fulfill the number to send parameter. See In-Roamer Messages Selection and Out-Roamer Messages Selection.
Active	When the message was (will be) available for selection.
Expiry	When the message was (will be) unavailable for selection.
Last Updated	Date and time stamp for the last update to this message.



Field	Description
Ву	Username of user that made the last update.

Note: The Activity, Expiry and Last Updated times are in relation to the time zone configured for SMS. (See *Service Management System Technical Guide*).

Adding new messages

Follow these steps to add new messages.

1. Select the Messages tab.

Result: The current messages are listed.

Click New....

Result: The New Message screen appears.

- Enter a message Name. This name should be meaningful and descriptive for a user, for example "Free texting".
- 4. Select the **Priority** check box, if required, to make this a priority message. This means it will be selected before non-priority messages.
- **5.** To:
 - Set an availability date and time for this message, select the Active check box.

Result: The **Wait until** date and time boxes become available. Enter or select the relevant values.

- Make the message available immediately, deselect the Active check box.
- **6.** To:
 - Set an expiry date and time for this message, select the Expiry check box.

Result: The **Expires on** date and time boxes become available. Enter or select the relevant values.

- Make the message never expire, deselect the Expiry check box. It can be edited later
 if required.
- Enter the text of the message that will be sent to a subscriber.

Tip: The maximum message length is 120 ASCII characters.

Result: The Save button becomes available.

Click Save.

Related topic

Messages

Editing messages

Follow these steps to edit messages.

Select the Messages tab.

Result: The current messages are listed.

In the table, select the message to edit.



Click Edit....

Result: The Edit Message screen appears.

- 4. Make the required changes to the fields, as described in Adding new messages.
- 5. Click Save.

Related topic

Messages

Deleting messages

Follow these steps to delete messages.

1. Select the Messages tab.

Result: The current messages are listed.

2. In the table, select the message to delete.

Warning: You should only delete messages that have expired.

Expired messages are automatically deleted by dbCleanup after a configured number of days.

Click Delete....

Result: The Delete Message confirmation screen appears.

Click Delete.

Inbound General Messages

This tab allows you to set up the available messages that can be sent to any subscriber inbound to the network, as against messages that are matched on country and network codes.

Inbound general messages tab columns

This table describes the content of each column.

Field	Description
Message	The message name.
Last Updated	Date and time stamp for the last update to this message (SMS time zone value).
Ву	Username of user that made the last update.

Adding new inbound general messages

Follow these steps to add new inbound general messages.

1. Select the **Inbound General Messages** tab.

Result: The current inbound general messages are listed.

2. Click New....

Result: The New Inbound General Message screen appears.

3. Select the required **Message** from the drop down list.

Tip: This is the list of messages maintained on the Messages tab.

4. Click Save.

Related topic

Inbound General Messages

Editing inbound general messages

Follow these steps to change an existing inbound general message.

1. Select the **Inbound General Messages** tab.

Result: The current inbound general messages are listed.

- 2. In the table, select the message to edit.
- Click Edit....

Result: The Edit Inbound General Message screen appears.

- Select the required Message from the drop down list.
- 5. Click Save.

Related topic

Inbound General Messages

Deleting inbound general messages

Follow these steps to delete inbound general messages.

1. Select the **Inbound General Messages** tab.

Result: The current inbound general messages are listed.

- 2. In the table, select the message to delete.
- Click Delete....

Result: The Delete Inbound General Message screen appears.

Click Delete.

Related topic

Inbound General Messages

Inbound Messages

This tab allows you to set up the available messages that can be sent to a subscriber inbound to the network from a specific country and network, as against general messages that are not matched on country and network codes.

Inbound messages tab columns

This table describes the content of each column.



Field	Description
Country	The country code the subscriber has just roamed from.
Network	The network the subscriber has just roamed from.
Message	The message name.
Last Updated	Date and time stamp for the last update to this message (SMS time zone value).
Ву	Username of user that made the last update.

Adding new inbound messages

Follow these steps to add new inbound messages.

