



OMA Push Management Object

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1. Scope

This document defines the OMA Push Management Object that manages the push whitelist.

2. References

2.1 Normative References

- [PUSH] "OMA Push Over The Air, Version 2.2 ". Open Mobile Alliance™
OMA-TS-PushOTA-V2_2. [URL:http://www.openmobilealliance.org](http://www.openmobilealliance.org)
- [DMSTDOBJ] "OMA Device Management Standardized Objects, Version 1.2". Open Mobile Alliance™
OMA-TS-DM-StdObj-V1_2. [URL:http://www.openmobilealliance.org](http://www.openmobilealliance.org)
- [DM-TND-V1-2] "OMA Device Management Tree and Description, Version 1.2". Open Mobile Alliance™
OMA-TS-DM_TND-V1_2 [URL:http://www.openmobilealliance.org](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](http://www.openmobilealliance.org)
- [DMTND] "OMA Device Management Tree and Description Serialization Specification, Version 1.2".
Open Mobile Alliance. OMA-TS-DM_TNDS-V1_2. [URL:http://www.openmobilealliance.org](http://www.openmobilealliance.org)
- [RFC1918] *Address Allocation for Private Internets*
<http://www.rfc-editor.org/rfc/rfc1918.txt>
- [RFC791] *RFC 791, Internet Protocol*,
DARPA, 1981, URL:<http://www.ietf.org/rfc/rfc791.txt>
- [RFC3513] *RFC 3513, Internet Protocol Version 6 (IPv6) Addressing Architecture*, §§2.2, 2.3
The Internet Society, 2003, URL:<http://www.ietf.org/rfc/rfc3513.txt>
- [RFC2373] *IP Version 6 Addressing Architecture*
<http://www.ietf.org/rfc/rfc2373.txt>
- [RFC3986] URI Generic Syntax
<http://rfc.net/rfc3986.html>
- [GENFORM] "WAP General Formats Document", WAP Forum_, WAP-188-WAPGenFormats, URL:
<http://www.openmobilealliance.org/>

2.2 Informative References

- [PUSHMO-DDF] "Push Management Object Device Description Framework", 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

See the DM Tree and Description [DM-TND-V1-2] document for definitions of terms related to the management tree.

3.3 Abbreviations

OMA	Open Mobile Alliance
MO	Management Object
SMSC	Short Message Service Centre
PPG	Push Proxy Gateway

4. Introduction

DM group has defined Management Objects where parameters can be easily managed and used by applications. This document describes the OMA Push Management Object syntax that manages the push whitelists.

5. Push Management Object

Push Management Object (MO) is an object for OMA BAC Push that restricts the accepted push messages depending on the originating PPG address or the originating SMSC address. The MO can be initially provisioned and is used for continuous provisioning to update service configurations.

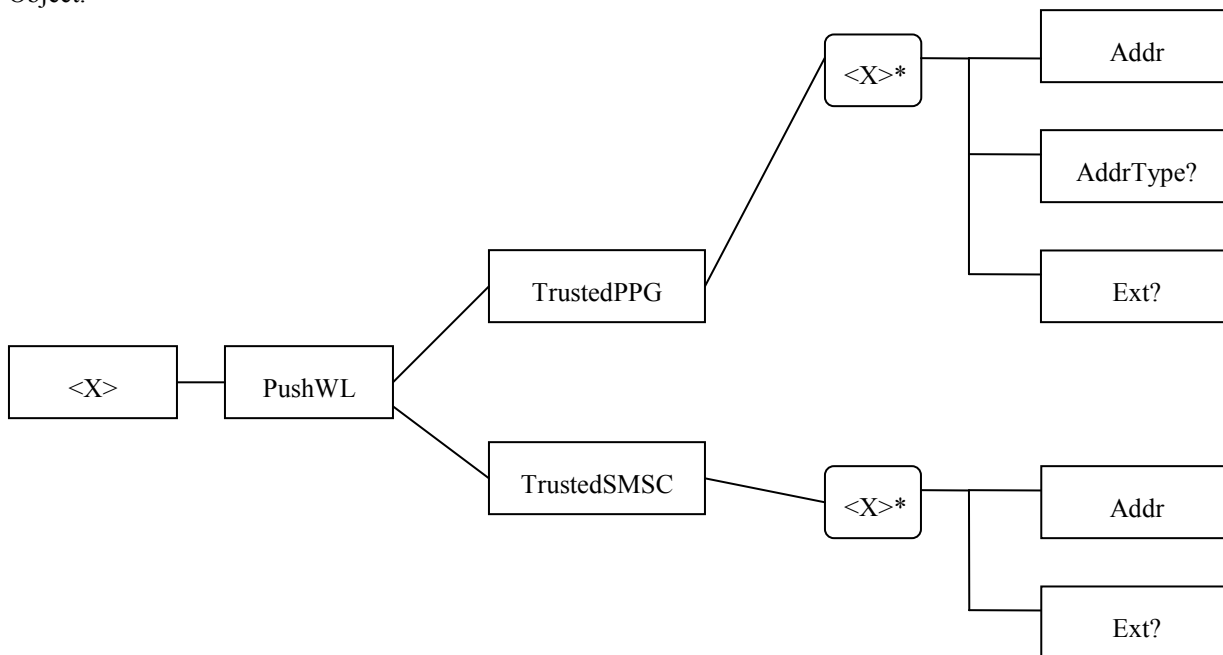
If the Push MO is provisioned together with other management object(s) during bootstrap then [DMTNDS] and [DMBOOT] MUST be used.

