

# Oracle® Communications Convergent Charging Controller Radius Control Agent Help



Release 12.0.6

F43258-01

August 2022

The Oracle logo, consisting of a solid red square with the word "ORACLE" in white, uppercase, sans-serif font centered within it.

ORACLE®

F43258-01

Copyright © 2022, Oracle and/or its affiliates.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software, software documentation, data (as defined in the Federal Acquisition Regulation), or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software," "commercial computer software documentation," or "limited rights data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle®, Java, and MySQL are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

# Contents

## 1 The RCA Configuration Screens

---

Billing Type Prefix	1-1
Adding a billing type prefix	1-2
Editing a billing type prefix	1-2
Deleting a billing type prefix	1-3
Release Message	1-3
Adding a release message	1-3
Editing a release message	1-4
Deleting a release message	1-4
Service Option	1-5
Maintaining service options	1-5
Adding a service option	1-5
Editing a service option	1-6
Deleting a service option	1-6
Service Option List	1-7
Maintaining service option lists	1-7
Adding a service option list	1-7
Editing a service option list	1-8
Deleting a service option list	1-8
Service Option Entry	1-9
Maintaining service option entry	1-9
Adding a service option entry	1-9
Editing a service option entry	1-9
Deleting a service option entry	1-10
IP Address	1-11
Maintaining IP address	1-11
Adding an IP address	1-11
Editing an IP address	1-12
Deleting an IP address	1-12
Address List	1-13
Maintaining address list	1-13
Adding an address list	1-13
Editing an address list	1-14

Deleting an address list	1-14
Address List Entry	1-15
Maintaining address list entry	1-15
Adding an address list entry	1-15
Editing an address list entry	1-16
Deleting an address list entry	1-16
CLI Address List	1-17
Maintaining CLI address list	1-17
Adding a CLI address list	1-17
Editing a CLI address list	1-18
Deleting a CLI address list	1-18
Global Config	1-19
Adding a global configuration	1-19
Editing a global configuration	1-20
Deleting a global configuration	1-21
Using the Find Screens	1-21
Find result mode buttons	1-21

# 1

## The RCA Configuration Screens

This chapter explains how to configure the RCA on the SMS using the RCA screens.

To configure RCA in the the database the following items *must* be defined:

- [Global Config](#)

Optionally the following items may also be defined:

- [Billing Type Prefix](#)
- [Release Message](#)
- [Address List](#)
- [Service Option](#)

**This chapter contains the following topics.**

[Billing Type Prefix](#)

[Release Message](#)

[Service Option](#)

[Service Option List](#)

[Service Option Entry](#)

[IP Address](#)

[Address List](#)

[Address List Entry](#)

[CLI Address List](#)

[Global Config](#)

[Using the Find Screens](#)

### Billing Type Prefix

You use the **Billing Type Prefix** tab to configure different billing types (volume or duration) for particular CLI prefixes.

To maintain Billing Type Prefixes, see the relevant option:

- [Adding a billing type prefix](#)
- [Editing a billing type prefix](#)
- [Deleting a billing type prefix](#)

## Adding a billing type prefix

Follow these steps to Add a new billing type prefix.

1. On the **Billing Type Prefix** tab in the Radius Control Agent Screen - Find mode, click **New**.  
**Result:** You see the tab in New mode.
2. In the **Prefix** field, enter the CLI prefix you want to assign a billing type to.
3. From the **Billing Type** drop down box, select the billing type to use for billing calls that match the CLI prefix.
4. In the **Remark** field, enter a comment if required.
5. Click **Save**.
6. Repeat steps 2 through 5 for all the required Billing Type Prefixes.  
**Note:** When you click **Save**, the saved values remain on the screen. You can create another new record by typing over these values and clicking **Save** again.
7. Click **Return** to go back to the previous screen.

### Related topic

[Billing Type Prefix](#)

## Editing a billing type prefix

Follow these steps to edit a billing type prefix.

1. In Find mode on the **Billing Type Prefix** tab, enter selection criteria in one or more query fields.  
**Note:** If a field is left empty, then the search will retrieve all instances of that field.
2. Click **Find**.  
**Result:** The query returns the first 100 records that begin with the selection criteria. For example, if you enter 123 in a query field, the system will return records such as 123, 1234, 12345.  
The results appear in the table on the Find result mode screen for the type of record you are querying. See [Using the Find Screens](#).
3. Click on the record to edit.
4. Click **Select**.  
**Result:** The selected record appears in Update mode on the tab.
5. Edit the details as described in [Adding a billing type prefix](#).
6. Click **Save**, and then **Return**, to save your changes and return to the previous screen.