Select the Inbound Messages tab.

Result: The current inbound messages are listed.

Click New....

Result: The New Inbound Network Specific Message screen appears.

- **3.** Enter the **Country Code** (MCC) to associate with the message.
- 4. Enter the **Network Code** (MNC) to associate with the message.

Warning: You must input the code with the correct number of leading zeroes, for example 01 (2-digit MNC), or 123 (3 digit MNC)

Result: The Save button becomes available.

Select the Message to associate with the Country and Network Code from the drop down list.

Tip: This is the list of messages maintained on the **Messages** tab.

6. Click Save.

Note: For a list of MCC and MNC, refer to ITU E.212 ("Land Mobile Numbering Plan") documentation.

Related topic

Inbound Messages

Editing inbound messages

Follow these steps to edit an existing inbound message.

Select the **Inbound Messages** tab.

Result: The current inbound messages are listed.

- 2. In the table, select the Inbound Message to edit.
- 3. Click Edit....

Result: The Edit Inbound Network Specific Message screen appears.

- Make the required changes to the fields, as described in Adding new inbound messages.
- 5. Click Save.

Related topic



Inbound Messages

Deleting inbound messages

Follow these steps to delete inbound messages.

1. Select the **Inbound Messages** tab.

Result: The current inbound messages are listed.

- 2. In the table, select the inbound message to delete.
- Click Delete....

Result: The Delete Inbound Network Specific Message confirmation screen appears.

4. Click Delete.

Related topic

Inbound Messages

Outbound General Messages

This tab lists the available messages that can be sent to any subscriber out bound from the network, as against messages that are matched on country and network codes.

Outbound general messages tab columns

This table describes the content of each column.

Field	Description
Message	The message name.
Last Updated	Date and time stamp for the last update to this message (SMS time zone value).
Ву	Username of user that made the last update.

Adding new outbound general messages

Follow these steps to add new outbound general messages.

1. Select the Outbound General Messages tab.

Result: The current outbound general messages are listed.

Click New....

Result: The New Outbound General Message screen appears.

3. Select the Message from the drop down list.

Tip: This is the list of messages maintained on the **Messages** tab.

The default is the first message in the list.

4. Click Save.

Related topic

Outbound General Messages



Editing outbound general messages

Follow these steps to change an outbound general message.

Select the Outbound General Messages tab.

Result: The current outbound general messages are listed.

- 2. In the table, select the message you want to edit.
- 3. Click Edit....

Result: The Edit Outbound General Message screen appears.

- 4. Select the Message from the drop down list.
- 5. Click Save.

Related topic

Outbound General Messages

Deleting outbound general messages

Follow these steps to delete outbound general messages.

1. Select the Outbound General Messages tab.

Result: The current outbound general messages are listed.

- 2. In the table, select the general outbound message to delete.
- Click Delete....

Result: The Delete Outbound General Message confirmation screen appears.

4. Click Delete.

Related topic

Outbound General Messages

Outbound Messages

This tab lists the available messages that can be sent to any subscriber out bound from the network to a specific country and network, as against general messages that are not matched on country and network codes.

Outbound messages tab columns

This table describes the content of each column.

Field	Description
Country	The country code the subscriber is roaming to.
Network	The network the subscriber is roaming to.
Message	The message name.
Last Updated	Date and time stamp for the last update to this message (SMS time zone value).
Ву	Username of user that made the last update.



Adding new outbound messages

Follow these steps to add new outbound messages.

Select the Outbound Messages tab.

Result: The current outbound messages are listed.

2. Click New....

Result: The New Outbound Network Specific Message screen appears.

- 3. Enter the **Mobile Country Code** (MCC) to associate with the message.
- 4. Enter the Mobile Network Code (MNC) to associate with the message.

Result: The Save button becomes available.

Select the Message to associate with the Country and Network Code from the drop down list

Tip: This is the list of messages maintained on the **Messages** tab.

6. Click Save.

Note: For a list of MCC and MNC, refer to ITU E.212 ("Land Mobile Numbering Plan") documentation.

