

ST AS Call Admission Control Management Guide

MTAS

USER GUIDE

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1 Introduction

This document describes how to configure the SIP Trunking Application Server (ST AS) Call Admission Control (CAC) service in the MTAS.

1.1 Prerequisites

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

1.1.1 Licenses

To enable the ST AS Call Admission Control feature, the ST AS Base license must be installed.

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

1.1.2 Documents

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

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

1.1.3 Conditions

The following condition must apply:

- An Ericsson Command-Line Interface (ECLI) session in Exec mode is in progress.





2 Overview

The ST AS CAC service enables the operator to restrict the following:

- The number of sessions in which a served PBX is involved
- The number of originating sessions in which a served PBX is involved
- The number of terminating sessions in which a served PBX is involved

The ST CAC service coexists with other simulation services on the same ST AS, for example, ST Communication Barring (CB) and ST Communication Diversion (CDIV). The interaction between the ST CAC and other simulated services is described in this document.

2.1 Use Cases

The use cases included in the ST CAC service are described in this section.

2.1.1 Reject Originating Communication

The ST CAC service checks the CAC counts against the appropriate limits, as configured for the served PBX. If a limit is exceeded, the ST CAC service optionally plays an announcement, then responds with `606 Not Acceptable`.

2.1.2 Reject Terminating Communication

The ST CAC service checks the CAC counts against the appropriate limits, as configured for the served PBX. If a limit is exceeded, the ST CAC service responds with `486 Busy Here`, which can be intercepted by other services, such as ST Communication Diversion.

2.1.3 Announcements

Announcements use case plays audio, video, or audio-video announcements when the ST CAC service is active by using the Generic Announcement Service.

For more information about how to configure announcements using MTAS Generic Announcement function, refer to *MTAS Generic Announcement Management Guide*.



2.2 Interaction with Other Services

This section describes the ST CAC interaction with other services.

2.2.1 Offline Charging

The ST CAC is started by the Supplementary Service Identity included in the Anonymous Communication Rejection (ACR) event generated for the original session that resulted in the busy response.

For more information about the Charging service, refer to *Diameter Offline Charging in MTAS*.

Note: Online charging is not applicable to ST AS.

2.2.2 ST Communication Barring

The Incoming Communication Barring (ICB) and Outgoing Communication Barring (OCB) services process the initial `INVITE` before the ST CAC service.

For more information about the ST CB service, refer to *ST AS Communication Barring Service Management Guide*.

2.2.3 ST Communication Diversion

The ST AS can be configured to control whether the ST CAC service is to count sessions diverted by the served PBX. When counting diverted sessions, the ST CAC service treats the sessions as originating sessions.

For more information about the ST CDIV service, refer to *ST AS Communication Diversion Management Guide*.

2.2.4 ST Identity Presentation

The Identity Presentation service process all provisional and final response messages generated by the ST CAC service on a Terminating ST AS.

For more information about the Identity Presentation service, refer to *ST AS Identity Presentation Service Management Guide*.



3 ST CAC Service

The ST CAC data is configured per subscriber (PBX) data, see Section 3.4 Service Data Configuration on page 6.

The ST CAC is controlled by the *MtasStCac* MO. An overview of the ST CAC services MO structure is shown in Figure 1.

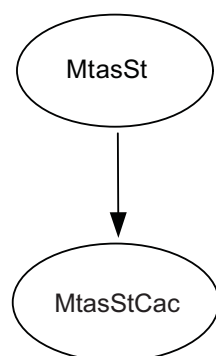


Figure 1 ST CAC MO Structure

For configurable Managed Objects (MOs) and attributes related to the ST CAC service, refer to *Managed Object Model (MOM)*.

3.1 ST CAC Counts Reset

If it becomes necessary to reset the counts for ST CAC, this can be achieved on a per PBX basis by using the CAI3G interface to set the `st-call-admission-control activated` attribute to `false`. This resets all the call counts for the PBX to 0. Any calls that begin setup while this flag is set to `false` are not counted to the ST CAC call limits. Setting this attribute back to `true` results in any new calls being counted to the ST CAC call limits.

If there were established sessions at the time of the reset of the ST CAC counts, then the number of permitted sessions exceeds the permitted session limits until there is a period when there are no established sessions for the PBX. The maximum number of extra sessions, above those permitted for the PBX, is the number of established sessions in progress at the time the count reset occurred.

3.2 Announcement Configuration

The ST CAC service plays an audio or video announcement, or both, to indicate to the caller, for example, when the communication has been rejected or a limit has been exceeded by using Generic Announcement Service.



For more information about how to configure announcements using the MTAS Generic Announcement function, refer to *MTAS Generic Announcement Management Guide*.

3.3 ST CAC Administrative State Configuration

The ST CAC service is enabled by setting the `mtasStCacAdministrativeState` attribute in the `MtasSTCac` MO to 1 (Unlocked). If the `mtasStCacAdministrativeState` is set to 0 (Locked), no ST CAC service is provided by the ST AS.

3.4 Service Data Configuration

This section describes how to configure the service data.

3.4.1 Operator Subscription Level Service Configuration

The operator can activate or deactivate the ST CAC service subscription for the PBX, and set the limits by setting the user data using the CAI3G protocol. The XDMS checks that the structure in the XML files matches the schema.

For more information about the CAI3G protocol, refer to *MTAS CAI3G Interface*.

3.4.2 Subscriber Subscription Level Service Configuration

No service data for the ST CAC service is configured in the subscriber part of the subscriber data.



4 Performance Management

For information on measurements, related to the ST CAC service, refer to *MTAS Performance Measurements*.