



Enabler Validation Plan for the RESTful Network API for OMA Push

Candidate Version 1.0 – 10 Sep 2013

Open Mobile Alliance
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1. Scope

This document details the Validation plan for the RESTful Network API for OMA Push V1.0 Enabler Release (PushREST 1.0). The successful accomplishment of the validation activities will be required for the Enabler to be considered for Approved status.

The validation plan for PushREST 1.0 specifications is based on testing expectations in the Enabler Test Requirements (ETR). While the specific test activities to be performed are described in the Enabler Test Specification (ETS) the test environment is described in this plan. This test environment details infrastructure, operational and participation requirements identified for the needed testing activities.

The list of specifications, defining the scope of PushREST 1.0, as stated in [ERELD] and [ETR] is according to the following:

- RESTful Network API for OMA Push V1.0 Technical Specification OMA-TS-REST_NetAPI_Push-V1_0 [PushREST-TS]

1.1 Assumptions

NONE

1.2 Exclusions

NONE

2. References

2.1 Normative References

- [IOPPROC] “OMA Interoperability Policy and Process”, Version 1.8, Open Mobile Alliance™, OMA-ORG-IOP_Process-V1_8, [URL:http://www.openmobilealliance.org/](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>

2.2 Informative References

- [WAPPushArch] "Push Architectural Overview". WAP Forum™. WAP-250-PushArchOverview URL: <http://www.wapforum.org>
- [Push2.1Arch] "Push Architectural Overview". WAP Forum™. WAP-250-PushArchOverview <http://www.wapforum.org>
- [Push2.2Arch] "Push Architectural Overview". Open Mobile Alliance™. OMA-AD-Push-V2_2 [URL:http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [Push2.3Arch] "Push Architectural Overview". Open Mobile Alliance™. OMA-AD-Push-V2_3 [URL:http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [PushREST-TS] " RESTful Network API for OMA Push". Open Mobile Alliance™. OMA-TS-REST_NetAPI_Push-V1_0 [URL:http://www.openmobilealliance.org/](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”, are normative, unless they are explicitly indicated to be informative.

3.2 Definitions

Push Initiator	The entity that originates push content and submits it to the push framework for delivery to a user agent on a client.
Push OTA Protocol	A protocol used for conveying content between a Push Proxy Gateway and a certain user agent on a client.
Push Proxy Gateway	A proxy gateway that provides push proxy services.

3.3 Abbreviations

ABNF	Augmented Backus-Naur Form
ABNF	Augmented Backus-Naur Form
ETR	Enabler Test Requirements
ETS	Enabler Test Specification
HTTP	Hypertext Transfer Protocol
OMA	Open Mobile Alliance
OMA	Open Mobile Alliance
OMNA	Open Mobile Naming Authority
OTA	Over The Air
PI	Push Initiator
PPG	Push Proxy Gateway
Push-OTA	Push Over-the-Air

4. Enabler Validation Description

This document details the Validation plan for the PushREST V1.0 Enabler Release. The successful accomplishment of the validation activities will be required for the Enabler to be considered for Approved status. This Plan will detail the required testing environment and tools required to implement the testing successfully.

5. TestFest Activities

5.1 Enabler Test Guidelines

A full description of PushREST 1.0 can be found in the ERELD and specifications.

These guidelines cover all PushREST 1.0 testing areas.

Assumptions:

- A Push initiator Tool is required to connect to the PPG for API operations
- At least one Push-OTA protocol binding supported by the PPG is tested
- The testing requires Push Client and PPG functionality, supporting any release of WAP Push or the OMA Push enabler ([WAPPushArch], [Push2.1Arch], [Push2.2Arch], [Push2.3Arch])

5.1.1 Minimal Test Configuration

The minimal test configuration of Push shall include:

- A Push Client implementation (can be an emulator)
- A Push Proxy Server implementation
- A Push Initiator Tool or Push-enabled service
- A data network for Push-OTA message delivery

