Oracle® Communications Convergent Charging Controller

Sample Message Flows Reference Guide

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About This Document

Scope

The scope of this document is confined to samples of message flows to help explain the effects of configuration choices.

Audience

This guide is written primarily for system administrators of Convergent Charging Controller products.

Prerequisites

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

Related Documents

The following documents are related to this document:

- *Charging Control Services User's Guide*

Document Conventions

Typographical Conventions

The following terms and typographical conventions are used in the Oracle Communications Convergent Charging Controller 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

CCS Message Flows

Overview

Introduction

This chapter includes sample CCS message flows. Each topic pertains to a specific part of CCS.

In this Chapter

This chapter contains the following topics.

Data Session Charging Behavior 1

Data Session Charging Behavior

This section shows the following sample CCS message flows:

- *Timeout with Update Reservation Revoked* "*Timeout with Update Reservation Revoked*"
- *Timeout with Update Reservation Confirmed* "*Timeout with Update Reservation Confirmed*"
- *Requested Reservation Chunk Not Set* "*Requested Reservation Chunk Not Set*"
- *Requested Reservation Chunk Set* "*Requested Reservation Chunk Set*"
- *Commit Volume Threshold Set* "*Commit Volume Threshold Set*"
- *Request Time Threshold Not Set* "*Request Time Threshold Not Set*"
- *Request Time Threshold Set* "*Request Time Threshold Set*"

Timeout with Update Reservation Revoked

This example shows the flow when a timeout occurs mid-session and a reservation is revoked.

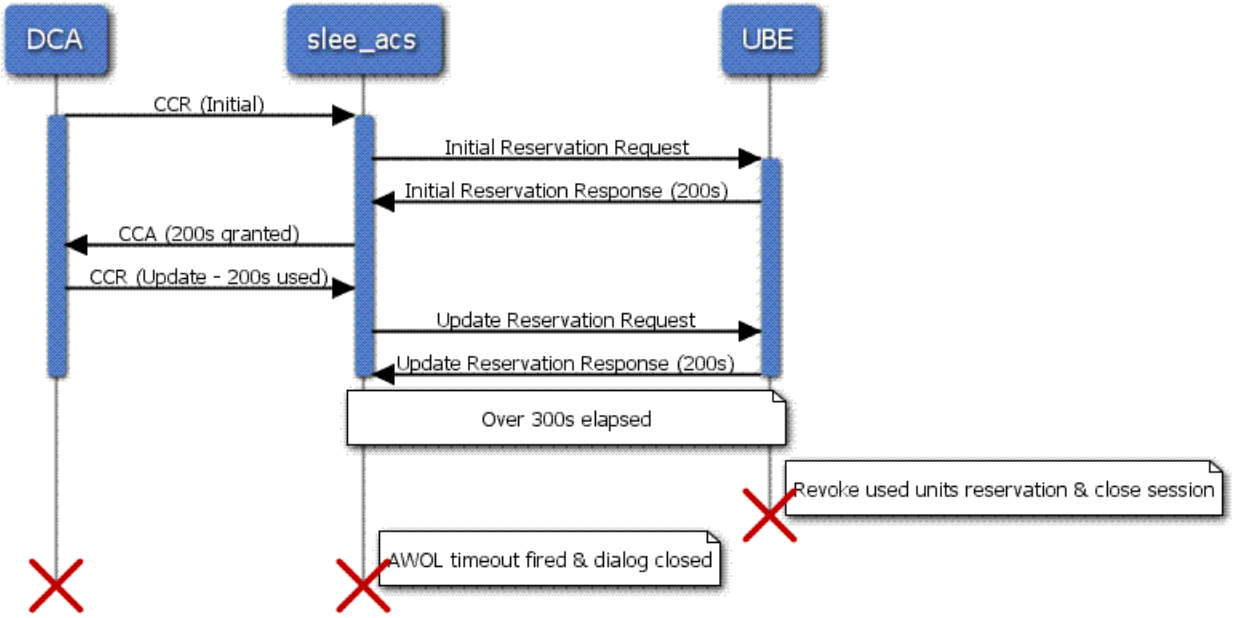
Parameters

This message flow assumes the following configuration:

Field	Screen/Panel	Value
Charge on Reservation Timeout	CLI-DN	(unchecked)
Hold Reservation Open	Reservation Config	300

Message Flow

When a timeout occurs mid-session, all outstanding reservations are revoked and the UBE session is closed.



