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Universal Mobile Telecommunications System (UMTS);

LTE; 5G;

Management Object (MO) for multi-device and multi-identity in the IP Multimedia Subsystem (IMS) (3GPP TS 24.175 version 16.0.0 Release 16)



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Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

- x the first digit:
 - 1 presented to TSG for information;
 - 2 presented to TSG for approval;
 - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

In the present document, modal verbs have the following meanings:

shall indicates a mandatory requirement to do somethingshall not indicates an interdiction (prohibition) to do something

The constructions "shall" and "shall not" are confined to the context of normative provisions, and do not appear in Technical Reports.

The constructions "must" and "must not" are not used as substitutes for "shall" and "shall not". Their use is avoided insofar as possible, and they are not used in a normative context except in a direct citation from an external, referenced, non-3GPP document, or so as to maintain continuity of style when extending or modifying the provisions of such a referenced document.

should indicates a recommendation to do something

should not indicates a recommendation not to do something

may indicates permission to do something

need not indicates permission not to do something

The construction "may not" is ambiguous and is not used in normative elements. The unambiguous constructions "might not" or "shall not" are used instead, depending upon the meaning intended.

can indicates that something is possiblecannot indicates that something is impossible

The constructions "can" and "cannot" are not substitutes for "may" and "need not".

will indicates that something is certain or expected to happen as a result of action taken by an agency

the behaviour of which is outside the scope of the present document

will not indicates that something is certain or expected not to happen as a result of action taken by an

agency the behaviour of which is outside the scope of the present document

might indicates a likelihood that something will happen as a result of action taken by some agency the

behaviour of which is outside the scope of the present document

might not indicates a likelihood that something will not happen as a result of action taken by some agency

the behaviour of which is outside the scope of the present document

In addition:

is (or any other verb in the indicative mood) indicates a statement of fact

is not (or any other negative verb in the indicative mood) indicates a statement of fact

The constructions "is" and "is not" do not indicate requirements.

1 Scope

The present document defines the management object (MO) for Multi-Device and Multi-Identity in IMS.

The MO for Multi-Device (MuD) and Multi-Identity (MiD) in IMS is 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-ERELD_DM-V1_2 [2].

The MO for Multi-Device and Multi-Identity in IMS consists of relevant configuration parameters that can be managed for a UE supporting the UE role specified in 3GPP TS 24.174 [3].

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] 3GPP TS 24.174: "Support of Multi-Device and Multi-Identity in IMS; Stage 3".
- [4] OMA-TS-DM_TND-V1_3-20160524-A: "OMA Device Management Tree and Description".

3 Definitions of terms, symbols and abbreviations

3.1 Terms

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

3.2 Symbols

Void.

3.3 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].

MiD Multi-iDentity
MO Management Object
MuD Multi-Device

4 Multi-Device and Multi-Identity management object

The MO for Multi-Device and Multi-Identity in IMS is used to manage settings of the UE for Multi-Device and Multi-Identity in IMS. Figure 4-1 gives an overview of the configuration parameters of this MO. The conventions used in this specification are as defined in OMA-TS-DM_TND [4] with the following modifications:

- interior nodes are drawn as rectangles, not rectangles with rounded corners; and
- leaf nodes are plain text, not rectangles.

The MO for Multi-Device and Multi-Identity in IMS covers configuration parameters for a UE supporting Multi-Device and Multi-Identity in IMS specified in TS 24.174 [3].

The MO identifier is: urn:oma:mo:ext-3gpp-mudmid:1.0.

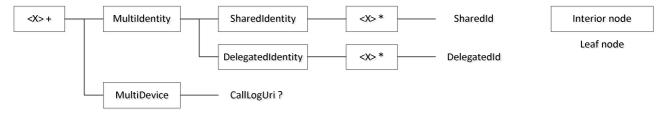


Figure 4-1: MO for Multi-Device and Multi-Identity in IMS

5 Management object parameters

5.1 General

This clause describes the configuration parameters for the MO for Multi-Device and Multi-Identity in IMS.

5.2 Node: /<X>

This interior node acts as a placeholder for the MO for Multi-Device and Multi-Identity in IMS.

- Occurrence: OneOrMore

Format: node

- Access Types: Get, Replace

- Values: N/A

The interior node is mandatory for a UE supporting the UE role specified in TS 24.174 [3].

NOTE: One node is normally used. More nodes are only used in case the terminal supports multiple UICCs.