### Related topic

[Billing Type Prefix](#)

## Deleting a billing type prefix

Follow these steps to delete an RCA billing type prefix.

1. In Find mode on the **Billing Type Prefix** tab, enter selection criteria in one or more query fields.

**Note:** If a field is left empty, then the search will retrieve all instances of that field.

2. Click **Find**.

**Result:** The query returns the first 100 records that begin with the selection criteria. For example, if you enter 123 in a query field, the system will return records such as 123, 1234, 12345.

The results appear in the table on the Find result mode screen for the type of record you are querying. See [Using the Find Screens](#).

3. Click on the record to delete.
4. Click **Delete**.  
**Result:** The Confirm Delete Record screen appears.
5. Click **Yes** to confirm.
6. Click **Return** to return to the previous screen.

### Related topic

[Billing Type Prefix](#)

## Release Message

The **Release Message** tab allows you to specify the RADIUS release message to send, corresponding to the release codes received from the IN, if the IN releases instead of connecting the call.

To maintain global configurations, see the relevant option:

- [Adding a release message](#)
- [Editing a release message](#)
- [Deleting a release message](#)

## Adding a release message

Follow these steps to Add a new release message.

1. On the **Release Message** tab in the Radius Control Agent Screen - Find mode, click **New**.
2. **Result:** You see the tab in New mode.
3. In the **Release Cause** field, enter the code corresponding to the release cause from the destination application (either ACS or CCS).
4. In the **Name** field, enter the name to assign to the release cause.
5. In the **Message** field, enter the RADIUS release message to send when a call is disconnected with this release cause.

6. In the **Remark** field, enter a comment if required.
7. Click **Save**.
8. Repeat steps 2 through 6 for all the required release messages.
9. **Note:** When you click **Save**, the saved values remain on the screen. You can create another new record by typing over these values and clicking **Save** again.
10. Click **Return** to go back to the previous screen.

**Related topic**

[Release Message](#)

## Editing a release message

Follow these steps to edit an RCA release message.

1. In Find mode on the **Release Message** tab, enter selection criteria in one or more query fields.

**Note:** If a field is left empty, then the search will retrieve all instances of that field.

2. Click **Find**.

**Result:** The query returns the first 100 records that begin with the selection criteria. For example, if you enter 123 in a query field, the system will return records such as 123, 1234, 12345.

The results appear in the table on the Find result mode screen for the type of record you are querying. See [Using the Find Screens](#).

3. Click on the record to edit.

4. Click **Select**.

**Result:** The selected record appears in Update mode on the tab.

5. Edit the details as described in [Adding a release message](#).

6. Click **Save**, and then **Return**, to save your changes and return to the previous screen.

**Related topic**

[Release Message](#)

## Deleting a release message

Follow these steps to delete an RCA release message.

1. In Find mode on the **Release Message** tab, enter selection criteria in one or more query fields.

**Note:** If a field is left empty, then the search will retrieve all instances of that field.

2. Click **Find**.

**Result:** The query returns the first 100 records that begin with the selection criteria. For example, if you enter 123 in a query field, the system will return records such as 123, 1234, 12345.

The results appear in the table on the Find result mode screen for the type of record you are querying. See [Using the Find Screens](#).



3. Click on the record to delete.
4. Click **Delete**.  
**Result:** The Confirm Delete Record screen appears.
5. Click **Yes** to confirm.
6. Click **Return** to return to the previous screen.

**Related topic**

[Release Message](#)

## Service Option

The RCA Service Option tabs let you configure the available service options for a service provided by the PDSN.

Service Options must be defined in the following order:

1. Define the available service options on the **Service Option** tab. See [Adding a service option](#).
2. Create the service option list on the **Service Option List** tab. See [Adding a service option entry](#).
3. On the **Service Option Entry** tab, assign the service options you have defined to the service option list. See [Adding a service option entry](#).

## Maintaining service options

To maintain service option configurations, see the relevant option:

- [Adding a service option](#)
- [Editing a service option](#)
- [Deleting a service option](#)

## Adding a service option

Follow these steps to Add a new service option.

