

# MTAS Multiple Languages Management Guide

## MTAS

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### USER GUIDE

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# 1 Introduction

This document describes how to configure the Multiple Languages (MLS) service in the MTAS.

## 1.1 Prerequisites

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

### 1.1.1 Licenses

To enable basic services in the MTAS, the MMTel AS Voice Base license must be installed.

For more information about licensing, 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 MTAS offers the MLS service to its subscribers. The MLS service supports sending of announcements and voice prompts to the served user according to the provisioned language preferences of the users.

The served user is the caller in the originating MTAS and the called party in the terminating MTAS.

Announcement to other users than the served user are using the node default language.

The support of languages on the `Mr` and `Mp` interfaces is subject to the MMTel AS Voice Base license.

**Note:** The announcement codes and parameters are specified by other MTAS service, refer to *MTAS Announcement Management Guide*.

If the license is absent or invalid (expired, wrong node) then XDMS rejects any attempt to provision language preferences and the provisioned language preferences are not considered when playing the announcements. An alarm is raised if MLS is enabled and there is no valid MMTel AS Voice Base license.

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

### 2.1 Subfunctions

This section describes the subfunctions included in the MLS service. Both embedded, and external Media Resource Function Controller (MRFC) is described.

#### 2.1.1 Mp Interface (Embedded MRFC)

##### **Simple Announcements, Chained Announcements or Collecting User Input**

Languages for announcements played in association with the `playcol` package (as defined by H.248.9), and the `apf` package (as defined by H.248.7) are specified by the content of the language prefix inserted in front of the announcement code.

For more information about language packages, refer to the following specifications:

- [ITU T H.248.9 \(01/2005\) “Gateway control protocol: Advanced media server packages”](#)

- [ITU-T H.248.7 \(03/2004\) “Gateway control protocol: Generic Announcement package”](#)

The language prefixes are configurable according to the setting of the CM parameter `mtasMrfLanguagesPrefix`.

For more information about the CM parameters, refer to *Managed Object Model (MOM)*.

Each prefix is connected to one locally configured language tag compliant to RFC 5646 (for example, `en`, `en-gb`, `en-gb-glg`, and so on).

The language prefix used for announcements is selected according to the served provisioned language tag of the users.

When no language tag is provisioned, or the announcement is not played to the served user (that is played to the called party in the originating MTAS or to the caller party in the terminating MTAS), the default prefix is used. The default prefix is specified by the CM parameter `mtasMrfDefaultLanguagePrefix`.

For more information about the CM parameters, refer to *Managed Object Model (MOM)*.

### **Segmented Announcement**

Languages for announcements played in association with the `aasb` package (as defined by H.248.9) are specified by the language selector, specified for each announcement segment. For more information, refer to [ITU T H.248.9 \(01/2005\) “Gateway control protocol: Advanced media server packages”](#).

The value of the language selector is taken directly from the served provisioned language tag of the users.

When no language tag is provisioned, or the announcement is not played to the served user (that is played to the called party in the originating MTAS or to the caller party in the terminating MTAS), the default language selector is used. The default language selector is specified by the CM parameter `mtasMrfDefaultLanguageSelector`.

For more information about the CM parameters, refer to *Managed Object Model (MOM)*.

For details on the language-dependent announcement segment selection in segmented announcements, refer to *MTAS Generic Announcement Management Guide*.

## **2.1.2**

### **Mr Interface (External MRFC)**

#### **Simple Announcements (not Chained or Segmented)**





When the MLS is enabled and there is valid MMTel AS Voice Base license, MTAS includes the locale parameter beside the play parameter in the Request URI of the INVITE sent to the MRF.

When the announcement is played to the served user (to the caller in the originating MTAS or to the called party in the terminating MTAS), the value of the locale parameter is set to the served provisioned language tag of the users.

```
sip:annc@<mtasMrfcNodeHostName>; play=<mtasMrControllerBaseUrl +  
service specific announcement code>;  
locale=<language-tag>
```

When the announcement is not played to the served user (that is played to the called party in the originating MTAS or to the caller party in the terminating MTAS) or the served user has not provisioned language tag, the value of the locale parameter is set to the value of CM attribute `mtasMrfDefaultLanguageSelector`.

```
sip:annc@<mtasMrfcNodeHostName>; play=<mtasMrControllerBaseUrl +  
service specific announcement code>;  
locale=<mtasMrfDefaultLanguageSelector>
```

For more information about the CM parameters, refer to *Managed Object Model (MOM)*.

### Chained Announcements or Collecting User Input

When the MLS is enabled and there is valid MMTel AS Voice Base license, MTAS includes the `<lang>` XML element in the VXML file returned to MRF.

When the announcement or prompt is played to the served user (to the caller in the originating MTAS or to the called party in the terminating MTAS), the value of the `<lang>` element is set to the served provisioned language tag of the users.

When the announcement is not played to the served user (that is played to the called party in the originating MTAS or to the caller party in the terminating MTAS) or the served user has not provisioned language tag, the value of the `<lang>` element is set to the value of CM attribute `mtasMrfDefaultLanguageSelector`.

For more information about the CM parameters, refer to *Managed Object Model (MOM)*.

### Segmented Announcements

When the Multi Language Support MLS is enabled and there is valid MMTel AS Voice Base license, MTAS includes the `<lang>` XML element in the VXML file returned to MRF.



For details on the language-dependent announcement segment selection in segmented announcements, refer to *MTAS Generic Announcement Management Guide*.

## 2.2 MLS Interaction with Other Services

The MLS has no interaction with other services.

Generic Announcement service extends the MLS with language-dependent announcement segment selection for segmented announcements.

For details, refer to *MTAS Generic Announcement Management Guide*.