Timeout with Update Reservation Confirmed

This example shows the flow when a timeout occurs mid-session and a reservation is confirmed.

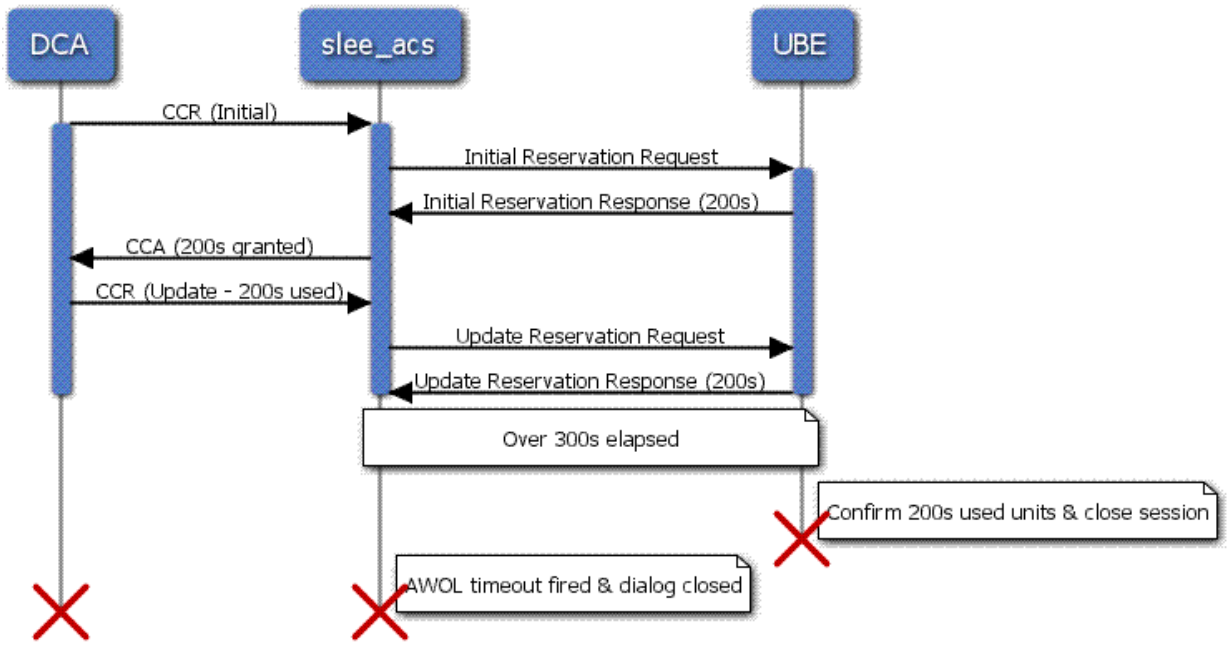
Parameters

This message flow assumes the following configuration:

Field	Screen/Panel	Value
Charge on Reservation Timeout	CLI-DN	(checked)
Hold Reservation Open	Reservation Config	300

Message Flow

When a timeout occurs mid-session, all used units are charged and the UBE session is closed.



Note: The UBE only confirms the used units value based on the received update reservation request. It does not commit the full 400s of granted time. This means that in the case of timeout on an initial reservation, the subscriber will not be charged regardless of the Charge on Reservation Timeout configuration.

Requested Reservation Chunk Not Set

This example shows the flow when the Requested Reservation Chunk is not set.

