



# **OMA Management Object for SUPL**

Approved Version 1.0 – 15 Jun 2007

---

**Open Mobile Alliance**  
OMA-TS-SUPL\_MO-V1\_0-20070615-A

Use of this document is subject to all of the terms and conditions of the Use Agreement located at <http://www.openmobilealliance.org/UseAgreement.html>.

Unless this document is clearly designated as an approved specification, this document is a work in process, is not an approved Open Mobile Alliance™ specification, and is subject to revision or removal without notice.

You may use this document or any part of the document for internal or educational purposes only, provided you do not modify, edit or take out of context the information in this document in any manner. Information contained in this document may be used, at your sole risk, for any purposes. You may not use this document in any other manner without the prior written permission of the Open Mobile Alliance. The Open Mobile Alliance authorizes you to copy this document, provided that you retain all copyright and other proprietary notices contained in the original materials on any copies of the materials and that you comply strictly with these terms. This copyright permission does not constitute an endorsement of the products or services. The Open Mobile Alliance assumes no responsibility for errors or omissions in this document.

Each Open Mobile Alliance member has agreed to use reasonable endeavors to inform the Open Mobile Alliance in a timely manner of Essential IPR as it becomes aware that the Essential IPR is related to the prepared or published specification. However, the members do not have an obligation to conduct IPR searches. The declared Essential IPR is publicly available to members and non-members of the Open Mobile Alliance and may be found on the “OMA IPR Declarations” list at <http://www.openmobilealliance.org/ipr.html>. The Open Mobile Alliance has not conducted an independent IPR review of this document and the information contained herein, and makes no representations or warranties regarding third party IPR, including without limitation patents, copyrights or trade secret rights. This document may contain inventions for which you must obtain licenses from third parties before making, using or selling the inventions. Defined terms above are set forth in the schedule to the Open Mobile Alliance Application Form.

NO REPRESENTATIONS OR WARRANTIES (WHETHER EXPRESS OR IMPLIED) ARE MADE BY THE OPEN MOBILE ALLIANCE OR ANY OPEN MOBILE ALLIANCE MEMBER OR ITS AFFILIATES REGARDING ANY OF THE IPR'S REPRESENTED ON THE “OMA IPR DECLARATIONS” LIST, INCLUDING, BUT NOT LIMITED TO THE ACCURACY, COMPLETENESS, VALIDITY OR RELEVANCE OF THE INFORMATION OR WHETHER OR NOT SUCH RIGHTS ARE ESSENTIAL OR NON-ESSENTIAL.

THE OPEN MOBILE ALLIANCE IS NOT LIABLE FOR AND HEREBY DISCLAIMS ANY DIRECT, INDIRECT, PUNITIVE, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE USE OF DOCUMENTS AND THE INFORMATION CONTAINED IN THE DOCUMENTS.

© 2007 Open Mobile Alliance Ltd. All Rights Reserved.

Used with the permission of the Open Mobile Alliance Ltd. under the terms set forth above.

# Contents

- 1. SCOPE .....4
- 2. REFERENCES .....5
  - 2.1 NORMATIVE REFERENCES.....5
  - 2.2 INFORMATIVE REFERENCES.....5
- 3. TERMINOLOGY AND CONVENTIONS .....6
  - 3.1 CONVENTIONS.....6
  - 3.2 DEFINITIONS.....6
  - 3.3 ABBREVIATIONS.....6
- 4. INTRODUCTION .....7
- 5. OMA SUPL MANAGEMENT OBJECT .....8
  - 5.1 MANAGEMENT OBJECT PARAMETERS.....9
    - 5.1.1 Node: ../<X> .....9
    - 5.1.2 Node: ../<X>/AppID .....9
    - 5.1.3 Node: ../<X>/ProviderID .....9
    - 5.1.4 Node: ../<X>/Name.....9
    - 5.1.5 Node: ../<X>/PrefConRef .....10
    - 5.1.6 Node: ../<X>/ToConRef .....10
    - 5.1.7 Node: ../<X>/ToConRef/<X>.....10
    - 5.1.8 Node:../<X>/ToConRef/<X>/ConRef .....10
    - 5.1.9 Node: ../<X>/Addr.....11
    - 5.1.10 Node: ../<X>/ AddrType.....11
    - 5.1.11 Node: ../<X>/Ext.....11
- APPENDIX A. CHANGE HISTORY (INFORMATIVE).....12
  - A.1 APPROVED VERSION HISTORY .....12