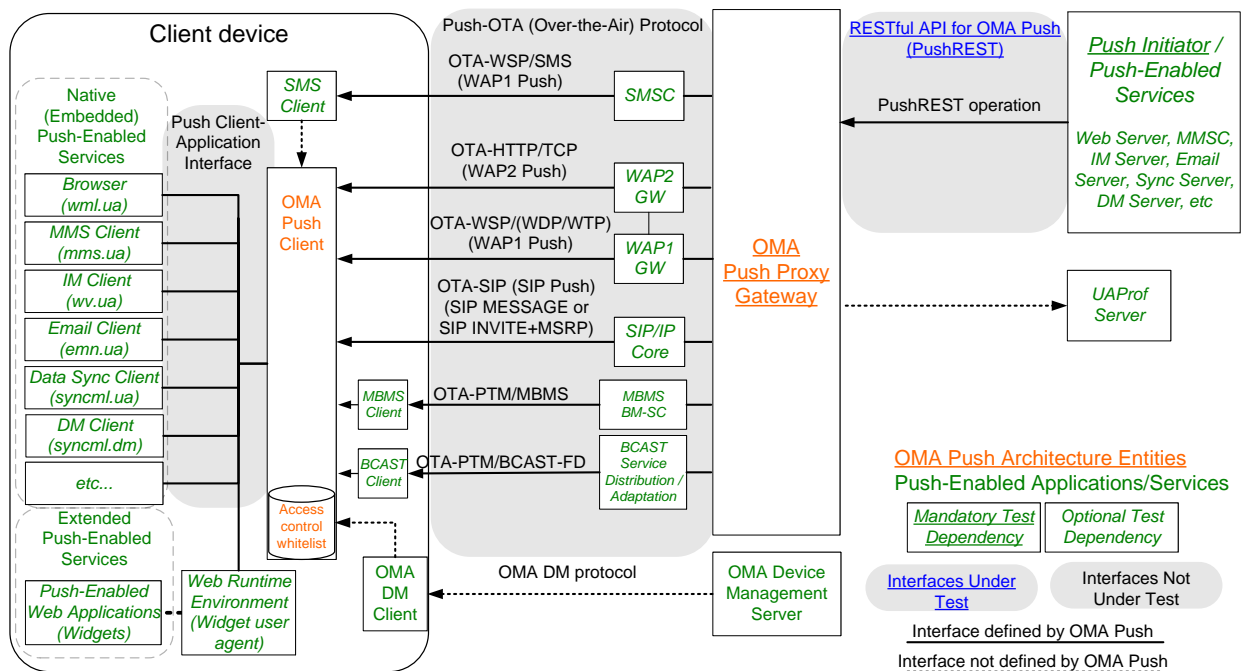


Figure 1 Test Configuration Options, as of OMA Push 2.3

5.1.2 Minimal Participation Guidelines

Minimum

- 1 Push Client implementations (may be an emulator)
- 1 PPG

5.1.3 Optimal TestFest Achievement Guidelines

The ETS Test Cases include all the Test Cases for the Enabler that it is thought should be executed in a test session at an OMA TestFest. This list is intended to facilitate maximum test coverage of the functionality of the enabler within a test session. It is not intended to be the only tests executed at a TestFest, and teams are encouraged to execute more tests if they are able to do in the time allowed.

In addition to availability of a suitable Push Initiator supporting PushREST 1.0, preparations for the test fest are the same as necessary for the Push-OTA bindings planned to be used in the tests, as described by the applicable WAP Push or OMA Push enabler release test validation plans.

5.2 Enabler Test Requirements

5.2.1 Test Infrastructure Requirements

See the applicable WAP Push or OMA Push enabler release test validation plans.

5.2.2 Enabler Execution Flow

Apart from use of the RESTful binding for OMA Push in place of the PAP protocol, enabler execution flow will be per the applicable WAP Push or OMA Push enabler release test validation plans.

5.2.3 Test Content Requirements

Apart from use of the RESTful binding for OMA Push in place of the PAP protocol, test content will be per the applicable WAP Push or OMA Push enabler release test validation plans.

5.2.4 Test Limitations

5.2.4.1 Physical

NONE

5.2.4.2 Resources

NONE

5.2.5 Test Restrictions

NONE

5.2.6 Test Tools

5.2.6.1 Existing Tools to be Used

The test tools needed to carry out the conformance and interoperability test cases are listed as:

- PPG
- Push Initiator Tool
- Device or emulator supporting Push Client functions

5.2.6.2 Test Tool Requirements

NONE

5.2.7 Resources Required

All test cases can be run in approx 8 hours. However, comparative testing may require more time, depending on the number of devices being compared.

5.3 Tests to be Performed

The following sections describe the tests related to the formal TestFest validation activities.

5.3.1 Entry Criteria for TestFest

There are no specific tests that need to be performed and passed by implementations by members wishing to participate in the TestFest.

5.3.2 Testing to be performed at TestFest

The following tests need to be performed to fully cover the range of capabilities of the enabler and defined protocols. These tests are to be covered in the TestFest.

Test Case Id	Special Conditions
PushREST-1.0-int-1	None
PushREST-1.0-int-2	None
PushREST-1.0-int-3	None
PushREST-1.0-int-4	None
PushREST-1.0-int-5	None
PushREST-1.0-int-6	None
PushREST-1.0-int-7	None
PushREST-1.0-int-8	None
PushREST-1.0-int-9	None
PushREST-1.0-int-10	None
PushREST-1.0-int-11	None
PushREST-1.0-int-12	None
PushREST-1.0-int-13	None
PushREST-1.0-int-15	None

5.4 Enabler Test Reporting

5.4.1 Problem Reporting Requirements

Normal Reporting Tool to be used, no special reporting required.

5.4.2 Enabler Test Requirements

As per the [ETR]

6. Alternative Validation Activities

NONE

7. Approval Criteria

The PushREST 1.0 Enabler can be put in the Approved state when:

- The Enabler has been tested successfully at 2 Test Fests or
- 3 Companies have successfully run Bi-lateral tests sessions towards a Push server and has reported results and any issues to OMA
- No open PRs exist.

Appendix A. Change History (Informative)

A.1 Approved Version History

Reference	Date	Description
n/a	n/a	No prior version –or- No previous version within OMA

A.2 Draft/Candidate Version 1.0 History

Document Identifier	Date	Sections	Description
Draft Version OMA-EVP-REST_NetAPI_Push-V1_0	27 Aug 2011	All	New document, based on OMA-IOP-BRO-2011-0082- INP_PushREST_EVP_Baseline
Candidate Version OMA-EVP-REST_NetAPI_Push-V1_0	13 Aug 2013	N/A	Status changed to Candidate TP Ref#OMA-TP-2013-0231- INP_PushREST_V1_0_EVP_for_Candidate_approval
Draft Version OMA-EVP-REST_NetAPI_Push-V1_0	02 Sep 2013	5.3.2	Applied OMA-IOP-BRO-2013-0038-CR_List_tests_for_test_fest
Candidate Version OMA-EVP-REST_NetAPI_Push-V1_0	10 Sep 2013	N/A	Status changed to Candidate TP Ref#OMA-TP-2013-0254- INP_PushREST_V1_0_EVP_for_Candidate_re_approval