Related topic

Outbound Messages

Editing outbound messages

Follow these steps to edit an outbound message.

Select the Outbound Messages tab.

Result: The current outbound messages are listed.

- 2. In the table, select the Outbound Message to edit.
- 3. Click Edit....

Result: The Edit Outbound Network Specific Message screen appears.

- Make the required changes to the fields, as described inAdding new outbound messages .
- 5. Click Save.

Related topic

Outbound Messages

Deleting outbound messages

Follow these steps to delete outbound messages.

1. Select the Outbound Messages tab.

Result: The current outbound messages are listed.

- 2. In the table, select the outbound message to delete.
- Click Delete....



Result: The Delete Outbound Network Specific Message confirmation screen appears.

4. Click Delete.

Related topic

Outbound Messages

Trigger Rules

This table describes the content of each column.

Field	Description
Event Class	The basic type of event. Currently just CAMEL Mobility Management is supported.
Event Type	The exact type of message.
Service Key	This is a parameter of the CAMEL Mobility Management event that allows different services to be treated differently.
Country Code	The MCC the subscriber is roaming to or from.
	Note: For a list of MCC, refer to ITU E.212 ("Land Mobile Numbering Plan") documentation.
Network Code	The home network (MNC) for the subscriber.
	The Country Code and Network Code are both used as prefixes in the IMSI and CAMEL Mobility Management events. These two codes identify the subscriber home network.
	Note: For a list of MNC, refer to ITU E.212 ("Land Mobile Numbering Plan") documentation.
MSISDN	Mobile Station ISDN number.
Enabled	This rule is active indicator (selected = active),
Last Updated	Date and time stamp for the last update to this message (SMS time zone value).
Ву	Username of user that made the last update.

Not visible on this tab, but required when adding or editing a trigger rule.

Field	Description
Service Provider	The telco providing the SES service/ACS customer.
Control Plan	The control plan to execute once a trigger match has occurred.

Adding new trigger rules

Follow these steps to add new trigger rules.

1. Select the Trigger Rules tab.

Result: The Trigger Rules are listed.

2. Click New....

Result: The New Trigger Rule screen appears.



Tip: A blank field results in a match against everything for that field and is therefore optional.

3. Select the **Event Class** from the drop down.

Warning: This field is mandatory.

Select the Event Type from the drop down list.

Can be one of:

- Any
- Location update in the same VLR service area
- Location update to another VLR service area
- IMSI attach
- MS initiated IMSI detach (explicit detach)
- Network initiated IMSI detach (implicit detach)
- Subscriber Busy
- Subscriber Idle
- 5. Warning: This field is mandatory.
- 6. Enter the Service Key if required.
- 7. Enter the Country Code (MCC) if required.
- 8. Enter the Network Code (MNC) if required.
- 9. Enter the MSISDN if required.
- 10. Select the **Enabled** check box to make this trigger available.
- 11. Perform one of the following:
 - Select the Service Provider from the drop down list, or, if the list is blank
 - Enter the initial digits and press Enter to search and validate the entry. If you leave the field blank and press Enter the drop down list will be populated with all available Service Providers.
- **12. Result:** The Service Provider value is validated and selected as valid and the control plan drop down list is populated.

Warning: This field is mandatory.

- 13. Perform one of the following:
 - Select the Control Plan from the drop down list
 - Enter the initial digits and press Enter to search and validate the entry
- **14. Result:** The control plan value is validated and ticked as valid, and the **Save** button becomes available.

Warning: This field is mandatory.

15. Click Save.

Note: For a list of MCC and MNC, refer to ITU E.212 ("Land Mobile Numbering Plan") documentation.

Related topic

Trigger Rules



Editing trigger rules

Follow these steps to edit trigger rules.

Select the Trigger Rules tab.

Result: The Trigger Rules are listed.

- 2. In the table, select the Trigger Rule to edit.
- 3. Click Edit....

Result: The Edit Trigger Rule screen appears.