# Figures

- Figure 1: The OMA SUPL Management Object tree.....8

# 1. Scope

This document defines the OMA SUPL Management Object (MO). The MO is defined using the OMA DM Device Description Framework.

## 2. References

### 2.1 Normative References

- [DMTND] “SyncML Device Management Tree and Description, Version 1.1.2”. Open Mobile Alliance™. OMA-SyncML-DMTND-V1\_1\_2, URL: <http://www.openmobilealliance.org>
- [RFC2119] Key words for use in RFCs to Indicate Requirement Levels, URL: <http://www.ietf.org/rfc/rfc2119.txt>
- [RFC2396] Uniform Resource Identifiers (URI): Generic Syntax, URL: <http://www.ietf.org/rfc/rfc2396.txt>

### 2.2 Informative References

- [IOPPROC] “OMA Interoperability Policy and Process”, Version 1.1, Open Mobile Alliance™, OMA-IOP-Process-V1\_1, URL:<http://www.openmobilealliance.org/>
- [OMA ULP] OMA-TS-SUPL-V1\_0,, Open Mobile Alliance™, URL: <http://www.openmobilealliance.org/>
- [OMNAPROC] “Open Mobile Naming Authority Process”, Version 1.0, Open Mobile Alliance™, OMA-ORG-OMNA\_Process-V1\_0, URL:<http://www.openmobilealliance.org/>
- [SUPL RD] OMA-RD-SUPL-V1\_0\_0. Open Mobile Alliance™. URL: <http://www.openmobilealliance.org/>
- [SUPLAD] OMA-AD-SUPL-AD-V1\_0\_0, Open Mobile Alliance™, URL: <http://www.openmobilealliance.org/>
- [WAP] “Wireless Application Protocol”, Version 2.0, Open Mobile Alliance™, URL: [http://www.openmobilealliance.org/tech/affiliates/wap/technical\\_wap2\\_0-20020813.zip](http://www.openmobilealliance.org/tech/affiliates/wap/technical_wap2_0-20020813.zip)

## 3. Terminology and Conventions

### 3.1 Conventions

The key words “MUST”, “MUST NOT”, “REQUIRED”, “SHALL”, “SHALL NOT”, “SHOULD”, “SHOULD NOT”, “RECOMMENDED”, “MAY”, and “OPTIONAL” in this document are to be interpreted as described in [RFC2119].

All sections and appendixes, except “Scope” and “Introduction”, are normative, unless they are explicitly indicated to be informative.

### 3.2 Definitions

See the DM Tree and Description [DMTND] document for definitions of terms related to the management tree.

### 3.3 Abbreviations

<b>DM</b>	Device Management
<b>FQDN</b>	Fully Qualified Domain Name
<b>H-SLP</b>	HomeSUPL Location Platform
<b>MO</b>	Management Object
<b>OMA</b>	Open Mobile Alliance
<b>SET</b>	SUPL Enabled Terminal
<b>SLC</b>	SUPL Location Center
<b>SLP</b>	SUPL Location Platform
<b>SUPL</b>	Secure User Plane Location
<b>TCP</b>	Transmission Control Protocol
<b>ULP</b>	UserPlane Location Protocol
<b>URI</b>	Uniform Resource Identifier
<b>WAP</b>	Wireless Application Protocol

## 4. Introduction

This document describes the OMA SUPL management object syntax that allows configuration deployment to OMA SUPL clients.