1. On the **Service Option** tab in the Radius Control Agent Screen in Find mode, click **New**.  
**Result:** You see the tab in New mode.
2. In the **ID** field, enter the ID corresponding to the PDSN ID for the service option. This is an integer which must be in the range 0-255.
3. In the **Name** field, enter the service option name. You may use up to 30 characters.
4. In the **Remark** field, enter any comments.
5. Click **Save**.
6. Repeat steps 2 through 5 for all the required service options.  
**Note:** When you click **Save**, the saved values remain on the screen. You can create another new record by typing over these values and clicking **Save** again.
7. Click **Return** to go back to the previous screen.

**Related topic**[Service Option](#)

## Editing a service option

Follow these steps to edit a service option.

1. In Find mode on the **Service Option** tab, enter selection criteria in one or more query fields.  
**Note:** If a field is left empty, then the search will retrieve all instances of that field.
2. Click **Find**.  
**Result:** The query returns the first 100 records that begin with the selection criteria. For example, if you enter 123 in a query field, the system will return records such as 123, 1234, 12345.  
The results appear in the table on the Find result mode screen for the type of record you are querying. See [Using the Find Screens](#).
3. Click on the record to edit.
4. Click **Select**.  
**Result:** The selected record appears in Update mode on the tab.
5. Edit the details as described in [Adding a service option](#).
6. Click **Save**, and then **Return**, to save your changes and return to the previous screen.

**Related topic**[Service Option](#)

## Deleting a service option

Follow these steps to delete a service option in the RCA.

1. In Find mode on the **Service Option** tab, enter selection criteria in one or more query fields.  
**Note:** If a field is left empty, then the search will retrieve all instances of that field.
2. Click **Find**.  
**Result:** The query returns the first 100 records that begin with the selection criteria. For example, if you enter 123 in a query field, the system will return records such as 123, 1234, 12345.  
The results appear in the table on the Find result mode screen for the type of record you are querying. See [Using the Find Screens](#).
3. Click on the record to delete.
4. Click **Delete**.  
**Result:** The Confirm Delete Record screen appears:
5. Click **Yes** to confirm.  
**Result:** The record is removed from the database.

6. Click **Return** to return to the previous screen.

**Related topic**

[Service Option](#)

## Service Option List

The RCA Service Option tabs let you configure the available service options for a service provided by the PDSN.

Service Options must be defined in the following order:

1. Define the available service options on the **Service Option** tab. See [Adding a service option](#).
2. Create the service option list on the **Service Option List** tab. See [Adding a service option list](#).
3. On the **Service Option Entry** tab, assign the service options you have defined to the service option list. See [Adding a service option entry](#).

## Maintaining service option lists

To maintain service option list configurations, see the relevant option:

- [Adding a service option list](#)
- [Editing a service option list](#)
- [Deleting a service option list](#)

## Adding a service option list

Follow these steps to Add a new Service Option List.

1. On the **Service Option List** tab in the Radius Control Agent Screen in Find mode, click **New**.

**Result:** You see the tab in New mode.

2. In the **Name** field, enter the service option list name. This can be up to 30 characters long.
3. In the **Remark** field, enter any comments.
4. Click **Save**.
5. Repeat steps 2 through 4 for all the required service option lists.

**Note:** When you click **Save**, the saved values remain on the screen. You can create another new record by typing over these values and clicking **Save** again.

6. Click **Return** to go back to the previous screen.

**Related topic**

[Service Option List](#)

## Editing a service option list

Follow these steps to edit a service option list name.

1. In Find mode on the **Service Option List** tab, enter selection criteria in one or more query fields.  
**Note:** If a field is left empty, then the search will retrieve all instances of that field.
2. Click **Find**.  
**Result:** The query returns the first 100 records that begin with the selection criteria. For example, if you enter 123 in a query field, the system will return records such as 123, 1234, 12345.  
The results appear in the table on the Find result mode screen for the type of record you are querying. See [Using the Find Screens](#).
3. Click on the record to edit.
4. Click **Select**.  
**Result:** The selected record appears in Update mode on the tab.
5. Edit the details as described in [Adding a service option list](#).
6. Click **Save**, and then **Return**, to save your changes and return to the previous screen.

### Related topic

[Service Option List](#)

## Deleting a service option list

Follow these steps to delete an RCA service option list.

