



Enabler Release Definition for Social Network Web Enabler (SNeW)

Approved Version 1.0 – 29 Mar 2016

Open Mobile Alliance
OMA-ERELD-SNeW-V1_0-20160329-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.

© 2016 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. RELEASE VERSION OVERVIEW	7
4.1 VERSION 1.0 FUNCTIONALITY	7
4.1.1 Informative Overview	7
5. DOCUMENT LISTING FOR SNEW 1.0	9
6. OMNA CONSIDERATIONS	10
7. CONFORMANCE REQUIREMENTS NOTATION DETAILS	11
8. ERDEF FOR SNEW 1.0 – CLIENT REQUIREMENTS	12
9. ERDEF FOR SNEW 1.0 – SERVER REQUIREMENTS	13
APPENDIX A. CHANGE HISTORY (INFORMATIVE)	14
A.1 APPROVED VERSION HISTORY	14

Figures

Figure 1 Social Network ecosystem	8
---	---

Tables

Table 1: Listing of Documents in SNeW 1.0 Enabler	9
Table 2: ERDEF for SNeW 1.0 Client-side Requirements	12
Table 3: ERDEF for SNeW 1.0 Server-side Requirements	13

1. Scope

The scope of this document is limited to the Enabler Release Definition of Social Network Web (SNeW) 1.0 according to OMA Release process and the Enabler Release specification baseline listed in section 5.

2. References

2.1 Normative References

- [RFC2119] “Key words for use in RFCs to Indicate Requirement Levels”, S. Bradner, March 1997, [URL:http://www.ietf.org/rfc/rfc2119.txt](http://www.ietf.org/rfc/rfc2119.txt)
- [SCRRULES] “SCR Rules and Procedures”, Open Mobile Alliance™, OMA-ORG-SCR_Rules_and_Procedures, [URL:http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [SNeW-ER] “Social Network Web Enabler”, Open Mobile Alliance™, OMA-ER-SNeW-V1_0, [URL:http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [SNeW-ETR] “Enabler Test Requirements for Social Network Web Enabler”, Open Mobile Alliance™, OMA-ETR-SNeW-V1_0, [URL:http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)

2.2 Informative References

- [MobSocNet-WP] “White Paper on Mobile Social Network Work Item Investigation”, Open Mobile Alliance™, OMA-WP-Mobile_Social_Network-20110516-A, [URL:http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [OMADICT] “Dictionary for OMA Specifications”, Version 2.9, Open Mobile Alliance™, OMA-ORG-Dictionary-V2_9, [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”, “Release Version Overview” and “Conformance Requirements Notation Details”, are normative, unless they are explicitly indicated to be informative.

The formal notation convention used in sections 8 and 9 to formally express the structure and internal dependencies between specifications in the Enabler Release specification baseline is detailed in [SCRRULES].

3.2 Definitions

Enabler Release	Collection of specifications that combined together form an enabler for a service area, e.g. a download enabler, a browsing enabler, a messaging enabler, a location enabler, etc. The specifications that are forming an enabler should combined fulfil a number of related market requirements.
External Social Network	A social network that is not-OMA Compliant and made available through either proprietary or non-proprietary mechanism and/or interfaces
Federated Social Networks	This is defined by a set of social networks that share some level of trust or set of rules, data formats and protocols, while, each social network retains its own administrative control and structure. The trust or set of rules binding the social networks govern the information that can be shared/searched/exchanged among users who are part of the respective social network.
Inbound/Outbound interactions	Inbound interactions relate to the concept of Aggregation of activities and media from External Social Networks, making thus possible to allow users that own accounts on multiple External SNs to access aggregated information about their friends (e.g. contact information, activities) on these networks. Outbound interactions, on the opposite, relate to the ability of Cross-posting activities and/or media to multiple External SNs. In this way, users could potentially share their activities over all their External SNs at once.
Minimum Functionality Description	Description of the guaranteed features and functionality that will be enabled by implementing the minimum mandatory part of the Enabler Release.
OMA Compliant Social Network	This is defined as a social network that conforms to the SNeW Enabler, essentially to ensure seamless interoperability and satisfaction of various actors in a social network. OMA Compliant Social Networks are natively Federated Social Networks.
Uniform Resource Name	Use definition from [OMADICT].

