

MTAS Subscriber Credit Notification Management Guide

MTAS

USER GUIDE

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1 Introduction

This document describes how to configure the Subscriber Credit Notification service in MTAS.

1.1 Prerequisites

It is assumed that the user of this document is familiar with the Operation & Maintenance (O&M) area, in general.

1.1.1 Licenses

To enable the Subscriber Credit Notification service, the MMTel AS Voice Base license must be installed.

For more information about the MMTel AS Voice Base license, refer to *MTAS Licenses*.

1.1.2 Documents

Before starting any procedure in this document, ensure that the following documents are available:

- *Managed Object Model (MOM)*
- *Ericsson Command-Line Interface User Guide*

1.1.3 Conditions

Before starting any procedure in this document, ensure that the following condition is met:

- The Node Management (NM) Toolbox and the Configuration Management (CM) browser are connected to the MTAS.





2 Overview

The Subscriber Credit Notification Service enables playing announcements to the served user regarding credit state. This can be done before establishing a session, during a session and when terminating a session.

Subscriber Credit Notification is based on MTAS Online Charging Function and the interaction with an Online Charging System (OCS). Subscriber Credit Notification Service is also responsible for playing OCS initiated announcements.

2.1 Subfunctions

The subfunctions included in the Subscriber Credit Notification service are described in this section.

This section describes the following subfunctions:

- Notify subscriber credit
- Play announcement
- Hold
- Resume

2.1.1 **Notify Subscriber Credit**

The Notify Subscriber Credit function plays credit announcements if the served users credit has degraded.

2.1.2 **Play Announcement**

The Announcement function utilizes an MRF/MRFP to play credit announcements. There is a configuration option to let the MRF provide an SDP offer for mid-session announcements. Credit announcements are done according to the best effort policy, which means that a failure to play the announcement does not stop the functionality of the service.

2.1.3 **Hold**

When credit announcement is played to served user the other party is put on hold. As a configuration option video line attribute can be set to 'inactive' when video streams are put on hold during mid-session announcements.



2.1.4 Resume

The user that was put on hold is resumed with the Resume function after credit announcement has been played.

2.2 Interaction with Other Services

This section describes the Subscriber Credit Notification interactions with other services.

2.2.1 Communication Diversion

For the diverting MTAS in the Communication Diversion function no credit announcements are played to the “diverted to” C-party.

2.2.2 Flexible Communication Distribution

Credit Announcements are only played to served user if call has been established to IMS primary user (B).

2.2.3 Conference

An MTAS node hosting the conference can play the following announcements.

- Credit limit announcement when a request to create a conference cannot be accepted because of credit restrictions.
- Pre-session and mid-session credit warning announcements when the credit of the served user is low, or very low during an established conference.
- Credit limit reached announcement when conference terminated because of credit restrictions.

2.2.4 Three Party

For the Three Party (3PTY) service the served users credit state is monitored and the following announcements are played.

- Credit limit announcement when a request to create a Three Party session cannot be accepted because of credit restrictions.
- Pre-session and mid-session credit warning announcements when the credit of the served user is low, or very low during a Three Party session.
- Credit limit reached announcement when Three Party session is terminated because of credit restrictions.



2.2.5 Hold

Credit warning announcements are not played to a user when it is not allowed (media streams are inactive or send only). The announcement is played later in the session when the users SDP has been changed to allow it (sendrecv).

2.2.6 Communication Completion

Credit limit announcement is played to the served user if the Communication Completion (CC) call cannot be established because of credit restrictions.

Credit warning announcement is played to the served user when it is indicated that the credit of the user is low, or very low when establishing a CC call. The announcement is played after CC call has been successfully established.

2.2.7 Explicit Communication Transfer

If the credit limit is reached for the served user A during an Explicit Communication Transfer (ECT), the credit limit reached announcement is played to the transferor (A), the sessions A-C, and A-B are restored and the transfer is rejected.

Credit warning indications during a call transfer are ignored without announcement.

Since the served user is not in the call any more after a successful call transfer, no announcement will be played. Credit warnings are ignored, but when the served user runs out of credits, the call is ended.





3 Subscriber Credit Notification Service Configuration

The Subscriber Credit Notification service is controlled by the `MtasChargingMO`.

For configurable MOs and attributes related to general Subscriber Credit Notification configuration, refer to *Managed Object Model (MOM)*.

3.1 Subscriber Credit Notification Administrative State Configuration

The Subscriber Credit Notification service is enabled by setting the `mtasChargingSubscriberCreditNotification` attribute in the `MtasChargingMO` to 1 (Unlocked). If the `mtasChargingSubscriberCreditNotification` is set to 0 (Locked), no Subscriber Credit Notification service is provided by the MTAS.

3.2 Configuration Activities

The configuration activities are listed in Table 1.

Table 1 Additional Configuration Activities

Activity	Attribute
Defines the directive (sendonly/i nactive) to use when put a video stream on hold while initiating mid call subscriber credit announcement.	<code>mtasChargingSubscriberCreditNotificationVideoDirective</code>
Defines whether SCN use MRF provided SDP offer or MRF provided SDP answer when initiated the mid-session announcement.	<code>mtasChargingSubscriberCreditNotificationMrfOffer</code>

3.3 Announcement Configuration

When OCS initiated announcement starts playing then the contents of Announcement-Instructions AVP is mapped to an MTAS generic announcement. The mapping is done by looking up an entry in `MtasRoAnnouncementMapping`, using the integer received in Announcement-Number AVP as key. If Announcement-Number AVP is missing or no entry found, then no announcement is played.



Attribute `mtasRoAnnouncementMappingAnnouncementName` contains the generic announcement name that is played. This string points to an entry in `MtasGaAnn MO`, which contains the announcement to be played.

3.4 Wholesale for Subscriber Credit Notification Configuration

The Subscriber Credit Notification service does not support Wholesale.

For more information about the Wholesale service, refer to *MTAS Wholesale Support Management Guide*.

3.5 Service Data Management

Subscriber Credit Notification does not support any data on operator or subscriber level.



4 Performance Management

For a description of measurements related to the Subscriber Credit Notification service, refer to *Managed Object Model (MOM)*.





5 Fault Management

For a list of alarms related to the Subscriber Credit Notification service, refer to *MTAS Alarm List*.