Child nodes of this interior node which are not defined in this version of the present document are ignored.

5.3 /<X>/Multildentity

This interior node contains the multi-identity parameters.

Occurrence: One

Format: node

- Access Types: Get, Replace

Values: N/A

5.4 /<X>/Multildentity/SharedIdentity

This interior node contains the parameters of shared identities.

Occurrence: One

- Format: node

- Access Types: Get, Replace

- Values: N/A

5.5 /<X>/Multildentity/SharedIdentity/<X>

This interior node contains the settings of shared identities.

- Occurrence: ZeroOrMore

Format: node

- Access Types: Get, Replace

- Values: N/A

5.6 /<X>/MultiIdentity/SharedIdentity/<X>/SharedId

This leaf node contains a shared identity the UE can use.

- Occurrence: One

Format: chr

- Access Types: Get, Replace

Values: N/A

5.7 /<X>/MultiIdentity/DelegatedIdentity

This interior node contains the multi-device parameters of delegated identities.

- Occurrence: One

Format: node

- Access Types: Get, Replace

- Values: N/A

5.8 /<X>/MultiIdentity/DelegatedIdentity/<X>

This interior node contains the settings of delegated identities.

- Occurrence: ZeroOrMore

- Format: node

- Access Types: Get, Replace

Values: N/A

5.9 /<X>/MultiIdentity/DelegatedIdentity/<X>/DelegatedId

This leaf node contains a delegated identity that is allowed to use the native identity.

- Occurrence: One

Format: chr

- Access Types: Get, Replace

- Values: N/A

5.10 /<X>/MultiDevice/

This interior node contains the multi-device parameters.

Occurrence: One

- Format: node

- Access Types: Get, Replace

- Values: N/A

5.11 /<X>/MultiDevice/CallLogUri

This leaf node contains a URI the UE can use to access the call log.

Occurrence: ZeroOrOne

Format: chr

- Access Types: Get, Replace

- Values: N/A

Annex A (informative): DDF of MO for Multi-Device and Multi-Identity in IMS

This DDF is the standardized minimal set. A vendor can define its own DDF for the complete device. This DDF can include more features than this minimal standardized version.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE MgmtTree PUBLIC "-//OMA//DTD-DM-DDF 1.2//EN"</pre>
    "http://www.openmobilealliance.org/tech/DTD/DM_DDF-V1_2.dtd">
<MamtTree>
    <VerDTD>1.2</VerDTD>
    <Man>--The device manufacturer--</Man>
    <Mod>--The device model--</Mod>
    <Node>
        <NodeName/>
        <DFProperties>
            <AccessType>
                <Get./>
                <Replace/>
            </AccessType>
            <DFFormat>
                <node/>
            </DFFormat>
            <Occurrence>
                <OneOrMore/>
            </Occurrence>
            <Scope>
                <Permanent/>
            <DFTitle>The Management Object (MO) for Multi-Device and Multi-Identity in
IMS.</DFTitle>
                <DDFName>urn:oma:mo:ext-3gpp-mudmid:1.0</pd>
            </DFType>
        </DFProperties>
        <Node>
            <NodeName>MultiIdentity</NodeName>
            <DFProperties>
                <AccessType>
                    <Get./>
                    <Replace/>
                </AccessType>
                <DFFormat>
                    <node/>
                </DFFormat>
                <Occurrence>
                </Occurrence>
                <Scope>
                     <Permanent/>
                <DFTitle>Interior node containing multi-identity parameters/DFTitle>
                <DFType><DDFName/></DFType>
            </DFProperties>
            <Node>
                <NodeName>SharedIdentity</NodeName>
                <DFProperties>
                    <AccessType>
                        <Get/>
                        <Replace/>
                     </AccessType>
                     <DFFormat>
                         <node/>
                     </DFFormat>
                     <Occurrence>
                        <0ne/>
                     </Occurrence>
                     <Scope>
                     </Scope>
                     <DFTitle>Interior node containing parameters of shared identities/DFTitle>
                     <DFType><DDFName/></DFType>
                </DFProperties>
                <Node>
                     <NodeName/>
```

