

# Oracle® Communications Convergent Charging Controller

## Messaging Manager Navigator Feature Nodes Help



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# 1

## RIMS Nodes

This chapter explains the RIMS macro nodes in depth.

**This chapter contains the following topics.**

[RIMS Nodes Use Cases](#)

[IS41 RIMS Query](#)

[MAP RIMS Query](#)

## RIMS Nodes Use Cases

In order to retrieve the requested values from RIMS and store them in the chassis and engine fields, each node has two states.

- The first state sets up an `xmsRimsChassisAction` and passes the data needed to generate the RIMS query message
- The second state receives information determining which exit branch to take from the chassis action

The only difference between the MAP and IS41 nodes are the data fields in the GUI that will be used to populate the query message, thus the following section will apply to both MAP and IS41 nodes unless specified.

### Query

The first state in each node will construct an `xmsRimsChassisAction` and send it the node data needed to construct the RIMS query message.

The node will then set the next state to be State 2, and will return `ACS_ENGINE_MACRO_STAY_HERE`, passing control to ACS until a response is received.

### Response

The second state of the node will be entered once the `xmsRimsChassisAction` has determined the validity of the response message from RIMS, and stored the values in the chassis and engine contexts if they are successful. The chassis action will return an enum denoting which exit branch the node should take based on this.

Therefore, all the second state will need to do is follow the specified exit.

## IS41 RIMS Query

The IS41 RIMS Query node supports IS-41 messages and queries the IMSI/MIN or IMSI/MIN & VMSC address of any MDN stored in an ACS number field.

The results can then be placed into ACS chassis and engine parameters.

This node allows you to override the SCCP Destination address digits used by the RIMS interface when sending IS41 SMSRequest messages to the HLR. The SCCP Calling Party address can also be overridden, allowing different addresses to be selected inside the control plan.

## Node exits

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

Exit	Cause	Description
1	Success	Query was successful.
2	Transient Failure	A transient failure status was returned.
3	Permanent Failure	A permanent failure status was returned.
4	Node Failure	General case for an unhandled state in this node.
5	RIMS Timeout	Response time exceeded timeout.

## Configuring the node

Follow these steps to configure the IS41 RIMS Query node.

1. Select the value in **MDN source to query** to send as the MDN key in the query message to RIMS.
2. In the **Party for Results** area, select the option to store the values in the response from RIMS in either calling or called engine and chassis fields.
3. In the **Type of Query** area, select the return option to control the contents of the requested results field in the query message.
4. In the HLR SCCP Address area, select the **Override** check box to optionally edit the following fields:
  - **Digits Location:** the profile block where the global title SCCP Destination address digits are stored.
  - **Digits Field:** the profile tag where the global title SCCP Destination address digits are stored.
  - **Translation Type:** the translation type applicable to this global title.

**Note:** This area is used to specify the SCCP Destination address digits for the RIMS interface to use while sending IS41 SMSRequest messages to the HLR. This will be based on the data stored in the profile.

5. In the SCCP Calling Party area, select from the drop down list the **Return Address** of the SCCP originating address.

This field is populated from the `scf` parameter in the `sms.html` file and the `acs.conf` file. For more information about this parameter, see *ACS Technical Guide*.

**Note:** It is recommended to select the **Return Address** value as `Default`. The default value is configured in the `RIMS.IS41` section of the `eserv.config` file.

6. Click **Save**.

## MAP RIMS Query

The MAP RIMS Query node supports MAP messages and queries the IMSI/MIN or IMSI/MIN & VMSC/SGSN address of any MDN stored in an ACS number.

The results can then be placed into ACS chassis and engine parameters.

This node allows you to override the SCCP Destination address digits used by the RIMS interface when sending MAP SendRoutingInfoForSM messages to the HLR. The SCCP Calling Party address can also be overridden, allowing different addresses to be selected inside the control plan.

## Node exits

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

Exit	Cause	Description
1	Success - VMSC	VMSC or only the IMSI, are successfully returned.
2	Success - SGSN	SGSN successfully returned.
3	Transient Failure	A transient failure status was returned.
4	Permanent Failure	A permanent failure status was returned.
5	Node Failure	General case for an unhandled state in this node.
6	RIMS Timeout	Response time exceeded timeout.

## Configuring the node

Follow these steps to configure the Map RIMS Query node.

1. Select the value in **MSISDN source to query** to send as the MSISDN key in the query message to RIMS.  
**Note:** If you select an IMSI, RIMS will treat this value as an MSISDN and may return a non-intuitive number.
2. In the **Party for Results** area, select the option to store the values in the response from RIMS in either calling or called engine and chassis fields.
3. In the **Type of Query** area, select the return option to control the contents of the requested results field in the query message.  
**Note:** If you select the **Return IMSI and SGSN/MS address** option, but only the VMSC address is returned, the exit used will be "Success - VMSC".
4. Select the **Priority Request** check box if you wish to set RIMS query message to priority, rather than normal.
5. In the HLR SCCP Address area, select the **Override** check box to optionally edit the following fields:
  - **Digits Location:** the profile block where the global title SCCP DEST address digits are stored.

- **Digits Field:** the profile tag where the global title SCCP DEST address digits are stored.
- **Translation Type:** the translation type applicable to this global title.

**Note:** This area is used to specify the SCCP Destination address digits which the RIMS interface will use while sending MAP SendRoutingInfoForSM messages to the HLR. This will be based on the data stored in the profile.

6. From the SCCP Calling Party area, select from the drop down list the **Return Address** of the SCCP originating address.

This field is populated from the `scf` parameter in the **sms.html** file and the **acs.conf** file. For more information about this parameter, see *ACS Technical Guide*.

**Note:** It is recommended to select the **Return Address** value as `Default`. The default value is configured in the `RIMS.MAP` section of the **eserv.config** file.

7. Click **Save**.