## 3 MLS Configuration

An overview of the MLS MO structure is shown in Figure 1. The MLS service is controlled by the *MtasMpController* and the *MtasMrfLanguages* MOs.

The *MtasSegmentVector* MO also contains the attributes of the MLS service.

For details, refer to *MTAS Generic Announcement Management Guide*.

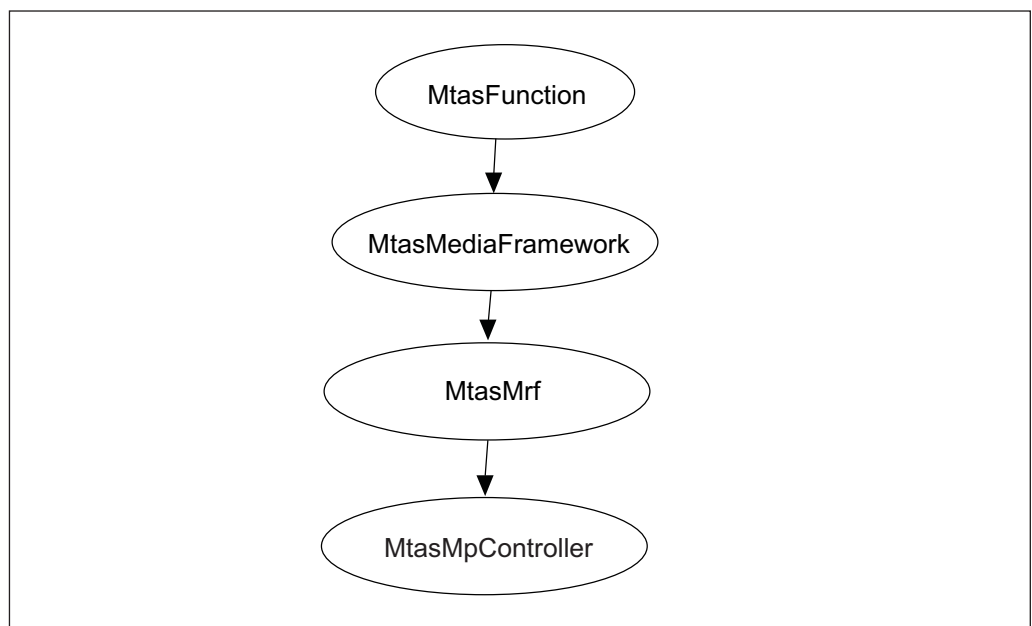


Figure 1 MLS MO Structure

Configurable MOs and attributes related to the MLO service are defined in the Managed Object Model (MOM).

### 3.1 Mp Interface (Embedded MRFC), Except Segmented Announcements

The `mtasMrfLanguagesPrefix` attribute specifies the language prefix inserted in front of the announcement code in the H.248 commands when ordering announcement in a language specified by the MO.

The language prefixes are configurable according to the setting of the CM parameter `mtasMrfLanguagesPrefix`. Each prefix is connected to one locally configured language tag compliant to [RFC 5646](#). For example, “en”, “en-gb”, “en-gb-glg”, and so on.



The language prefix used for announcements is selected according to the served provisioned language tag of the users. When no language tag is provisioned, or the announcement is not sent to the served user, the default prefix is used. The default prefix is specified by the CM parameter `mtasMrfLanguagesPrefix`.

For more information about language tags, refer to [IETF RFC 5646 “Tags for Identifying Languages”](#).

When this attribute is set to a non-default value, then the “an” parameter (used in association with the H.248 apf package) or the “ip” parameter (used in association with the H.248 playcol package) contains the prefix with the value of this configuration attribute in front of the announcement code.

For example, if

`mtasMrfLanguagesPrefix = “en-GB_”`, the `mtasMrfPlaycolAnnouncementsURI` is `“http://localhost/opt/play/announcements/$”` and the associated announcement number is 123, then the `ip=“sid=<http://localhost/opt/play/announcements/en-GB_123>”` and `an=en-GB_123`

Parameters are sent in the voice prompt and announcement orders from the embedded MRFC.

## 3.2 Mr Interface (External MRFC)

The language used for announcements and prompts is selected according to the served provisioned language tag of the user. When no language tag is provisioned, or the announcement is not sent to the served user, the default language is used. The default language is specified by the CM parameter `mtasMrfDefaultLanguageSelector`, and defined as an [RFC3066](#) compliant language-tag.

## 3.3 Segmented Announcements (Both for Mp and Mr Interfaces)

For details on the language-dependent announcement segment selection in segmented announcements, refer to *MTAS Generic Announcement Management Guide*.

## 3.4 Service Data Configuration

This section describes how to configure the service data.



### 3.4.1 Operator Subscription Level Service Configuration

The MLS depends on the addition of a new common data element called “language-tag” to the operator part of the User Service Data.

For more information about the formal XML definition of the service over the CAI3G interface, refer to *MTAS CAI3G Interface*.

If a valid MMTel AS Voice Base license is not available, the provision of the “language-tag” is rejected.

### 3.4.2 Subscriber Subscription Level Service Configuration

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

## 3.5 Announcement Configuration

For more information about announcement handling and attributes for the Supplementary Service Code (SSC) service, refer to *MTAS Announcement Management Guide*.

## 3.6 MLS Administrative State Configuration

This attribute determines if MTAS considers the language preferences at constructing the announcements to the caller.

The MLS service is enabled by setting the `mtasMrfMLSAdministrativeState` attribute in the *MtasMpController* MO to 1 (Unlocked). If the `mtasMrfMLSAdministrativeState` is set to 0 (Locked), no MLS service is provided by the MTAS.





## 4 Performance Management

For measurements related to the MLS service, refer to *MTAS Performance Measurements*.







## 5 Fault Management

For alarms related to the MLS services, refer to *MTAS Alarm List*.