The OMA BAC Push Management Object consists of relevant parameters required by the PUSH enabler. It is compatible with OMA Device Management protocol specifications, version 1.2, and is defined using the OMA DM Device Description Framework as described in [DM-TND-V1-2] and [DMSTDOBJ].

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

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

The following figure shows the nodes and leaf objects for the OMA_PUSH Management Object.



5.1 Management Object parameters

This section describes the parameters for the OMA BAC PUSH Management Object. The procedure to validate whether the Push PDU originates from a trusted source or not is defined in [PUSH].

Node: /<X>

This interior node acts as a placeholder for one or more accounts for a fixed node. It specifies the object root of a BAC PUSH management object. The purpose of this interior node is to group together the parameters of a single BAC PUSH object. The ancestor elements of this node define the position in the management tree of the BAC PUSH object. But the structure of the DM tree and hence positions in the tree of management objects is out of scope

of this specification.
Status: Required
Occurrence: OneOrMore
Format: Node
Access Types: Get
Values: N/A

/<X>/PushWL

The PushWL interior node is used to hold a list of PPG Addresses and/or a list of SMSCAddresses.
Status: Required
Occurrence: One
Format: Node
Access Type: Get
Value: N/A

/<X>/PushWL/TrustedPPG

The TrustedPPG interior node is used to list the PPG addresses from which push message is trusted. It makes it possible to specify a plurality of addresses.
Status: Required
Occurrence: One
Format: Node
Access Type: Get
Value: N/A

/<X>/PushWL/TrustedSMSC

The TrustedSMSC interior node is used to list the SMSC addresses from which push message content is trusted. It makes it possible to specify a plurality of addresses.
Status: Required
Occurrence: One
Format: Node
Access Type: Get
Value: N/A

/<X>/ PushWL/TrustedPPG /<X>*

This node contains the instances of authorized Push Proxy Gateway addresses.
Status: Required
Occurrence: ZeroOrMore
Format: Node
Access Type: Get
Value: N/A

/<X>/ PushWL/TrustedSMSC /<X>*

This node contains the instances of authorized SMSC addresses.
Status: Required
Occurrence: ZeroOrMore
Format: Node
Access Type: Get
Value: N/A

/<X>/PushWL/TrustedPPG /<X>+/Addr

The Addr node holds addresses of different types, for example, an IP address or an URI. The type of address in the field can be determined on the AddrType node.
Status: Required

Occurrence: One
 Format: Chr
 Access Type: Get
 Value: N/A

/<X>/PushWL/TrustedPPG/<X>/AddrType?

This leaf node specifies the type of NAP address supplied as the **Addr** leaf node value. If this node is omitted, the type of the Addr node value MUST be IPv4.

AddrType	Value of Addr node
IPv4	An IPv4 address [RFC791] represented in string form dotted-decimal CIDR notation Subnetwork addressing using the CIDR notation is allowed (e.g. 12.11.10.9/15) [RFC1918] IPV4 is the default value of the AddrType node
IPv6	An IPv6 address represented in string form as in [RFC3513] Subnetwork addressing using the CIDR notation is allowed [RFC2373]
URI	URI formed as in [RFC3986]
E164	A phone number according to the E164 scheme [GENFORM]

Status: Optional
 Occurrence: ZeroOrOne
 Format: Chr
 Access Type: Get
 Value: IPv4

/<X>/PushWL/TrustedPPG /<X>/Ext?

The Ext is an interior node where the vendor-specific information about the OMA_BAC-PUSH MO is placed (“vendor” means application vendor, device vendor etc.). Usually the vendor extension is identified by a vendor-specific name under the ext node. The tree structure under the vendor identified is not defined and can therefore include a non-standardized sub-tree.

Status: Optional
 Occurrence: ZeroOrOne
 Format: node
 Access Types: Get
 Values: N/A

/<X>/PushWL/TrustedSMSC/<X>/Addr

The Addr node holds the trusted SMSC E164 address.

Status: Required
 Occurrence: One
 Format: Chr
 Access Type: Get
 Value: N/A

/<X>/PushWL/TrustedSMSC/<X>/Ext?

The Ext is an interior node where the vendor-specific information about the OMA_BAC-PUSH MO is placed (“vendor” means application vendor, device vendor etc.). Usually the vendor extension is identified by a vendor-specific name under the ext node. The tree structure under the vendor identified is not defined and can therefore include a non-standardized sub-tree.

Status: Optional
 Occurrence: ZeroOrOne
 Format: node
 Access Types: Get
 Values: N/A

The complete Device Description Framework of this Push management object can be found in [PUSHMO-DDF].

Appendix A. Change History (Informative)

A.1 Approved Version History

Reference	Date	Description
n/a		

A.2 Draft/Candidate Version 1.0 History

Document Identifier	Date	Sections	Description
Draft Versions OMA-TS-Push_MO-V1_0-	13 Dec 2006	All	Document creation
	14 Dec 2006		Addition of a reference to the DDF file Editorial modifications
	22 Jan 2007		Updated after consistency review
	05 Jul 2007	All	Editorial updates: Cover page and header fixed with correct specification title History box fixed as per template 2007 copyright Cross-References fixed
	26 Jul 2007	2.1 and 5	Bug fix regarding the MO provisioning
Candidate Version: OMA-TS-Push_MO-V1_0	02 Oct 2007	N/A	Status changed to Candidate by TP: TP ref # OMA-TP-2007-0296R01- INP_Push_V2_2_ERP_for_Candidate_Approval