## 5. OMA SUPL Management Object

OMA SUPL management object (MO) is an object, which is used to manage OMA SUPL settings. Management object enables to manage OMA SUPL related settings on behalf of the end user. E.g. it SHOULD be possible to set a new Home SUPL Location Platform (H-SLP) server without notifying the end user. OMA SUPL management object (MO) is defined using the OMA DM Device Description Framework as described in [DMTND].

The Management Object Identifier is: urn:oma:mo:oma-supl:1.0

The following diagram describes the same structure visually.

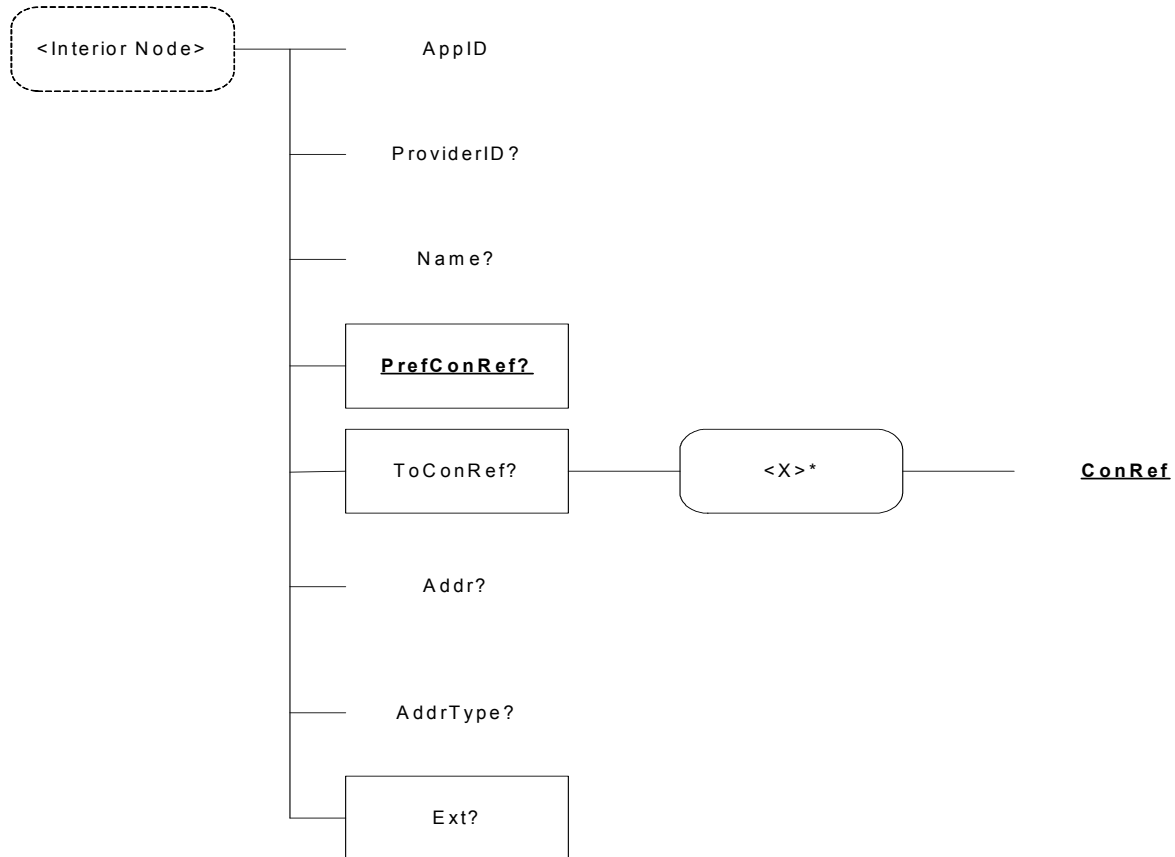


Figure 1: The OMA SUPL Management Object tree



## 5.1 Management Object Parameters

This section describes the parameters for OMA SUPL Management Object.