```
<DFProperties>
                        <AccessType>
                            <Get/>
                            <Replace/>
                        </AccessType>
                        <DFFormat>
                            <node/>
                        </DFFormat>
                        <Occurrence>
                            <ZeroOrMore/>
                        </Occurrence>
                        <Scope>
                            <Dynamic/>
                        </Scope>
                        <DFTitle>This interior node contains the settings of shared
identities</DFTitle>
                        <DFType><DDFName/></DFType>
                    </DFProperties>
                     <Node>
                        <NodeName>SharedId</NodeName>
                        <DFProperties>
                             <AccessType>
                                <Get/>
                                <Replace/>
                            </AccessType>
                             <DFFormat>
                                <chr/>
                             </DFFormat>
                             <0ccurrence>
                                <One/>
                             </Occurrence>
                             <Scope>
                                 <Dynamic/>
                             </Scope>
                             <DFTitle>This leaf node contains a shared identity the UE can
use</DFTitle>
                             <DFType>
                                <MIME>text/plain</MIME>
                             </DFType>
                        </DFProperties>
                    </Node>
                </Node>
            </Node>
            <Node>
                <NodeName>DelegatedIdentity</NodeName>
                <DFProperties>
                    <AccessType>
                        <Get/>
                        <Replace/>
                    </AccessType>
                    <DFFormat>
                        <node/>
                    </DFFormat>
                    <Occurrence>
                        <0ne/>
                    </Occurrence>
                    <Scope>
                        <Permanent/>
                    </Scope>
                    <DFTitle>Interior node containing parameters of delegated identities/DFTitle>
                    <DFType><DDFName/></DFType>
                </DFProperties>
                <Node>
                    <NodeName/>
                     <DFProperties>
                        <AccessType>
                            <Get/>
                            <Replace/>
                        </AccessType>
                        <DFFormat>
                            <node/>
                        </DFFormat>
                        <Occurrence>
                            <ZeroOrMore/>
                        </Occurrence>
                        <Scope>
                            <Dynamic/>
                        </Scope>
```

```
<DFTitle>This interior node contains the settings of delegated
identities</DFTitle>
                        <DFType><DDFName/></DFType>
                    </DFProperties>
                     <Node>
                        <NodeName>DelegatedId</NodeName>
                         <DFProperties>
                             <AccessType>
                                 <Get/>
                                 <Replace/>
                             </AccessType>
                             <DFFormat>
                                <chr/>
                             </DFFormat>
                             <Occurrence>
                                <One/>
                             </Occurrence>
                             <Scope>
                                 <Dynamic/>
                             </Scope>
                            <DFTitle>This leaf node contains the delegated identity allowed to use
the native identity</DFTitle>
                             <DFType>
                                 <MIME>text/plain</MIME>
                            </DFType>
                        </DFProperties>
                     </Node>
                </Node>
            </Node>
        </Node>
        <Node>
            <NodeName>MultiDevice</NodeName>
            <DFProperties>
                <AccessType>
                    <Get/>
                    <Replace/>
                </AccessType>
                <DFFormat>
                    <node/>
                </DFFormat>
                <Occurrence>
                    <One/>
                </Occurrence>
                <Scope>
                    <Permanent/>
                </Scope>
                <DFTitle>Interior node containing multi-device parameters/DFTitle>
                <DFType><DDFName/></DFType>
            </DFProperties>
            <Node>
                <NodeName>CallLogUri</NodeName>
                <DFProperties>
                    <AccessType>
                        <Get/>
                        <Replace/>
                    </AccessType>
                    <DFFormat>
                        <chr/>
                    </DFFormat>
                    <Occurrence>
                        <ZeroOrOne/>
                     </Occurrence>
                     <Scope>
                         <Dynamic/>
                    </Scope>
                        <DFTitle>This leaf node contains a URI the UE can use to access the call
log</DFTitle>
                    <DFType>
                        <MIME>text/plain</MIME>
                    </DFType>
                </DFProperties>
            </Node>
        </Node>
    </Node>
</MgmtTree>
```

Annex B (informative): Change history

	Change history								
Date	Meeting	TDoc	CR	Rev	Cat	Subject/Comment	New version		
2019-11	CT1#121	C1-198315, C1-198317, C1-198318, C1-198833, C1-198834				First version of this specification	0.0.0		
2019-12	CT#86	CP-193163				Presentation for information to TSG CT	1.0.0		
2019-12	CT#86	CP-193293				A TS number added	1.0.1		
2020-03	CT1#122 E	C1-201030				Sent for approval to TSG CT	1.1.0		
2020-03	CT-87e	CP-200164				Presentation for approval to TSG CT	2.0.0		
2020-03	CT-87e					Version 16.0.0 created after approval	16.0.0		

History

Document history								
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