

# MTAS SIP Trunking Service Management Guide

## MTAS

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### USER GUIDE

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# 1 Introduction

This document provides a short description of each service in the SIP Trunking Application Server (ST AS) within MTAS and how to configure these services.

## 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 functionality in the ST AS, the Capacity license must be installed.

For more information about the ST AS 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

This section describes the supported ST services.

Some features in the services have dependencies to other subsystems, such as charging and the Media Resource Function Controller (MRFC). An example of such features is announcement, which has dependencies to the MRFC and to the external Media Resource Function Processor (MRFP) node.

For detailed descriptions of all attributes for configuration of the services, refer to *Managed Object Model (MOM)*.

For more information about services providing announcement and announcement configuration, refer to *MTAS Announcement Management Guide*.

For more information about the MRFP and how to configure the MRFP in the MRFC, refer to *MTAS Media Control Management Guide*.

### 2.1 Services

The ST AS and each service in the ST AS is described by a Managed Object (MO) that holds attributes to define the behavior of that particular service. The administrative state of the MO controls whether the ST AS and ST services are available to the network. A reference to a charging profile defines the charging behavior for the ST AS.

The *MtasSt* MO embraces all the ST services. Each ST service MO is used to enable and disable a particular ST service in the MTAS node.

The ST AS is activated by setting the `mtasStAdministrativeState` attribute to 1 (Unlocked).

Each ST service is activated by setting its `mtasSt...AdministrativeState` attribute to 1 (Unlocked).

#### 2.1.1 ST Control

The ST Control service in the ST AS is responsible for handling basic SIP Trunking functionality, such as, managing access between operator IMS Network and enterprise IP Private Branch Exchanges (IP-PBXs), and providing charging support for communication that originates from, or terminates to, a PBX.

For more information on how to configure the ST Control Service, refer to *MTAS SIP Trunking Management Guide*.



## 2.1.2 ST Malicious Communication Identification

The Malicious Communication Identification (MCID) service in the ST AS enables the subscriber to register a recent incoming communication as malicious. The ST AS uses Diameter messages to convey details of the malicious communication to the Communication Details Server (CDS), or stores the information on a local File Server. Only permanent mode is supported in the ST MCID. The service is triggered for configured PBX extension numbers or for all PBX users when the list of extension numbers is empty.

For more information on how to configure the MCID service, refer to *ST AS Malicious Communication Identity Service Management Guide*.

## 2.1.3 ST Carrier Select Rn and Carrier Pre-Select Rn

Carrier selection services in the ST AS allow overriding the default carrier for a communication session. The ST Carrier Select Rn service enables an end user to point out which carrier to use for a particular call by Carrier Select Code prefixed to the dialed number. The ST Carrier Pre-Select Rn service enables the operator to set up data on behalf of the PBX for selection of a carrier based on the localness of the call.

For more information about how to configure the carrier selection services in ST AS, refer to *ST AS Carrier Select Rn and Carrier Pre-Select Rn Management Guide*.

## 2.1.4 ST Identification Presentation

The ST AS Identity Presentation services and their subfunctions enable or restrict the presentation of the identities in a communication based on the participant preferences, information received at the initiation of the communication, and information received in each message.

For more details on how to configure the ST AS Identification Presentation service, refer to *ST AS Identity Presentation Service Management Guide*.

## 2.1.5 ST Communication Barring

The ST AS offers a number of Barring services, which are controlled by the interaction between the MOs and per PBX data. The Barring service enables a PBX to have barring of certain categories of communication.

For more details on ST AS Communication Barring, refer to *ST AS Communication Barring Service Management Guide*.





## 2.1.6 ST Communication Diversion

The ST AS Communication Diversion (CDIV) supplementary service enables a served PBX to have the network redirect communication to another user. This applies to communication addressed to the served PBX that meets conditions in the CDIV rule set of the served PBX. The ability of the served PBX to originate communications is unaffected by the CDIV supplementary service.

For more details on ST AS CDIV, refer to *ST AS Communication Diversion Management Guide*.

