



# **OMA Management Object for Mobile\_Email**

## **Candidate Version 1.0 – 18 Aug 2009**

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**Open Mobile Alliance**  
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# 1. Scope

This document defines the OMA Mobile Email (MEM) Management Object (MO).

## 2. References

### 2.1 Normative References

- [MEM\_TS] " Technical Specifications for Mobile Email ". Open Mobile Alliance™ OMA-TS-Mobile\_Email-V1\_0. URL: <http://www.openmobilealliance.org>
- [DMPRO] "OMA Device Management Protocol, Version 1.2". Open Mobile Alliance™ OMA-TS-DM\_Protocol-V1\_2. URL: <http://www.openmobilealliance.org>
- [DMBOOT] "OMA Device Management Bootstrap", Version 1.2, Open Mobile Alliance, OMA-TS-DM\_Bootstrap-V1\_2, URL:<http://www.openmobilealliance.org/>
- [RFC2119] "Key words for use in RFCs to Indicate Requirement Levels", S. Bradner, March 1997, URL:<http://www.ietf.org/rfc/rfc2119.txt>
- [RFC4234] "Augmented BNF for Syntax Specifications: ABNF". D. Crocker, Ed., P. Overell. October 2005, URL:<http://www.ietf.org/rfc/rfc4234.txt>
- [SCRRULES] "SCR Rules and Procedures", Open Mobile Alliance™, OMA-ORG-SCR\_Rules\_and\_Procedures, URL:<http://www.openmobilealliance.org/>

### 2.2 Informative References

- [OMADICT] "Dictionary for OMA Specifications", Version x.y, Open Mobile Alliance™, OMA-ORG-Dictionary-Vx\_y, URL:<http://www.openmobilealliance.org/>

## 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

This section left intentionally blank.

### 3.3 Abbreviations

<b>DM</b>	Device Management
<b>MEM</b>	Mobile Email
<b>MO</b>	Management Object
<b>OMA</b>	Open Mobile Alliance
<b>URL</b>	Uniform Resource Locator

## 4. Introduction

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

## 5. OMA MEM Management Object

The MEM Management Object (MO) allows a device to present its MEM configuration in a standardized way, allowing the subsequent retrieval and management of it.

The OMA MEM Management Object consists of relevant parameters required by the MEM Enabler. It is defined using the OMA DM Device Description Framework and is compatible with OMA DM protocol version 1.2 [DMPRO] or any later compatible version. If MEM MO is to be configured during bootstrap then [DMBOOT] MUST be used.