1. In Find mode on the **Service Option List** tab, enter selection criteria in one or more query fields.  
**Note:** If a field is left empty, then the search will retrieve all instances of that field.
2. Click **Find**.  
**Result:** The query returns the first 100 records that begin with the selection criteria. For example, if you enter 123 in a query field, the system will return records such as 123, 1234, 12345.  
The results appear in the table on the Find result mode screen for the type of record you are querying. See [Using the Find Screens](#).
3. Click on the record to delete.
4. Click **Delete**.  
**Result:** The Confirm Delete Record screen appears.
5. Click **Yes** to confirm.
6. Click **Return** to return to the previous screen.

### Related topic

[Service Option List](#)

## Service Option Entry

The RCA Service Option tabs let you configure the available service options for a service provided by the PDSN.

Service Options must be defined in the following order:

1. Define the available service options on the **Service Option** tab. See [Adding a service option](#).
2. Create the service option list on the **Service Option List** tab. See [Adding a service option list](#).
3. On the **Service Option Entry** tab, assign the service options you have defined to the service option list. See [Adding a service option entry](#).

## Maintaining service option entry

To maintain service option entry configurations, see the relevant option:

- [Adding a service option entry](#)
- [Editing a service option entry](#)
- [Deleting a service option entry](#)

## Adding a service option entry

Follow these steps to Add a Service Option Entry to a Service Option List.

1. On the **Service Option Entry** tab in the Radius Control Agent Screen in Find mode, click **New**.  
**Result:** You see the tab in New mode.
2. From the **Service Option List** drop down box, select the required service option list.
3. From the **Service Option** drop down box, select the service option to include in the list.
4. In the **Max Num Instances** enter the maximum number of simultaneous accesses to the service option, that the customer may have. This is an integer which must be in the range 0-255.
5. Click **Save**.
6. Repeat steps 2 through 5 for all the required service options.  
**Note:** When you click **Save**, the saved values remain on the screen. You can create another new record by typing over these values and clicking **Save** again.
7. Click **Return** to go back to the previous screen.

### Related topic

[Service Option Entry](#)

## Editing a service option entry

Follow these steps to Edit a Service Option Entry.

1. In Find mode on the **Service Option Entry** tab, enter selection criteria in one or more query fields.  
**Note:** If a field is left empty, then the search will retrieve all instances of that field.
2. Click **Find**.  
**Result:** The query returns the first 100 records that begin with the selection criteria. For example, if you enter 123 in a query field, the system will return records such as 123, 1234, 12345.  
The results appear in the grid on the Find result mode screen for the type of record you are querying. See [Using the Find Screens](#).
3. Click on the record to edit.
4. Click **Select**.  
**Result:** The selected record appears in Update mode on the tab.
5. Edit the details as described in [Adding a service option entry](#).
6. Click **Save**, and then **Return**, to save your changes and return to the previous screen.

**Related topic**

[Service Option Entry](#)

## Deleting a service option entry

Follow these steps to delete an RCA Service Option Entry.

1. In Find mode on the **Service option Entry** tab, enter selection criteria in one or more query fields.  
**Note:** If a field is left empty, then the search will retrieve all instances of that field.
2. Click **Find**.  
**Result:** The query returns the first 100 records that begin with the selection criteria. For example, if you enter 123 in a query field, the system will return records such as 123, 1234, 12345.  
The results appear in the table on the Find result mode screen for the type of record you are querying. See [Using the Find Screens](#).
3. Click on the record to delete.
4. Click **Delete**.  
**Result:** The Confirm Delete Record screen appears.
5. Click **Yes** to confirm.
6. Click **Return** to return to the previous screen.

**Related topic**

[Service Option Entry](#)

## IP Address

The address tabs in the RCA allow you to configure lists of IP addresses for remote billing purposes (see *X.S011 - 005 - C, cdma200 Wireless IP Network Standard: Accounting Services and 3GPP2 RADIUS VSAs*).

**Note:** It is the responsibility of the PDSN to perform the remote accounting, and not the RADIUS Control Agent.

Addresses in RCA need to be configured in the following order:

1. Define the IP addresses on the IP Address tab. See [Adding an IP address](#).
2. Define IP address lists on the Address List tab. See [Adding an address list](#).
3. Assign the IP addresses to an address list, on the Address List Entry tab. See [Adding an address list entry](#).
4. Assign the address lists to CLI prefixes on the CLI Address List tab. See [Adding a CLI address list](#).

## Maintaining IP address

To maintain IP address configurations, see the relevant option:

- [Adding an IP address](#)
- [Editing an IP address](#)
- [Deleting an IP address](#)

## Adding an IP address

Follow these steps to Add a new IP address.