3.3 Abbreviations

API	Application Programming Interface
ER	Enabler Release
ERDEF	Enabler Requirement Definition
ERELD	Enabler Release Definition
OMA	Open Mobile Alliance
OMNA	Open Mobile Naming Authority
SCR	Static Conformance Requirements
SN	Social Network
SNEW	Social Network Web
URN	Uniform Resource Name
WP	White Paper

4. Release Version Overview

This enabler release defines:

- the reference architecture to allow interoperability between clients and servers and server-to-server federation of OMA Compliant SNs, supporting at least features such as:
 - profile discovery;
 - publication and sharing of contents, activities and reactions;
- the interface between an SNeW Client entity and an SNeW Server entity (intra-domain or UNI) that supports the above identified features;
- the interface between SNeW Server entities (inter-domain or NNI) that supports the above identified features;
- a set of Device APIs and Network APIs, to easily integrate OMA Compliant SN with external applications, as well as an appropriate privacy framework to control access to information through these APIs;
- a set of guidelines to reuse existing OMA enablers for providing additional features (e.g. profile search using OMA MSF);

4.1 Version 1.0 Functionality

Version 1.0 of the SNeW Enabler covers:

- the interoperability between clients and servers and server-to-server federation of OMA Compliant SNs, supporting the following features:
 - Profile discovery;
 - Publication and sharing of contents, activities and reactions;
 - Retrieving activities / reactions (both request/response and push);
 - User account management (e.g. user profile management, linking a External Social Network account);
 - User authentication and authorization for the requested interactions
- a set of Network APIs, to easily integrate OMA Compliant SN with external applications, as well as an appropriate privacy framework to control access to information through these APIs

Version 1.0 of the SNeW Enabler relates to existing technologies from the Social Web environment in that:

- it is wire-compatible with OStatus-related specifications, in particular for server-to-server interactions (federation);
- it references OpenSocial Social API Server specifications, in particular for client-server interactions.

In addition, this enabler leverages the OMA Push enabler to support notifications to SNeW Client entities (e.g. for activities & reactions delivery, etc).

4.1.1 Informative Overview

The SNeW Enabler aims at allowing large-scale deployments and interoperability of SNeW Clients and SNeW Servers in a timely manner, further guaranteeing social network federation so that users can easily communicate with users on other SNs and migrate their data. In particular, this enabler identifies a coherent subset of functionalities specific to SNeW representing a core specification.

The Figure 1 shows the overall ecosystem related to Social Network Web Enabler. In particular, the user (within the red circle) owns an account on a specific OMA Compliant SN ("his/her SN"), and interacts with users belonging either to his/her SN, or to another OMA Compliant SN, or to an External SN through the gateway functionality. Users access SNeW functionalities through multiple devices, each of them capable of running multiple applications.