### 5.1 Management Object Tree



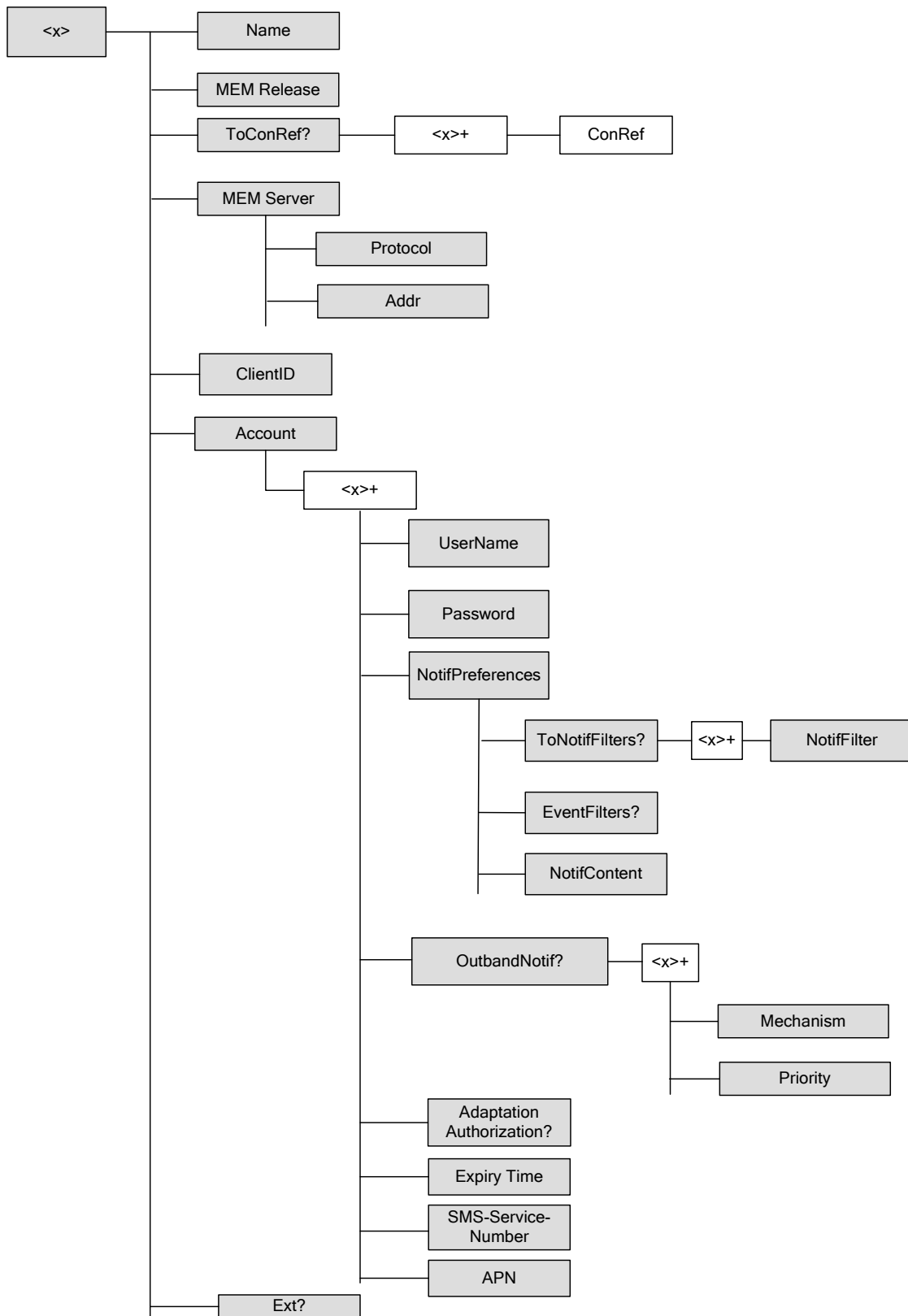


Figure 1: The OMA MEM Management Object tree

## 5.2 Management Object Parameters

This section describes the parameters for the OMA MEM Management Object.

### 5.2.1 /<X>

This interior node acts as a placeholder for one or more configuration set. One configuration set is bound to one Service Provider. The interior node is mandatory if the UE supports OMA MEM.

- Occurrence: OneOrMore
- Format: Node
- Access Types: Get
- Values: n/a

### 5.2.2 /<X>/Name

This leaf node specifies the human readable name of the MEM Service.

- Occurrence: One
- Format: chr
- Access Types: Get
- Values: <Human readable name>

### 5.2.3 /<X>/MEM Release

This leaf node specifies the MEM release of the client. This leaf node is mandatory and for this release should have the value 1.0.

- Occurrence: One
- Format: chr
- Access Types: Get
- Values: <1.0 for this release>

### 5.2.4 /<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.

- Occurrence: ZeroOrOne
- Format: Node
- Access Types: Get
- Values: N/A.

### 5.2.5 /<X>/ToConRef/<X>

This run-time node acts as a placeholder for each reference to connectivity parameters

- Occurrence: OneOrMore
- Format: Node
- Access Types: Get
- Values: N/A.

### 5.2.6 /<X>/ToConRef/<X>/ConRef

The ConRef specifies a specific linkage to connectivity parameters. This parameter points to the right connectivity identity.