1. On the **IP Address** tab in the Radius Control Agent Screen in Find mode, click **New**.  
**Result:** You see the tab in New mode.
2. From the **Address Type** drop down list, select the address type.
3. Select the **Qualifier** check box if the IP address is exempt from billing.  
**Note:** The exemption is subject to interpretation by the PDSN, and not the RADIUS Control Agent.
4. In the **IP Address** field, enter the IP address you want to add.
5. In the **Mask or Prefix** field, enter the mask or prefix for the IP address.  
**Note:** This will depend on the Address Type. Enter a mask if the Address Type is IPv4, or a prefix if it is IPv6.
6. In the **Description** field enter a description for the IP address. This can be up to 50 characters long.
7. In the **Remark** field, enter a user comment if required.
8. Click **Save**.
9. Repeat steps 2 through 8 for all the required IP Addresses.

**Note:** When you click **Save**, the values from the previous entry remain on the screen. You can create another new record by typing over these values and clicking **Save** again.

10. Click **Return** to go back to the previous screen.

#### Related topic

[IP Address](#)

## Editing an IP address

Follow these steps to edit an RCA IP address.

1. In Find mode on the **IP Address** tab, enter selection criteria in one or more query fields.

**Note:** If a field is left empty, then the search will retrieve all instances of that field.

2. Click **Find**.

**Result:** The query returns the first 100 records that begin with the selection criteria. For example, if you enter 123 in a query field, the system will return records such as 123, 1234, 12345.

The results appear in the table on the Find result mode screen for the type of record you are querying. See [Using the Find Screens](#).

3. Click on the record to edit.
4. Click **Select**.

**Result:** The selected record appears in Update mode on the tab.

5. Edit the details as described in [Adding an IP address](#).
6. Click **Save**, and then **Return**, to save your changes and return to the previous screen.

#### Related topic

[IP Address](#)

## Deleting an IP address

Follow these steps to delete an RCA IP address.

1. In Find mode on the **IP Address** tab, enter selection criteria in one or more query fields.

**Note:** If a field is left empty, then the search will retrieve all instances of that field.

2. Click **Find**.

**Result:** The query returns the first 100 records that begin with the selection criteria. For example, if you enter 123 in a query field, the system will return records such as 123, 1234, 12345.

The results appear in the table on the Find result mode screen for the type of record you are querying. See [Using the Find Screens](#).

3. Click on the record to delete.
4. Click **Delete**.



**Result:** The Confirm Delete Record screen appears.

5. Click **Yes** to confirm.
6. Click **Return** to return to the previous screen.

#### Related topic

[IP Address](#)

## Address List

The address tabs in the RCA allow you to configure lists of IP addresses for remote billing purposes (see *X.S011 - 005 - C, cdma200 Wireless IP Network Standard: Accounting Services and 3GPP2 RADIUS VSAs*).

**Note:** It is the responsibility of the PDSN to perform the remote accounting, and not the RADIUS Control Agent.

Addresses in RCA need to be configured in the following order:

1. Define the IP addresses on the IP Address tab. See [Adding an IP address](#).
2. Define IP address lists on the Address List tab. See [Adding an address list](#).
3. Assign the IP addresses to an address list, on the Address List Entry tab. See [Adding an address list entry](#).
4. Assign the address lists to CLI prefixes on the CLI Address List tab. See [Adding a CLI address list](#).

## Maintaining address list

To maintain address list configurations, see the relevant option:

- [Adding an address list](#)
- [Editing an address list](#)
- [Deleting an address list](#)

## Adding an address list

Follow these steps to Add a new address list.

1. On the **Address List** tab in the Radius Control Agent Screen in Find mode, click **New**.  
**Result:** You see the tab in New mode.
2. In the **Name** field, enter the name of the address list to add.
3. In the **Remark** field, enter a user comment if required.
4. Click **Save**.
5. Repeat steps 2 through 5 for all the required address lists.  
**Note:** When you click **Save**, the values from the previous entry remain on the screen. You can create another new record by typing over these values and clicking **Save** again.
6. Click **Return** to go back to the previous screen.

#### Related topic

[Address List](#)

## Editing an address list

Follow these steps to edit an RCA address list.