### 5.1.1 Node: .../<X>

This interior node acts as a placeholder for one or more accounts or for the SUPL Enabled Terminal (SET) node.

- Status: Required
- Occurs: OneOrMore / One
- Format: Node
- Access Types: Get
- Values: N/A

### 5.1.2 Node: .../<X>/AppID

The AppID identifies the type of the application service available at the described Home SUPL Location Platform (H-SLP) server.

- Status: Required
- Occurrence: One
- Value: Leaf values are in textual format as defined in the WAP Provisioning Content document. (The value is always ap0004 for OMA SUPL.)
- Access Type: Get
- Format: Chr

Example: ap0004

### 5.1.3 Node: .../<X>/ProviderID

The ProviderID leaf provides an identifier for the H-SLP.

- Status: Optional
- Occurrence: ZeroOrOne
- Value:
- Access Type: Get
- Format: Chr

Example: 123.56.78.90

### 5.1.4 Node: .../<X>/Name

The Name leaf indicates a logical, user readable identity (property) of the H-SLP.

- Status: Optional
- Occurrence: ZeroOrOne

- Value:
- Access Type: Get
- Format: Chr

Example: XYZop H-SLP

### 5.1.5 Node: .../<X>/PrefConRef

The PrefConRef leaf indicates the preferred linkage to connectivity parameters (proxy or network access point).

- Status: Optional
- Occurrence: ZeroOrOne
- Value: Relative URI
- Access Type: Get
- Format: Chr

Example: ./AP/ThisOperator/NAPDef/1/ThisItem

### 5.1.6 Node: .../<X>/ToConRef

The ToConRef interior node is used to allow application to refer to a collection of connectivity definitions. Several connectivity parameters may be listed for a given application under this interior node.

- Status: Optional
- Occurrence: ZeroOrOne
- Value:
- Access Type: Get
- Format: Node

### 5.1.7 Node: .../<X>/ToConRef/<X>

This run-time node acts as a placeholder for zero or more connectivity parameters.

- Status: Required
- Occurrence: ZeroOrMore
- Value:
- Access Type: Get
- Format: Node

### 5.1.8 Node: .../<X>/ToConRef/<X>/ConRef

The ConRef leaf indicates the linkage to connectivity parameters.

- Status: Required

- Occurrence: One
- Value: Relative URI
- Access Type: Get
- Format: Chr

Example: ./AP/ThatOperator/Px/1/ThatItem

### 5.1.9 Node: .../<X>/Addr

The Addr node can hold addresses of the H-SLP, for example, FQDN. The type of address in the field can be determined on the AddrType node. If the parameter AddrType is not defined or if no value is given, then the parameter Addr can contain the same type of values as the PrefAddr node defined above.

- Status: Required
- Occurrence: ZeroOrOne
- Value: SLP address or SUPL Location Center (SLC) for non-proxy mode)
- Access Type: Get
- Format: Chr

Example: www.hspl.com

### 5.1.10 Node: .../<X>/ AddrType

The AddrType leaf indicates the format and interpretation of the Addr parameter. When the value is omitted, the address type is a fully qualified Internet domain name (i.e. hostname as defined in section 3.2.2 of [RFC2396]).

- Status: Optional
- Occurrence: ZeroOrOne
- Value: FQDN
- Access Type: Get
- Format: Chr

Example: "FQDN"

### 5.1.11 Node: .../<X>/Ext

The Ext node is an interior node where the vendor specific information about this particular application is being placed (vendor meaning application vendor, device vendor, OS 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 non-standardized sub-tree.

- Status: Optional
- Occurrence: ZeroOrOne
- Value:
- Access Type: Get

- Format: Node

## Appendix A. Change History

(Informative)

### A.1 Approved Version History

Reference	Date	Description
OMA-TS-SUPL_MO-V1_0	15 Jun 2007	No prior version