- Occurrence: One
- Format: chr
- Access Types: Get
- Values: N/A.

### 5.2.7 /<X>/MEM Server

This interior node acts as a placeholder for MEM Server configuration.

- Occurrence: One
- Format: node
- Access Types: Get
- Values: N/A

### 5.2.8 /<X>/MEM Server/Protocol

This leaf node specifies the protocol supported by the MEM Server (i.e. Lemonade or DS).

- Occurrence: One
- Format: chr
- Access Types: Get
- Values: "Lemonade" or "DS"

### 5.2.9 /<X>/MEM Server/Addr

This leaf node specifies the address of the MEM Server.

- Occurrence: One
- Format: chr
- Access Types: Get
- Values: <address of the MEM Server (i.e. URL)>

### 5.2.10 /<X>/ClientID

The leaf node specifies the MEM Client ID as defined in [MEM\_TS].

- Occurrence: One
- Format: chr
- Access Types: Get
- Values: <client-id>

### 5.2.11 /<X>/Account/

This node is used to specify multiple MEM accounts provided by the same Service Provider.

- Occurrence: One
- Format: Node
- Access Types: Get
- Values: N/A

### 5.2.12 /<X>/Account/<x>/

This interior node acts as a placeholder for separating one or more MEM accounts

- Occurrence: OneOrMore
- Format: Node
- Access Types: Get
- Values: N/A

### 5.2.13 /<X>/Account/<x>/UserName

The leaf node specifies the user login associated to this MEM account. In many cases, the user login is the user's email address without "@domain"

- Occurrence: One
- Format: chr
- Access Types: Get
- Values: <User login>

### 5.2.14 <X>/Account/<X>/NotifPreferences

This interior node acts as a placeholder for notification preferences.

- Occurrence: One
- Format: node
- Access Types: Get
- Values: N/A

### 5.2.15 /<X>/Account/<x>/Password

The leaf node specifies the password associated to this MEM account.

- Occurrence: One
- Format: chr
- Access Types: Get
- Values: <password>

### 5.2.16 /<X>/Account/<x>/NotifPreferences/ToNotifFilters

This node is used to specify multiple Notification Filters. The Event Filters are the filtering rules that determine for a particular email message whether or not a notification is sent to the MEM Client (e.g. only email from John to be notified).

- Occurrence: ZeroOrOne
- Format: Node
- Access Types: Get
- Values: N/A

### 5.2.17 /<X>/Account/<x>/NotifPreferences/ToNotifFilters/<x>/

This interior node acts as a placeholder for separating one or more Notification Filters.

- Occurrence: OneOrMore
- Format: Node
- Access Types: Get
- Values: N/A

### 5.2.18 /<X>/Account/<x>/NotifPreferences/ToNotifFilters/<x>/NotifFilter

This leaf node specifies a condition on the email object that triggers a notification. An example of such condition could be: "From Header field = [John@domain.com](mailto:John@domain.com)".

- Occurrence: One
- Format: Node
- Access Types: Get
- Values: <condition on email>

### 5.2.19 /<X>/Account/<x>/NotifPreferences/EventFilters

This node is used to specify the list of subscribed Email event types as defined in section 6.4.2 of [MEM TS]. The list of subscribed Email Events MUST be a non-case sensitive list of Email Event types separated by a plus sign ('+').

- Occurrence: ZeroOrOne

- Format: chr
- Access Types: Get
- Values: N/A

### 5.2.20 /<X>/Account/<x>/NotifPreferences/NotifContent

This leaf node specifies the content of the notification in case of new email.

- Occurrence: One
- Format: chr
- Access Types: Get
- Values: <content of the notification>

### 5.2.21 /<X>/Account/<x>/OutbandNotif/

This node is used to specify multiple Outband Notification mechanisms.