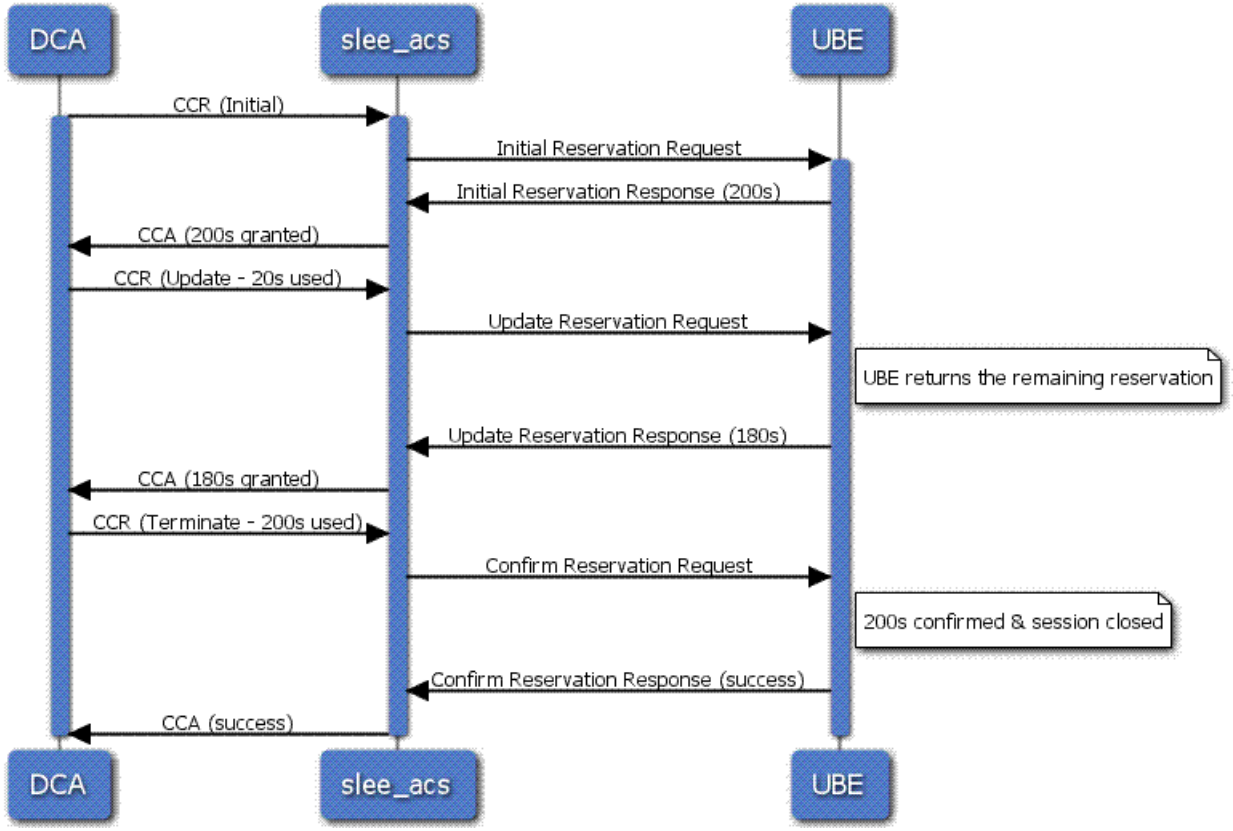
The requested reservation chunk ensures that the reservation returned from the UBE is always rounded to the full size. If it is not set and a subsequent reservation request is received that uses less than the granted reservation size, the UBE returns only the delta.

Parameters

This message flow assumes the following configuration:

Field	Screen/Panel	Value
Requested Reservation Chunk	Reservation Config	(empty)
Hold Reservation Open	Reservation Config	300
Commit Volume Threshold	Reservation Config	(disabled)

Message Flow



Requested Reservation Chunk Set

This example shows the flow when the Requested Reservation Chunk is set.