1. In Find mode on the **Address List** tab, enter selection criteria in one or more query fields.  
**Note:** If a field is left empty, then the search will retrieve all instances of that field.
2. Click **Find**.  
**Result:** The query returns the first 100 records that begin with the selection criteria. For example, if you enter 123 in a query field, the system will return records such as 123, 1234, 12345.  
The results appear in the table on the Find result mode screen for the type of record you are querying. See [Using the Find Screens](#).
3. Click on the record to edit.
4. Click **Select**.  
**Result:** The selected record appears in Update mode on the tab.
5. Edit the details as described in [Adding an address list](#).
6. Click **Save**, and then **Return**, to save your changes and return to the previous screen.

**Related topic**

[Address List](#)

## Deleting an address list

Follow these steps to delete an RCA address list.

1. In Find mode on the **Address List** tab, enter selection criteria in one or more query fields.
2. **Note:** If a field is left empty, then the search will retrieve all instances of that field.
3. Click **Find**.
4. **Result:** The query returns the first 100 records that begin with the selection criteria. For example, if you enter 123 in a query field, the system will return records such as 123, 1234, 12345.
5. The results appear in the table on the Find result mode screen for the type of record you are querying. See [Using the Find Screens](#).
6. Click on the record to delete.
7. Click **Delete**.
8. **Result:** The Confirm Delete Record screen appears.
9. Click **Yes** to confirm.
10. Click **Return** to return to the previous screen.

**Related topic**

[Address List](#)

## Address List Entry

The address tabs in the RCA allow you to configure lists of IP addresses for remote billing purposes (see *X.S011 - 005 - C, cdma200 Wireless IP Network Standard: Accounting Services and 3GPP2 RADIUS VSAs*).

**Note:** It is the responsibility of the PDSN to perform the remote accounting, and not the RADIUS Control Agent.

Addresses in RCA need to be configured in the following order:

1. Define the IP addresses on the IP Address tab. See [Adding an IP address](#).
2. Define IP address lists on the Address List tab. See [Adding an address list](#).
3. Assign the IP addresses to an address list, on the Address List Entry tab. See [Adding an address list entry](#).
4. Assign the address lists to CLI prefixes on the CLI Address List tab. See [Adding a CLI address list](#).

## Maintaining address list entry

To maintain address list entry configurations, see the relevant option:

- [Adding an address list entry](#)
- [Editing an address list entry](#)
- [Deleting an address list entry](#)

## Adding an address list entry

Follow these steps to Add a new address list.

1. On the **Address List Entry** tab in the Radius Control Agent Screen in Find mode, click **New**.

**Result:** You see the tab in New mode.

2. From the **Address List** drop down box, select the name of the address list to add an IP address to.
3. From the **IP Address** drop down box, select the IP address to add.
4. In the **Remark** field, enter a user comment if required.
5. Click **Save**.
6. Repeat steps 2 through 5 for all the required address lists.

**Note:** When you click **Save**, the values from the previous entry remain on the screen. You can create another new record by typing over these values and clicking **Save** again.

7. Click **Return** to go back to the previous screen.

### Related topic

[Address List Entry](#)

## Editing an address list entry

Follow these steps to edit an RCA address list entry.

1. In Find mode on the **Address List Entry** tab, enter selection criteria in one or more query fields.  
**Note:** If a field is left empty, then the search will retrieve all instances of that field.
2. Click **Find**.  
**Result:** The query returns the first 100 records that begin with the selection criteria. For example, if you enter 123 in a query field, the system will return records such as 123, 1234, 12345.  
The results appear in the table on the Find result mode screen for the type of record you are querying. See [Using the Find Screens](#).
3. Click on the record to edit.
4. Click **Select**.  
**Result:** The selected record appears in Update mode on the tab.
5. Edit the details as described in [Adding an address list entry](#).
6. Click **Save**, and then **Return**, to save your changes and return to the previous screen.

### Related topic

[Address List Entry](#)

## Deleting an address list entry

Follow these steps to delete an RCA address list entry.

1. In Find mode on the **Address List Entry** tab, enter selection criteria in one or more query fields.  
**Note:** If a field is left empty, then the search will retrieve all instances of that field.
2. Click **Find**.  
**Result:** The query returns the first 100 records that begin with the selection criteria. For example, if you enter 123 in a query field, the system will return records such as 123, 1234, 12345.  
The results appear in the table on the Find result mode screen for the type of record you are querying. See [Using the Find Screens](#).
3. Click on the record to delete.
4. Click **Delete**.  
**Result:** The Confirm Delete Record screen appears.
5. Click **Yes** to confirm.
6. Click **Return** to return to the previous screen.