- 4. Make the required changes to the fields, as described in Adding new trigger rules.
- 5. Click Save.

Related topic

Trigger Rules

Deleting trigger rules

Follow these steps to delete trigger rules.

Select the Trigger Rules tab.

Result: The Trigger Rules are listed.

- 2. In the table, select the trigger rule to delete.
- 3. Click Delete....

Result: The Delete Trigger Rule confirmation screen appears.

4. Click Delete.

Related topic

Trigger Rules

Contact History

This tab enables you to view the roaming subscriber's history of messages sent. The available history is governed by the number of days history messages are kept in the database (defined in dbCleanup configuration).

The contact history is added to every time a message is successfully sent to an in-roaming or out-roaming subscriber. Population of history will be performed by an external application, for example, Deliver SM.

Contact tab columns

This table describes the contents of each column.

Field	Description
MSISDN	Mobile Station ISDN number.
IMSI	International Mobile Subscriber Identity.



Field	Description
Application	When present, configuration information from the application which populated the contact history, for example. Deliver SM feature node.
Tag	All messages sent are tagged by the sending feature node. These tags are internal, auto generated and informative only.
Timestamp	Time message sent to the subscriber (SMS time zone value).
Last Updated	Date message sent to the subscriber (SMS time zone value).
Ву	Username or application name that made the last update.

Viewing contact history

Follow these steps to view the contact history for a subscriber.

Select the Contact History tab.

Result: The contact history screen shows with unpopulated columns.

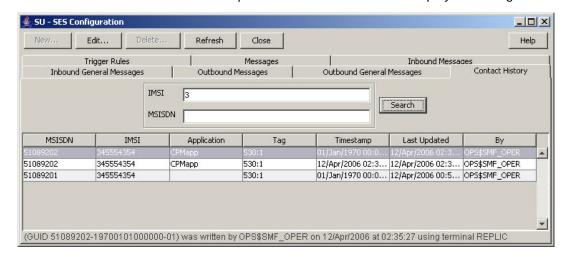
Type either the IMSI or the MSISDN (both is not allowed) of the subscriber to view the history of.

Tip: In either case, just the leading digits may be entered to broaden the search results.

Result: The **Search** button becomes available.

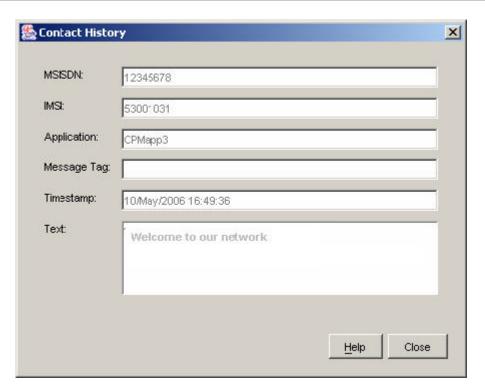
3. Click Search.

Result: The search results for the requested IMSI or MSISDN are displayed in the grid.



4. To view the actual message text, select the message row and click Edit....

Result: The message details are displayed.



5. Click Close to exit.

Related topic

Contact History

Using SES Feature Nodes

This chapter explains how SES uses ACS. This includes details on the SES specific feature nodes that are used in the ACS Control Plan Editor (CPE). These check subscribers on entering or leaving a network using SES and determine whether to send them messages and if so, determine the number of messages to be sent.

For an overview of ACS and the ACS Control Plan Editor, see the relevant ACS or CPE user's guides.

This chapter contains the following topics.

In-Roamer Contact Check

In-Roamer Messages Selection

Out-Roamer Contact Check

Out-Roamer Messages Selection

In-Roamer Contact Check

When a roaming subscriber enters your network, this node checks the duration since any previous inbound roaming contact with the subscriber, by looking up the contact history, and compares the duration with the period of days configured in the node.

Node exits - In-Roamer Contact Check

This node has one entry and two exits. The number of exits cannot be changed.

Exit	Cause	Description
1	Contacted	The subscriber has been contacted within the configured number of days.
2	Not Contacted	The subscriber has not been contacted within the configured number of days (includes never been contacted and any system failures).