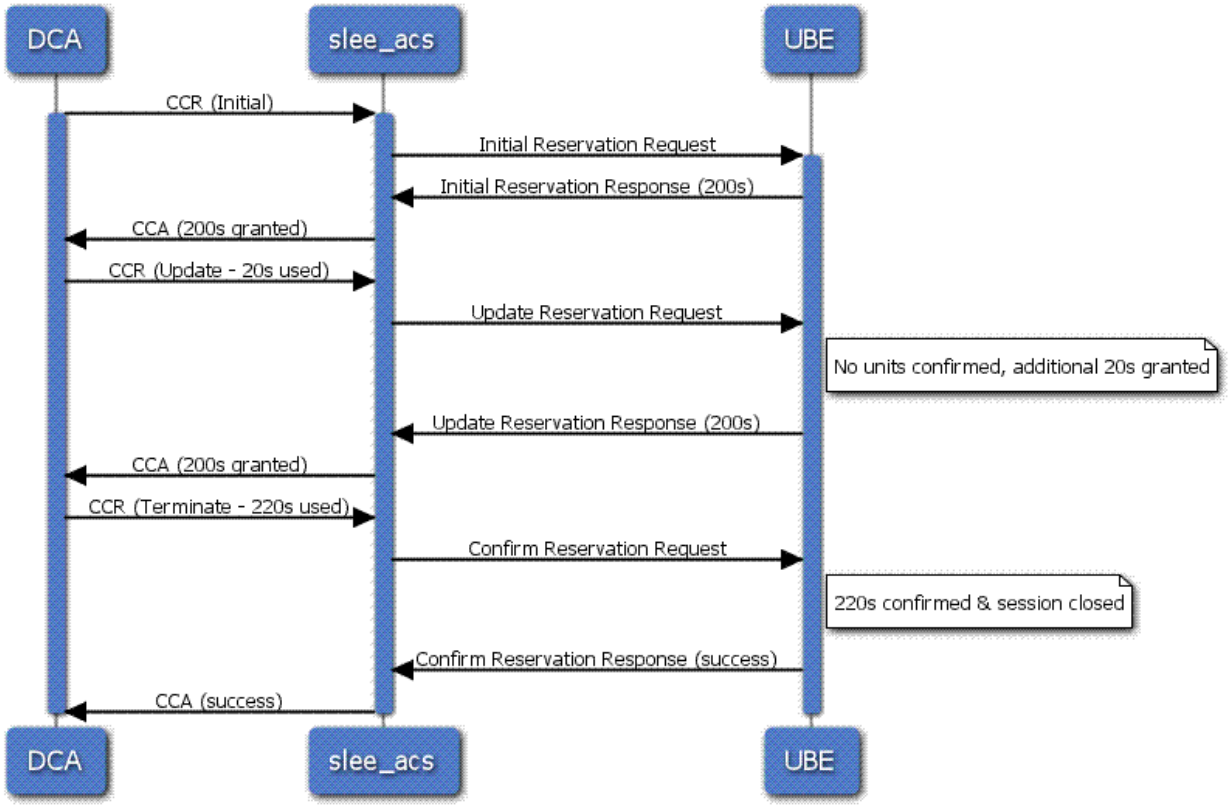
The requested reservation chunk ensures that the reservation returned from the UBE is always rounded to the full size. If it is set and a subsequent reservation request is received that uses less than the granted reservation size, the UBE reserves the amount used to grant a full-sized reservation in response.

Parameters

This message flow assumes the following configuration:

Field	Screen/Panel	Value
Requested Reservation Chunk	Reservation Config	200
Hold Reservation Open	Reservation Config	300
Commit Volume Threshold	Reservation Config	(disabled)

Message Flow



Commit Volume Threshold Set

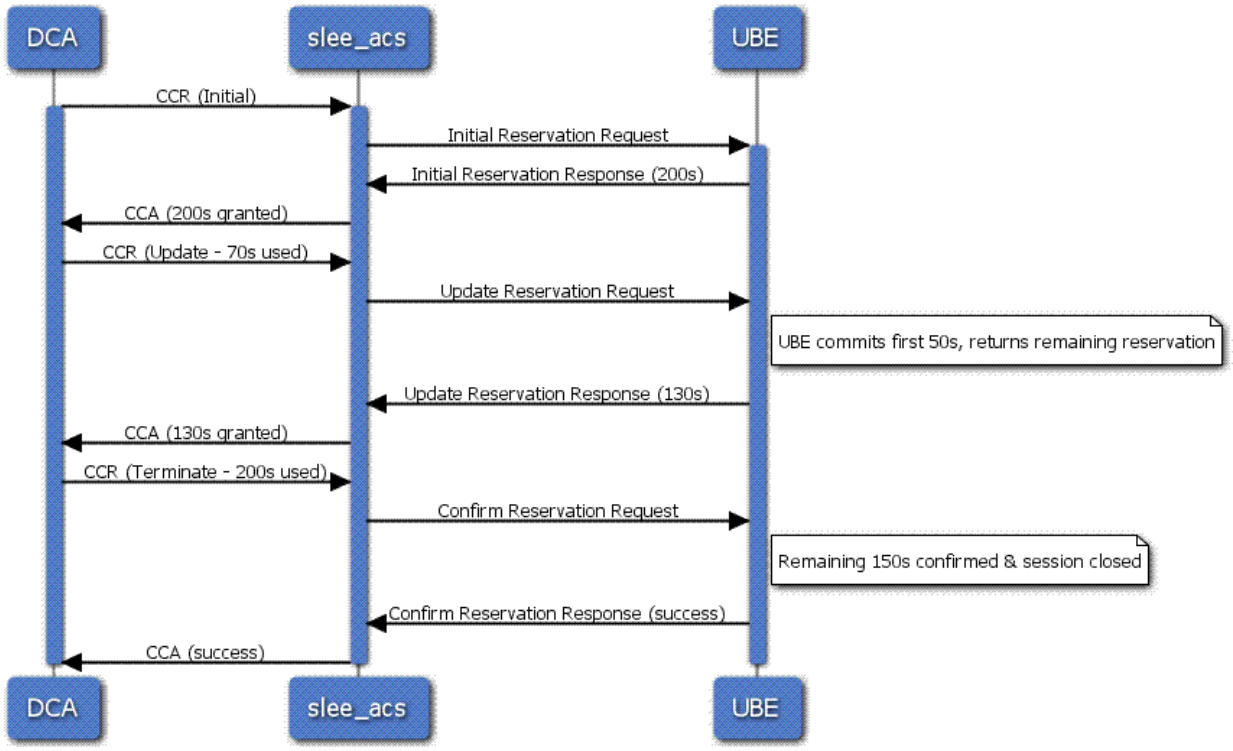
This example shows the flow when the Commit Volume Threshold is set.