- Occurrence: ZeroOrOne
- Format: Node
- Access Types: Get
- Values: N/A

### 5.2.22 /<X>/Account/<x>/OutbandNotif/<x>/

This interior node acts as a placeholder for separating one or more Outband Notification mechanisms.

- Occurrence: OneOrMore
- Format: Node
- Access Types: Get
- Values: N/A

### 5.2.23 /<X>/Account/<x>/OutbandNotif/<x>/Mechanism

This leaf node specifies the identifier for the Outband Notification mechanism. Possible values may include SMS, MMS, Wap Push, etc.

- Occurrence: One
- Format: chr
- Access Types: Get
- Values: <outband notification mechanism>

### 5.2.24 /<X>/Account/<x>/OutbandNotif/<x>/Priority

This leaf node specifies the priority indicator assigned to the outband notification mechanism, as specified in 6.4.3.1 in [MEM\_TS]

- Occurrence: One
- Format: Integer
- Access Types: Get
- Values: <priority indicator>

### 5.2.25 /<X>/Account/<x>/Adaptation Authorization

This leaf node indicates whether the MEM Client authorizes an Email to be adapted or not.

- Occurrence: ZeroOrOne
- Format: Boolean
- Access Types: Get
- Values: “True” or “False”.

### 5.2.26 /<X>/Account/<x>/Expiry Time

This leaf node specifies the maximum length of time a message sent by the MEM Client will be stored in the network.

- Occurrence: One
- Format: integer
- Access Types: Get
- Values: <length of time in seconds>.

### 5.2.27 /<X>/Account/<x>/SMS-Service-Number

MEM client MAY only handle SMS which is sent from this SMS-Service-number for security reason. Please refer to Section 6.3 of [MEM TS] for details.

- Occurrence: One
- Format: chr
- Access Types: Get
- Values: Digit

### 5.2.28 /<X>/Account/<x>/APN

Normally, there are more than one APN with one Operator. This operator MAY specify one APN which is used for this service.

- Occurrence: One
- Format: chr
- Access Types: GetValues: ALPHA

## 5.2.29 /<X>/Ext

The Ext is an interior node for where the vendor specific information 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 un-standardized sub-tree.

- Occurrence: ZeroOrOne
- Format: Node
- Access Types: Get
- Values: N/A



## Appendix A. Change History (Informative)

### A.1 Approved Version History

Reference	Date	Description
n/a	n/a	No previous version within OMA

### A.2 Draft/Candidate Version 1.0 History

Document Identifier	Date	Sections	Description
Draft Version: OMA-TS-MEM_MO-V1_0	03 June 2008	All	Proposed as Initial Baseline as part of OMA-MEM-2008-0009R01-INP_MEM_MO_TS_Document
	01 Dec 2008	5.2	Incorporated the following CR: <ul style="list-style-type: none"> <li>OMA-MEM-2008-0081R02-CR_Add_setting_MO_parameters</li> </ul>
	16 Apr 2009	2.1, 5	Applied the following change request: <ul style="list-style-type: none"> <li>OMA-MEM-2008-0034-CR_MEM_MO_bugfix</li> </ul>
	05 May 2009	All	Applied the following change request: <ul style="list-style-type: none"> <li>OMA-MEM-2009-0059-CR_CR_MEM_TS_CONRR_D001</li> </ul>
	06 May 2009	All	Editorial Changes
	15 May 2009	App A	Editorial Changes
	13 July 2009	3.2	Applied the following change request: <ul style="list-style-type: none"> <li>OMA-MEM-2009-0061-CR_MEM_TS_MO_COMMENT_MWG</li> </ul>
	24 July 2009	All	Applied the following change request: <ul style="list-style-type: none"> <li>OMA-MEM-2009-0067R02-CR_MEM_MO_bug_fixes.</li> </ul>
Candidate Version: OMA-TS-MEM_MO-V1_0	18 Aug 2009	All	Status changed to Candidate by TP: OMA-TP-2009-0355-INP_Mobile_Email_V1_0_ERP_for_Candidate_Approval