ETSI TS 124 286 V15.0.0 (2018-06)

TECHNICAL SPECIFICATION

Digital cellular telecommunications system (Phase 2+) (GSM);
Universal Mobile Telecommunications System (UMTS);
LTE;
IP Multimedia (IM) Core Network (CN) subsystem
Centralized Services (ICS);
Management Object (MO)
(3GPP TS 24.286 version 15.0.0 Release 15)

Reference

RTS/TSGC-0124286vf00

Keywords

GSM,LTE,UMTS

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Contents

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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.

1   Scope

This document defines the IMS Centralised Services Management Object (MO). The management object 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 [4].

The IMS Centralised Services Management Object consists of relevant parameters that can be managed for ICS.

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

[3]   3GPP TS 24.292: "IP Multimedia (IM) Core Network (CN) subsystem; Centralized Services (ICS); Stage 3".

[4]   OMA-ERELD-DM-V1_2: "Enabler Release Definition for OMA Device Management".

[5]   3GPP TS 23.292: "IP Multimedia Subsystem (IMS) Centralized Services; Stage 2".

3   Definitions and abbreviations

3.1   Definitions

For the purposes of the present document, the terms and definitions given in 3GPP TR 21.905 [1] apply.

For the purposes of the present document, the following terms and definitions given in 3GPP TS 23.003 [2] apply:

Home Network Domain Name

For the purposes of the present document, the following terms and definitions given in 3GPP TS 23.292 [5] apply:

ICS UE

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].

DM	Device Management
ICS	IMS Centralised Services
IMS	IP Multimedia core network Subsystem
IP	Internet Protocol
MO	Management Object
OMA	Open Mobile Alliance
UE	User Equipment

4 ICS Managed Object

The ICS Management Object (MO) is used to configure ICS UE behaviour for IMS Centralised Services.

The Management Object Identifier is: urn:oma:mo:ext-3gpp-ICS:1.0.

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

The OMA DM Access Control List (ACL) property mechanism (see OMA-ERELD-DM-V1_2 [4]) may be used to grant or deny access rights to OMA DM servers in order to modify nodes and leaf objects of the ICS MO.

The following nodes and leaf objects are possible under the ICS node as described in figure 4-1:
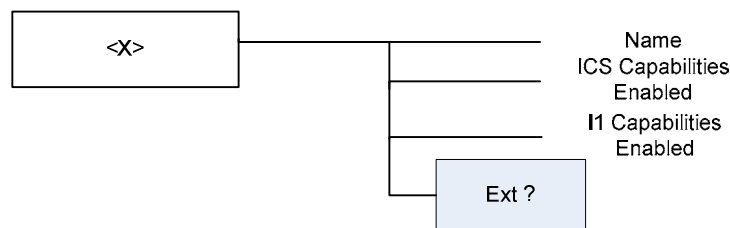
Figure 4-1: The ICS Management Object

5 Management Object parameters

5.1 General

This clause describes the parameters for the IMS Centralised Services Management Object (MO).

5.2 Node: *<X>*

This interior node acts as a placeholder for the IMS Centralised Services Management Object (MO).

- Occurrence: ZeroOrOne

- Format: node

- Access Types: Get

- Values: N/A

5.3 /*<X>*/Name

The Name leaf is a name for the IMS Centralised Services settings.

- Occurrence: ZeroOrOne

- Format: chr

- Access Types: Get

- Values: <User displayable name>

5.4 /*<X>*/ICS_Capabilities_Enabled

The ICS_Capabilities_Enabled leaf indicates an operator's preference to enable or disable IMS Centralised Services.

- Occurrence: One

- Format: bool

- Access Types: Get, Replace

- Values: 0, 1

    0 – Indicates that IMS Centralised Services capabilities over Gm are enabled.

    1 – Indicates that IMS Centralised Services capabilities over Gm are disabled.

The default value is that IMS Centralised Services over Gm are disabled when the IMS Centralised Services Management Object is not provisioned. Use of the ICS_Capabilities_Enabled leaf is specified in 3GPP TS 24.292 [3].

5.5 /*<X>*/I1_Capabilities_Enabled

The I1_Capabilities_Enabled leaf indicates an operator's preference to enable or disable support for the I1 protocol.

- Occurrence: One

- Format: int

- Access Types: Get, Replace

- Values: 0, 1

    0 – Indicates that IMS Centralised Services capabilities over I1 are disabled.

    1 – Indicates that IMS Centralised Services capabilities over I1 are enabled if concurrent use of CS RAT and PS RAT is not supported.

The default value is that IMS Centralised Services over I1 are disabled when the IMS Centralised Services Management Object is not provisioned. Use of the I1_Capabilities_Enabled leaf is specified in 3GPP TS 24.292 [3].

5.6 /*<X>*/Ext/

The Ext is an interior node for where the vendor specific information about the IMS Centralised Services MO is being placed (vendor meaning application vendor, device vendor etc.). Usually the vendor extension is identified by vendor specific name under the ext node. The tree structure under the vendor identified is not defined and can therefore include one or more un-standardized sub-trees.