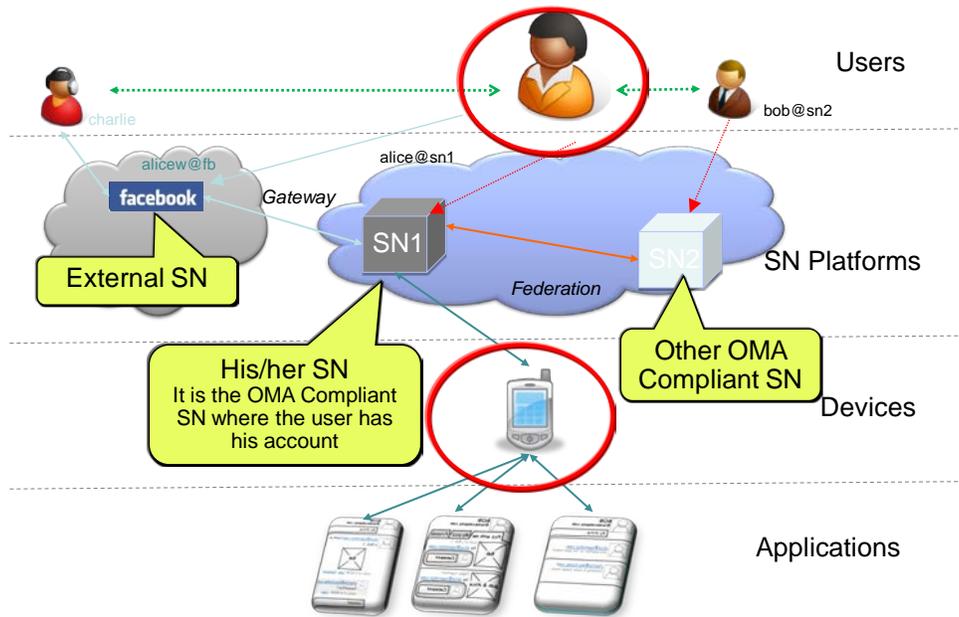


Figure 1 Social Network ecosystem

This Enabler is derived from the outcome of the Whitepaper on “Mobile Social Network Work Item Investigation” [MobSocNet-WP].

5. Document Listing for SNeW 1.0

This section is normative.

Doc Ref	Permanent Document Reference	Description
Enabler Release		
[SNeW-ER]	OMA-ER-SNeW-V1_0-20160329-A	Requirements, architecture and technical specification of the SNeW enabler.

Table 1: Listing of Documents in SNeW 1.0 Enabler

6. OMNA Considerations

SNeW 1.0 includes the following OMNA items:

1. Push-Application ID
 - a. x-oma-application:snew.ua (*new in SNeW 1.0*)
2. Push Resource Identifier
 - a. snew.ua (*new in SNeW 1.0*)

7. Conformance Requirements Notation Details

This section is informative.

The tables in following chapters use the following notation:

- Item:** Entry in this column **MUST** be a valid `ScrItem` according to [SCRRULES].
- Feature/Application:** Entry in this column **SHOULD** be a short descriptive label to the **Item** in question.
- Requirement:** Expression in the column **MUST** be a valid `TerminalExpression` according to [SCRRULES] and it **MUST** accurately reflect the architectural requirement of the **Item** in question.

8. ERDEF for SNeW 1.0 – Client Requirements

This section is normative.

Item	Feature / Application	Requirement
OMA-ERDEF-SNeW-C-001-M	SNEW Client	[SNeW-ER]:MCF
OMA-ERDEF-SNeW-C-002-O	Client gateway functionality	[SNeW-ER]-GW-C-MCF
OMA-ERDEF-SNeW-C-003-O	Subscription-mode functionality	[SNeW-ER]-SUB-C-MCF

Table 2: ERDEF for SNeW 1.0 Client-side Requirements

9. ERDEF for SNeW 1.0 – Server Requirements

This section is normative.

Item	Feature / Application	Requirement
OMA-ERDEF-SNeW-S-001-M	SNEW Server	[SNeW-ER]:MSF
OMA-ERDEF-SNeW-S-002-O	Server gateway functionality	[SNeW-ER]-GW-S-MSF
OMA-ERDEF-SNeW-S-003-O	Subscription-mode functionality	[SNeW-ER]-SUB-S-MSF
OMA-ERDEF-SNeW-S-004-O	Social data import/export functionality	[SNeW-ER]-IE-S-MSF

Table 3: ERDEF for SNeW 1.0 Server-side Requirements

Appendix A. Change History (Informative)

A.1 Approved Version History

Reference	Date	Description
OMA-ERELED-SNeW-V1_0-20160329-A	29 Mar 2016	Status changed to Approved by TP TP Ref # OMA-TP-2016-0049-INP_SNeW_V1_0_ERP_for_final_Approval