Parameters

This message flow assumes the following configuration:

Field	Screen/Panel	Value
Requested Reservation Chunk	Reservation Config	(empty)
Hold Reservation Open	Reservation Config	300
Commit Volume Threshold	Reservation Config	50

Message Flow



Request Time Threshold Not Set

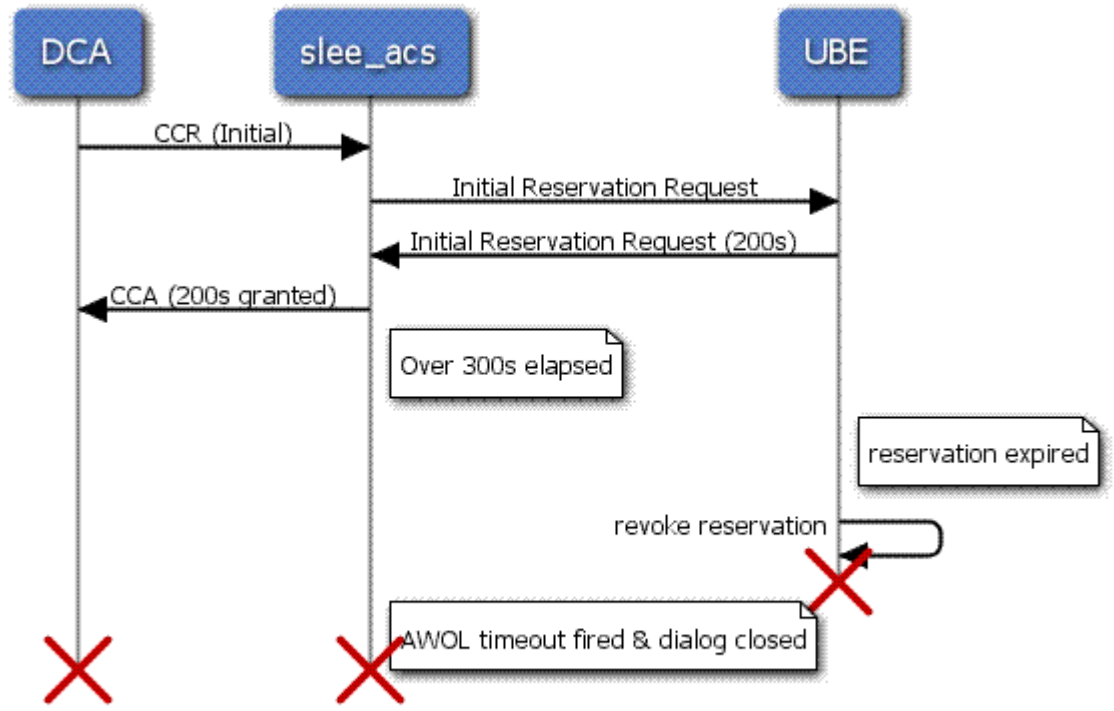
This example shows the flow when the request time threshold is not set.