### Related topic

[Address List Entry](#)

## CLI Address List

The address tabs in the RCA allow you to configure lists of IP addresses for remote billing purposes (see *X.S011 - 005 - C, cdma200 Wireless IP Network Standard: Accounting Services and 3GPP2 RADIUS VSAs*).

**Note:** It is the responsibility of the PDSN to perform the remote accounting, and not the RADIUS Control Agent.

Addresses in RCA need to be configured in the following order:

1. Define the IP addresses on the IP Address tab. See [Adding an IP address](#).
2. Define IP address lists on the Address List tab. See [Adding an address list](#).
3. Assign the IP addresses to an address list, on the Address List Entry tab. See [Adding an address list entry](#).
4. Assign the address lists to CLI prefixes on the CLI Address List tab. See [Adding a CLI address list](#).

## Maintaining CLI address list

To maintain CLI address list configurations, see the relevant option:

- [Adding a CLI address list](#)
- [Editing a CLI address list](#)
- [Deleting a CLI address list](#)

## Adding a CLI address list

Follow these steps to add a new CLI address list.

1. On the **CLI Address List** tab in the Radius Control Agent Screen in Find mode, click **New**.

**Result:** You see the tab in New mode.

2. In the **Prefix** field, enter the CLI prefix to assign an address list to.
3. From the **Address List** drop down box, select the address list.
4. In the **Remark** field, enter a user comment if required.
5. Click **Save**.
6. Repeat steps 2 through 5 for all the address lists to assign to a CLI.

**Note:** When you click **Save**, the values from the previous entry remain on the screen. You can create another new record by typing over these values and clicking **Save** again.

7. Click **Return** to go back to the previous screen.

### Related topic

[CLI Address List](#)

## Editing a CLI address list

Follow these steps to edit an RCA CLI address list.

1. In Find mode on the **CLI Address List** tab, enter selection criteria in one or more query fields.

**Note:** If a field is left empty, then the search will retrieve all instances of that field.

2. Click **Find**.

**Result:** The query returns the first 100 records that begin with the selection criteria. For example, if you enter 123 in a query field, the system will return records such as 123, 1234, 12345.

The results appear in the table on the Find result mode screen for the type of record you are querying. See [Using the Find Screens](#).

3. Click on the record to edit.

4. Click **Select**.

**Result:** The selected record appears in Update mode on the tab.

5. Edit the details as described in [Adding a CLI address list](#).
6. Click **Save**, and then **Return**, to save your changes and return to the previous screen.

### Related topic

[CLI Address List](#)

## Deleting a CLI address list

Follow these steps to delete an RCA CLI address list.

1. In Find mode on the **CLI Address List** tab, enter selection criteria in one or more query fields.

**Note:** If a field is left empty, then the search will retrieve all instances of that field.

2. Click **Find**.

**Result:** The query returns the first 100 records that begin with the selection criteria. For example, if you enter 123 in a query field, the system will return records such as 123, 1234, 12345.

The results appear in the table on the Find result mode screen for the type of record you are querying. See [Using the Find Screens](#).

3. Click on the record to delete.

4. Click **Delete**.

**Result:** The Confirm Delete Record screen appears.

5. Click **Yes** to confirm.
6. Click **Return** to return to the previous screen.

### Related topic

[CLI Address List](#)

## Global Config

The **Global Config** tab allows you to specify the global default values for the RCA service.

To maintain global configurations, see the relevant option:

- [Adding a global configuration](#)
- [Editing a global configuration](#)
- [Deleting a global configuration](#)

### Adding a global configuration

Follow these steps to add a new global configuration for the RCA.

1. On the **Global Config** tab in the Radius Control Agent Screen in Find mode, click **New**.  
**Result:** The **Global Config** tab redisplay in New mode.
2. In the **Name** field, enter the name for the global configuration.  
**Note:** This name corresponds to the `ConfigName` parameter in the `eserv.config` file. This tells the Radius Gateway which database configuration to load at startup.
3. From the **Service Option List** drop down box, select the service option list. This will have been previously defined on the **Service Option List** tab.  
**Note:** This is intended for volume-based billing; for duration-based billing leave blank or none.
4. In the **Max Service Instances** field, enter the maximum number of external services that can be accessed at one time.  
**Note:** This is related to service options; for duration-based billing leave blank.
5. In the **Session Timeout** field, enter the maximum length of time for a session before it is disconnected (regardless of the activity of the session).  
**Note:** Leave blank or 0 for no timeout.
6. In the **Idle Timeout** field, enter the length of time the session can be inactive before it is disconnected. To ensure that calls can be billed correctly, you must enter a value for Idle Timeout that is:
  - Greater than zero (0). If you set **Idle Timeout** to zero or leave this field blank, the timer is disabled.
  - Greater than the largest reservation chunk that will be returned by the billing engine. This will prevent the RCA from timing out sessions that are still active.
  - Less than the billing engine timeout value that is set in the **Session Timeout** field; if the billing engine times out first, it will release the reservation, so the call will not be billed.
7. **Note:** When the idle timer expires, RCA sends an `ApplyChargingReport` to ACS, signaling that the call has ended, and billing for the call.
8. From the **Billing Type** drop down list, select the default billing type for incoming calls. Select one of:
  - Duration

