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Mission Critical Services (MCS) Management Object (MO)
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Contents

Foreword

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y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.

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1 Scope

The present document defines a number of Mission Critical Services (MCSs) Management Objects (MO) that are configured for the UE for the operation of MCSs. The management objects are compatible with OMA Device Management protocol specifications, version 1.2 and upwards, and is defined using the OMA DM Device Description Framework as described in the Enabler Release Definition OMA OMA-ERELD_DM-V1_2 [2].

MCSs are services that require preferential handling compared to normal telecommunication services, e.g. in support of police or fire brigade.

MCSs can be used for public safety applications and also for general commercial applications (e.g., utility companies and railways).

The present document is applicable to an UE supporting on-line, off-line or both on-line and off-line configuration of the configuration management client.

The present document is applicable to an UE supporting off-line configuration of the group management client.

The parameters defined by the management objects in the present document are configured in the UE using on-line configuration over the CSC-4 reference point and using off-line configuration over the CSC-11 and CSC-12 reference points. Other specifications define how these parameters are used in the operation of MCSs, and whether they are applicable to on-network operation or off-network operation, or both:

- 3GPP TS 24.379 [7]
- 3GPP TS 24.380 [8]
- 3GPP TS 24.381 [9]
- 3GPP TS 24.382 [11]
- 3GPP TS 24.384 [12]

The common network operation means both on-network operation and off-network operation in the present document.

The following management objects are defined in the present document:

- MCPTT UE configuration MO
- MCPTT user profile MO
- MCPTT group configuration MO
- MCPTT service configuration MO
- MCPTT UE initial configuration MO

The MOs listed above define repositories of data in the ME.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] OMA OMA-ERELD-DM-V1_2-20070209-A: "Enabler Release Definition for OMA Device Management, Version 1.2".

[3] OMA OMA-TS-DM_Protocol-V1_2: "OMA Device Management Protocol".

[4] OMA OMA-TS-XDM_Group-V1_1-20120403-A: "Group XDM Specification".

[5] 3GPP TS 23.003: "Numbering, addressing and identification".

[6] 3GPP TS 23.303: "Proximity-based Services (ProSe); Stage 2".

[7] 3GPP TS 24.379: "Mission Critical Push To Talk (MCPTT) call control Protocol specification".

[8] 3GPP TS 24.380: "Mission Critical Push To Talk (MCPTT) media plane control Protocol specification".

[9] 3GPP TS 24.381: "Mission Critical Push To Talk (MCPTT) group management Protocol specification".

[10] 3GPP TS 31.102: "Characteristics of the USIM Application".

[11] 3GPP TS 24.382: "Mission Critical Push To Talk (MCPTT) identity management Protocol specification".

[12] 3GPP TS 24.384: "Mission Critical Push To Talk (MCPTT) configuration management Protocol specification".

[13] IETF RFC 4566 (July 2006): "Session Description Protocol".

[14] 3GPP TS 33.179: "Security of Mission Critical Push-To-Talk (MCPTT)".

[15] 3GPP TS 23.179: "Functional architecture and information flows to support mission critical communication services; Stage 2".

3 Definitions and abbreviations

3.1 Definitions

For the purpose of the present document, the following terms and definitions given in 3GPP TS 23.179 [15] apply:

Pre-selected MCPTT user profile

3.2 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in 3GPP TR 21.905 [1].

ACL	Access Control List
CMS	Configuration Management Server
DDF	Device Description Framework
DM	Device Management
GMS	Group Management Server
MCS	Mission Critical Service
MCSs	Mission Critical Services
MCPTT	Mission Critical Push To Talk
ME	Mobile Equipment
MO	Management Object
OMA	Open Mobile Alliance
ProSe	Proximity-based Services
RFC	Request For Comments
URI	Uniform Resource Identifier

URN	Uniform Resource Name
XCAP	XML Configuration Access Protocol
XML	eXtensible Markup Language
XUI	XCAP Unique Identifier

4 MCPTT UE configuration MO

4.1 General

The MCPTT UE configuration Management Object (MO) is used to configure MCPTT Client behaviour for the on-network or off-network MCPTT Service. The MCPTT UE configuration parameters may be stored in the ME, or in the USIM as specified in 3GPP TS 31.102 [10], or in both the ME and the USIM. If both the ME and the USIM contain the same parameters, the values stored in the USIM shall take precedence.

The Management Object Identifier is: urn:oma:mo:ext-3gpp-MCPTT-UE-configuration:1.0.

Protocol compatibility: This MO is compatible with OMA OMA DM 1.2 [3].

The OMA DM ACL property mechanism (see OMA OMA-ERELD-DM-V1_2 [2]) may be used to grant or deny access rights to OMA DM servers in order to modify nodes and leaf objects of the MCPTT UE configuration MO.

The following nodes and leaf objects are possible under the MCPTT UE configuration node as described in figure 4.1.1.