Parameters

This message flow assumes the following configuration:

Field	Screen/Panel	Value
Request Time Threshold	Reservation Config	not set
Hold Reservation Open	Reservation Config	300
Charge on Timeout	Reservation Config	not set

Message Flow

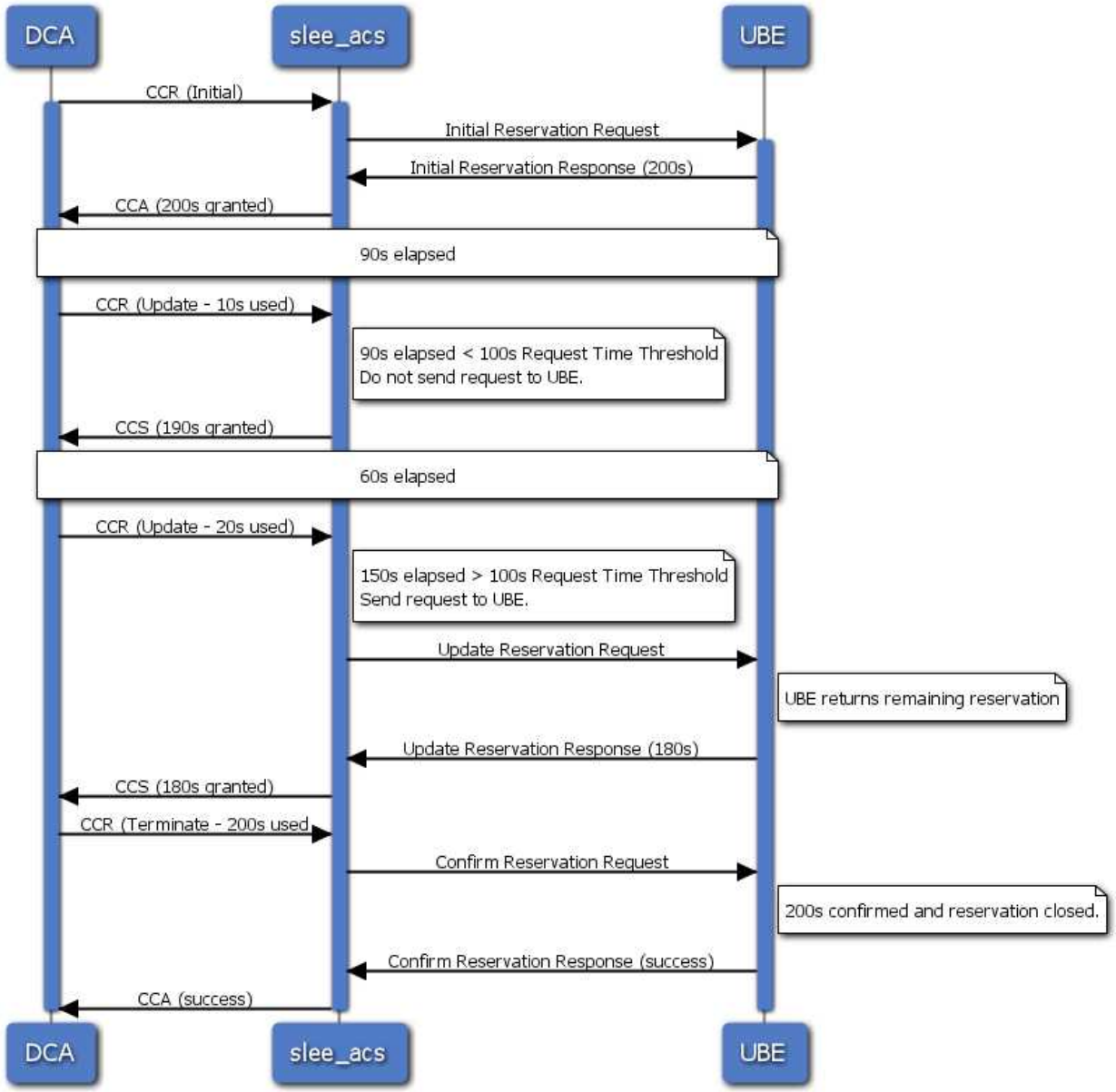


Request Time Threshold Set

This example shows the flow when the request time threshold is set.

Parameters

This message flow assumes the following configuration:

Field	Screen/Panel	Value
Request Time Threshold	Reservation Config	1000 deci-seconds
Hold Reservation Open	Reservation Config	300
Charge on Timeout	Reservation Config	not set

Message Flow