- Volume
  - None
9. **Note:** If you select `None`, then you must select a value in the **Release** field. If the CLI for an incoming call does not match any prefix configured in the **Billing Type Prefix** tab then the incoming call is released using the release code configured here.
  10. Select the **Write UDR** check box if you want to write usage data records.  
**Note:** This should be left unselected, Oracle applications write EDRs generated by Prepaid Charging.
  11. In the **Internal Error** field, enter the RADIUS error message to send for any errors occurring that are not related to releasing the call.
  12. In the **Max Volume Quota** field, enter the maximum amount of data (in octets) that can be used.  
**Note:** This is used for volume-based billing; for duration-based billing leave blank or 0.
  13. In the **Max Duration Quota** field, enter the maximum length of time (in seconds) that the user can be connected when no billing is being performed. For example, if RCA receives a Connect/Continue from the IN without an ApplyCharging.  
**Note:** This is used for duration-based billing; for volume-based billing leave blank or 0.
  14. In the **Shared Secret** field, enter the key used for encryption/decryption between RCA and the RADIUS client.
  15. In the **Remark** field, enter a user comment if required.
  16. Click **Save**.
  17. Repeat steps 2 through 14 for all global configuration records to define.  
**Note:** When you click **Save**, the values from the previous entry remain on the screen. You can then create another new record by typing over these values.
  18. Click **Return** to go back to the previous screen.

#### Related topic

[Global Config](#)

## Editing a global configuration

Follow these steps to edit an RCA global configuration.

1. In Find mode on the **Global Config** tab, enter selection criteria in one or more query fields.  
**Note:** If a field is left empty, then the search will retrieve all instances of that field.
2. Click **Find**.  
**Result:** The query returns the first 100 records that begin with the selection criteria. For example, if you enter 123 in a query field, the system will return records such as 123, 1234, 12345.

The results appear in the table on the Find result mode screen for the type of record you are querying. See [Using the Find Screens](#).



3. Click on the record to edit.
4. Click **Select**.  
**Result:** The selected record appears in Update mode on the tab.
5. Edit the details as described in [Adding a global configuration](#).
6. Click **Save**, and then **Return**, to save your changes and return to the previous screen.

**Related topic**

[Global Config](#)

## Deleting a global configuration

Follow these steps to delete an RCA global configuration.

1. In Find mode on the **Global Config** tab, enter selection criteria in one or more query fields.

**Note:** If a field is left empty, then the search will retrieve all instances of that field.

2. Click **Find**.

**Result:** The query returns the first 100 records that begin with the selection criteria. For example, if you enter 123 in a query field, the system will return records such as 123, 1234, 12345.

The results appear in the table on the Find result mode screen for the type of record you are querying. See [Using the Find Screens](#).

3. Click on the record to delete.
4. Click **Delete**.  
**Result:** The Confirm Delete Record screen appears.
5. Click **Yes** to confirm.
6. Click **Return** to return to the previous screen.

**Related topic**

[Global Config](#)

## Using the Find Screens

A find screen enables you to find records that match the selection criteria. All RCA find screens contain the following:

- Buttons
- Query fields

### Find result mode buttons

The table below describes the function of each button displayed at the bottom of the RADIUS Control Agent Screens in Find result mode.

Button	Function
Previous	Goes back to the previous set of records in the table, if you have used the <b>Next</b> button to display more records.
Next	Displays the next set of records, if all the Find results cannot be displayed in the table at one time.
Select	Selects the record highlighted in the table and displays it on the tab in Update mode.
Modify All	Modifies a group of records.
Delete All	Deletes a group of records.
Export	Exports the Find results to a file.
Print	Prints the Find results.
Return	Returns you to the RADIUS Control Agent Screen in Find mode for the tab.