3GPP TS 24.286 V16.0.0 (2020-07)

Technical Specification

3rd Generation Partnership Project;

Technical Specification Group Core Network and Terminals;

IP Multimedia (IM) Core Network (CN) subsystem

Centralized Services (ICS);

Management Object (MO)

(Release 16)

* *

The present document has been developed within the 3rd Generation Partnership Project (3GPP TM) and may be further elaborated for the purposes of 3GPP..  
The present document has not been subject to any approval process by the 3GPPOrganizational Partners and shall not be implemented.  
This Specification is provided for future development work within 3GPPonly. The Organizational Partners accept no liability for any use of this Specification.  
Specifications and reports for implementation of the 3GPP TM system should be obtained via the 3GPP Organizational Partners' Publications Offices.

Keywords

IP, multimedia, network

***3GPP***

Postal address

3GPP support office address

650 Route des Lucioles - Sophia Antipolis

Valbonne - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Internet

http://www.3gpp.org

***Copyright Notification***

No part may be reproduced except as authorized by written permission.  
The copyright and the foregoing restriction extend to reproduction in all media.

© 2020, 3GPP Organizational Partners (ARIB, ATIS, CCSA, ETSI, TSDSI, TTA, TTC).

All rights reserved.

UMTS™ is a Trade Mark of ETSI registered for the benefit of its members

3GPP™ is a Trade Mark of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners  
LTE™ is a Trade Mark of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners

GSM® and the GSM logo are registered and owned by the GSM Association

Contents

Foreword [4](#__RefHeading___Toc289423040)

1 Scope [5](#__RefHeading___Toc289423041)

2 References [5](#__RefHeading___Toc289423042)

3 Definitions and abbreviations [5](#__RefHeading___Toc289423043)

3.1 Definitions [5](#__RefHeading___Toc289423044)

3.2 Abbreviations [5](#__RefHeading___Toc289423045)

4 ICS Managed Object [6](#__RefHeading___Toc289423046)

5 Management Object parameters [6](#__RefHeading___Toc289423047)

5.1 General [6](#__RefHeading___Toc289423048)

5.2 Node: *<X>* [6](#__RefHeading___Toc289423049)

5.3 /*<X>*/Name [6](#__RefHeading___Toc289423050)

5.4 /*<X>*/ICS\_Capabilities\_Enabled [7](#__RefHeading___Toc289423051)

5.5 /*<X>*/I1\_Capabilities\_Enabled [7](#__RefHeading___Toc289423052)

5.6 /*<X>*/Ext/ [7](#__RefHeading___Toc289423053)

Annex A (informative): Management Object DDF [8](#__RefHeading___Toc289423054)

Annex B (informative): Change history [10](#__RefHeading___Toc289423055)

# 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.

# 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** | **Rev** | **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 |
| 2020-07 | SA-88e | - | - | - |  | Update to Rel-16 version (MCC) | **16.0.0** |