## 2.1.7 ST Call Admission Control

The ST AS Call Admission Control (CAC) service enables the operator to risk the number of sessions and the number of originating and terminating sessions a served PBX is involved in. For more details on ST AS CAC and its interaction with other services, refer to *ST AS Call Admission Control Management Guide*.





## 3 ST Services Activation

This section describes how to activate ST AS, and ST service.

### 3.1 Activate ST AS

The ST AS is associated to an MO on ST AS level that has an attribute handling the ST AS administrative state. The ST AS can be activated by unlocking the corresponding administrative state.

To activate ST AS:

1. Verify that the correct parameters are set in the corresponding MO. For a complete description of the parameters, refer to *Managed Object Model (MOM)*.
2. Verify that the `mtasFunctionAdministrativeState` attribute for the `MtasFunction` MO is 1 (Unlocked), refer to *MTAS VNF Management Guide*.
3. Verify that the `mtasStAdministrativeState` attribute in the `MtasSt` MO is 1 (Unlocked).
4. Perform a backup, as described in *Create Backup*.

Result: The ST AS is activated, and the `mtasStAdministrativeState` attribute associated to the activated MO is set to 1 (Unlocked).

### 3.2 Activate ST Service

Each of the MOs has an attribute handling the administrative state. The ST service associated to an MO can be activated by unlocking the corresponding administrative state.

To activate ST service:

1. Verify that the correct parameters are set in the corresponding MO. For a complete description of the parameters, refer to *Managed Object Model (MOM)*.
2. Verify that the `mtasFunctionAdministrativeState` attribute for the `MtasFunction` MO is 1 (Unlocked), refer to *MTAS VNF Management Guide*.
3. Verify that the `mtasStAdministrativeState` attribute in the `MtasSt` MO is 1 (Unlocked).



4. Navigate to the MO for the service to be activated.
5. Set the `mtasSt...AdministrativeState` attribute associated to the MO to **1 (Unlocked)**.
6. Perform a backup, as described in *Create Backup*.

Result: The service is activated, and the `mtasSt...AdministrativeState` attribute associated to the activated MO is set to **1 (Unlocked)**.



## 4 ST Services Deactivation

The services can be divided into two groups, depending on by which method the service is deactivated in ST AS.

Both the immediate deactivation method and the graceful deactivation method allow the ongoing traffic presently using the deactivated service to continue, at the same time as the activation of new such traffic is disallowed. Services that use the session-based functions in the MTAS, use the graceful deactivation method. Each service that can be gracefully deactivated can also be deactivated immediately.

The ST Control service can be deactivated gracefully.

### 4.1 Deactivate ST AS Immediately

To deactivate ST AS immediately:

1. Navigate to the MO.
2. Set the `mtasStAdministrativeState` attribute associated to the MO to 0 (Locked).
3. Perform a backup, as described in *Create Backup*.

Result: The ST AS is deactivated, and the `mtasStAdministrativeState` attribute associated to the deactivated ST AS MO is set to 0 (Locked).

### 4.2 Deactivate ST Services Immediately

To deactivate ST services immediately:

4. Navigate to the MO.
5. Set the `mtasSt...AdministrativeState` attribute associated to the MO to 0 (Locked).
6. Perform a backup, as described in *Create Backup*.

Result: The service is deactivated, and the `mtasSt...AdministrativeState` attribute associated to the deactivated MO is set to 0 (Locked).

### 4.3 Deactivate ST Services Gracefully

To deactivate ST services gracefully:



1. Navigate to the MO.
2. Set the `mtasSt...AdministrativeState` attribute associated to the MO to 2 (Shutting down).
3. Perform a backup, as described in *Create Backup*.

Result: The service is deactivated, and the `mtasSt...AdministrativeState` attribute associated to the deactivated MO is set to 0 (Locked).



## 5 ST Services Parameters Configuration

It is possible to configure the parameters relating to the ST services, for example, enabling and disabling audio announcements.

For a complete description of the parameters relating to service configuration, refer to *Managed Object Model (MOM)*.