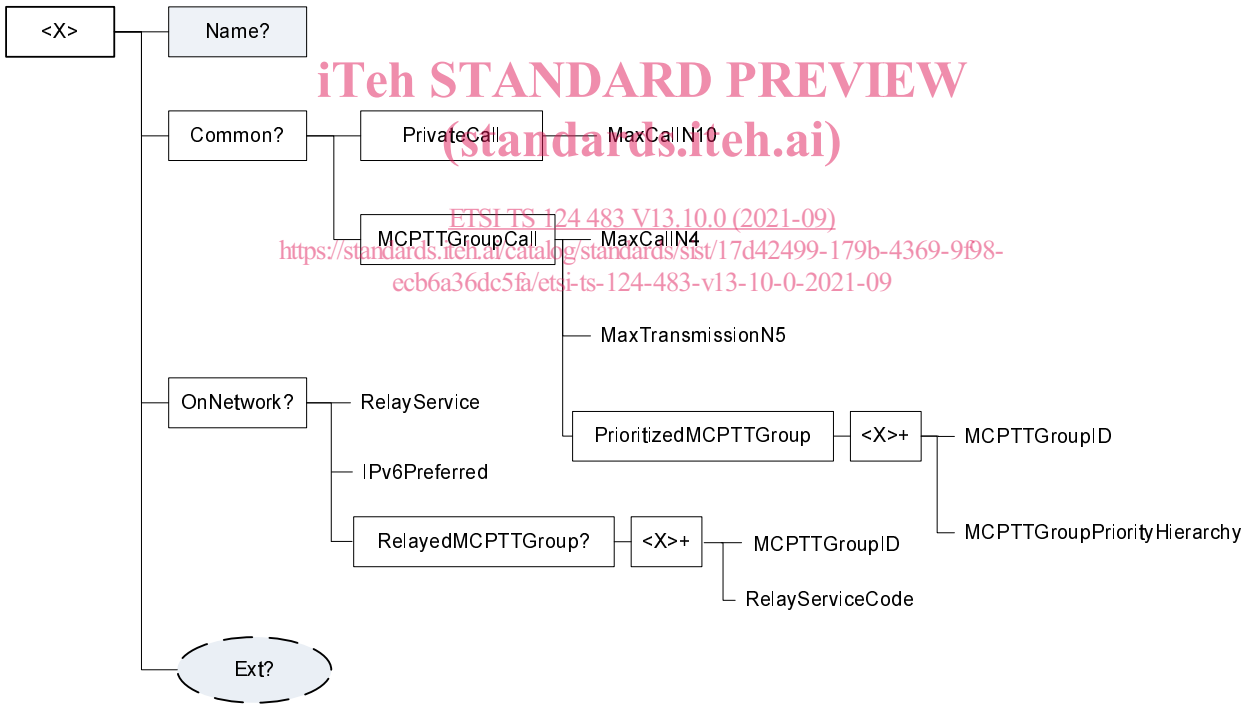

Figure 4.1.1: The MCPTT UE configuration MO

4.2 MCPTT UE configuration MO parameters

4.2.1 General

This clause describes the parameters for the MCPTT UE configuration Management Object (MO).

4.2.2 Node: <x>

Table 4.2.2.1: Node: <x>

<x>

Status	Occurrence	Format	Min. Access Types
Required	OneOrMore	node	Get

This interior node acts as a placeholder for the MCPTT UE configuration Management Object (MO).

For the MCPTT UE configuration MO, the namespace specific string is: "urn:oma:mo:oma-dm-mcptt-ue-configuration:1.0"

- Values: N/A

4.2.3 /<x>/Name

Table 4.2.3.1: /<x>/Name

Name

Status	Occurrence	Format	Min. Access Types
Required	ZeroOrOne	chr	Get

The Name leaf is a name for the MCPTT UE configuration settings.

- Values: <User displayable name>

4.2.4 /<x>/Ext/

Table 4.2.4.1: /<x>/Ext/

Ext

Status	Occurrence	Format	Min. Access Types
Optional	ZeroOrOne	node	Get, Replace

The Ext is an interior node for where the vendor specific information about the MCPTT UE configuration MO is being placed.

Usually the vendor extension is identified by vendor specific name under the ext node and contains the vendor meaning application vendor, device vendor etc. The tree structure under the vendor identified is not defined and can therefore include one or more un-standardized sub-trees.

- Values: N/A

4.2.5 /<x>/Common

Table 4.2.5.1: /<x>/Common

Common

Status	Occurrence	Format	Min. Access Types
Required	ZeroOrOne	node	Get, Replace

This interior node represents a container for the common network operation which means both on-network operation and off-network operation.

4.2.6 /<x>/Common/PrivateCall

Table 4.2.6.1: /<x>/Common/PrivateCall

Common/PrivateCall

Status	Occurrence	Format	Min. Access Types
Required	One	node	Get, Replace

This interior node is a placeholder for the private call configuration.

4.2.7 /<x>/Common/PrivateCall/MaxCallN10

Table 4.2.7.1: /<x>/Common/PrivateCall/MaxCallN10

Common/PrivateCall/MaxCallN10

Status	Occurrence	Format	Min. Access Types
Required	One	int	Get, Replace

This leaf node indicates the maximum number of private calls.

- Values: 0-255

4.2.8 /<x>/Common/MCPTTGroupCall

Table 4.2.8.1: /<x>/Common/MCPTTGroupCall

Common/MCPTTGroupCall

Status	Occurrence	Format	Min. Access Types
Required	One	node	Get, Replace

This interior node is a placeholder for the MCPTT group call configuration.

4.2.9 /<x>/Common/MCPTTGroupCall/MaxCallN4

Table 4.2.9.1: /<x>/Common/MCPTTGroupCall/MaxCallN4

Common/MCPTTGroupCall/MaxCallN4

Status	Occurrence	Format	Min. Access Types
Required	One	int	Get, Replace

This leaf node indicates the maximum number of simultaneous group calls.

- Values: 0-255

4.2.10 /<x>/Common/MCPTTGroupCall/MaxTransmissionN5

Table 4.2.10.1: /<x>/Common/MCPTTGroupCall/MaxTransmissionN5

Common/MCPTTGroupCall/MaxTransmissionN5

Status	Occurrence	Format	Min. Access Types
Required	One	int	Get, Replace

This leaf node indicates the maximum number of transmissions in a group.