Using the node - In-Roamer Contact Check

For descriptions of how this node is used, refer to the following topics in SES User's and Technical Guide:

- Example Control Plan In-Roamer
- Example scenarios

Configuring the node - In-Roamer Contact Check

Follow these steps to edit the node.

Type a value in days in the Period field.

Note: Blank or zero means the subscriber will be contacted every time they enter the network.

Click Save.

In-Roamer Messages Selection

This node selects the messages for sending to the subscriber, based on the message priority, the number of messages to be sent, and the message selection option used. For more information, see SES User's and Technical Guide, System Overview chapter.

Node exits - In-Roamer Messages Selection

This node has one entry and two exits. The number of exits cannot be changed.

Exit	Cause	Description
1	No Messages Selected	No messages were selected (includes system failures).
2	Messages Selected	At least one message was selected.

Using the node - In-Roamer Messages Selection

For descriptions of how this node is used, refer to the following topics in SES User's and Technical Guide:

- Example Control Plan In-Roamer
- Example scenarios

Editing the node - In-Roamer Messages Selection

Follow these steps to edit the In-Roamer Messages Selection node.

Type the maximum number of messages to send to the subscriber in the Number field.

Note: Currently the maximum is about 2 billion.

Select either the Random or Latest message Selection Method.

Note: Messages are configured to be priority, or non priority (see *SES User's and Technical Guide*, SES Configuration - Messages Tab). For either option, the priority messages are used to fulfill the Number parameter before the non priority messages. See *SES User's and Technical Guide*, SES Example scenarios.

Note: Latest is the message with the most recent availability date.

3. Click Save.



Out-Roamer Contact Check

When a roaming subscriber leaves your network, this node checks the duration since any previous out-roaming contact with the subscriber, by looking up the contact history, and compares the duration with the period of days configured in the node.

Node exits - Out-Roamer Contact Check

This node has one entry and three exits. The number of exits cannot be changed.

Exit	Cause	Description
1	Opted Out	The subscriber has opted out of being contacted on leaving the network.
		Note: This flag is configurable. Refer to SES User's and Technical Guide, macroNodes configuration, for the value of the tag used.
2	Contacted	The subscriber has been contacted within the configured number of days.
3	Not Contacted	The subscriber has not been contacted within the configured number of days (includes never been contacted and any system failures).

Using the node - Out-Roamer Contact Check

For descriptions of how this feature node is used, see the following topics in *Subscriber Event Service User's and Technical Guide*:

- Example Control Plan Out-Roamer
- Example scenarios

Configuring the node - Out-Roamer Contact Check

Follow these steps to edit the node.

Type a value in days in the **Period** field.

Note: Blank or zero means the subscriber will be contacted every time they exit the network.

2. Click Save.

Out-Roamer Messages Selection

This node selects the messages for sending to the subscriber, based on the message priority, the number of messages to be sent, and the message selection option used. For more information, see the discussion of system overview in *Subscriber Event Service User's and Technical Guide*.



Node exits - Out-Roamer Messages Selection

This node has one entry and two exits. The number of exits cannot be changed.

Exit	Cause	Description
1	No Messages Selected	No messages were selected (includes system failures).
2	Messages Selected	At least one message was selected.

Using the node - Out-Roamer Messages Selection

For descriptions of how this feature node is used, see the following topics in *Subscriber Event Service User's and Technical Guide*:

- Example Control Plan Out-Roamer
- Example scenarios

Configuring the node - Out-Roamer Messages Selection

Follow these steps to edit the Out-Roamer Messages Selection node.

1. Type the maximum number of messages to send to the subscriber in the **Number** field.

Note: Currently this is about 2 billion.

2. Select either the Random or Latest message Selection Method.

Note: Messages are configured to be priority or no priority (see Messages). For either option, the priority messages are used to fulfill the Number parameter before the no priority messages. See SES Example scenarios.

Note: Latest is the message with the most recent availability date.

3. Click Save.