- Occurrence: ZeroOrOne

- Format: node

- Access Types: Get, Replace

- Values: N/A

Annex A (informative): Management Object DDF

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"
"http://www.openmobilealliance.org/tech/DTD/dm_ddf-v1_2.dtd">
<MgmtTree>
    <VerDTD>1.2</VerDTD>
    <Node>
        <NodeName>IMS Centralised Services</NodeName>
        <DFProperties>
            <AccessType>
                <Get/>
            </AccessType>
            <Description> IMS Centralised Services settings</Description>
            <DFFormat>
                <node/>
            </DFFormat>
            <Occurrence>
                <OneOrMore/>
            </Occurrence>
            <DFTitle>The IMS Centralised Services Management Object.</DFTitle>
            <DFType>
                <DDFName/>
            </DFType>

        <Node>
            <NodeName>Name</NodeName>
            <DFProperties>
                <AccessType>
                    <Get/>
                </AccessType>
                <DFFormat>
                    <chr/>
                </DFFormat>
                <Occurrence>
                    <ZeroOrOne/>
                </Occurrence>
                <DFTitle>User displayable name for the node</DFTitle>
                <DFType>
                    <MIME>text/plain</MIME>
                </DFType>
            </DFProperties>
        </Node>

        <Node>
            <NodeName>ICS_Capabilities_Enabled</NodeName>
            <DFProperties>
                <AccessType>
                    <Get/>
                    <Replace/>
                </AccessType>
                <DFFormat>
                    <bool/>
                </DFFormat>
                <Occurrence>
                    <One/>
                </Occurrence>
                <DFTitle>This leaf specifies an operator's preference to enable or disable IMS
Centralised Services capabilities.</DFTitle>
                <DFType>
                    <MIME>text/plain</MIME>
                </DFType>
            </DFProperties>
        </Node>

        <Node>
            <NodeName>I1_Capabilities_Enabled</NodeName>
            <DFProperties>
                <AccessType>
                    <Get/>
                    <Replace/>
```

```
                </AccessType>
                <DFFormat>
                    <int/>
                </DFFormat>
                <Occurrence>
                    <One/>
                </Occurrence>
                <DFTitle>This leaf specifies an operator's preference to enable or disable I1
capabilities.</DFTitle>
                <DFType>
                    <MIME>text/plain</MIME>
                </DFType>
            </DFProperties>
        </Node>

        <Node>
            <NodeName>Ext</NodeName>
            <!-- The Extension node starts here. -->
            <DFProperties>
                <AccessType>
                    <Get/>
                    <Replace/>
                </AccessType>
                <DFFormat>
                    <node/>
                </DFFormat>
                <Occurrence>
                    <ZeroOrOne/>
                </Occurrence>
                <DFTitle>A collection of all Extension objects.</DFTitle>
                <DFType>
                    <DDFName/>
                </DFType>
            </DFProperties>
        </Node>

    </Node>
</MgmtTree>
```

Annex B (informative):
Change history

Change history								
Date	**TSG #**	**TSG Doc.**	**CR**	**R e v**	**Subject/Comment**		**Old**	**New**
2009-11					Version 0.0.1: Preliminary proposal			0.0.1
2009-11					Version 0.0.2: Revision based on comments in CT1#62			0.0.2
2009-11					Version 0.0.3: Revision based on further comments in CT1#62			0.0.3
2009-11					Version 0.0.4: Cleanup of whitespace and styles and specification number (24.xyz)			0.0.4
2009-11					Further editorial cleanups		0.0.4	0.0.5
2009-11					Further editorial cleanups		0.05	0.0.6
2009-12	CT-46				V1.0.0 created by MCC for presentation to CT-46 for information and approval		0.0.6	1.0.0
2009-12	CT-46				V8.0.0 created by MCC after approval at CT-46		1.0.0	8.0.0
2009-12	CT-46				Upgrade to Rel-9		8.0.0	9.0.0
2009-12	CT-46				Editorial correction		9.0.0	9.0.1
2010-03	CT-47	CP-100137	0001	1	Enable use of I1 when the home operator has configured it to do so		9.0.1	9.1.0
2011-03	CT-51	CP-110170	0006		MO identifier registered by OMNA		9.1.0	9.2.0
2011-03	CT-51				Upgrade to Rel-10		9.2.0	10.0.0
2012-09	CT-57				Upgrade to Rel-11		10.0.0	11.0.0
2014-09	CT-65				Upgrade to Rel-12		11.0.0	12.0.0
2015-12	CT-70				Upgrade to Rel-13		12.0.0	13.0.0
Change history								
Date	**Meeting**	**TDoc**	**CR**	**Rev**	**Cat**	**Subject/Comment**		**New version**
2017-03	CT-75					Upgrade to Rel-14		14.0.0
2018-06	SA-80	-	-	-	-	Update to Rel-15 version (MCC)		15.0.0

History

Document history		
V15.0.0	June 2018	Publication