Enabler Test Specification for Social Network Web

Candidate Version 1.0 – 17 Sep 2013

Open Mobile Alliance
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1. Scope

This document describes in detail available test cases for SNeW 1.0

The test cases are split in two categories, conformance and interoperability test cases.

The conformance test cases are aimed to verify the adherence to normative requirements described in the technical specifications.

The interoperability test cases are aimed to verify that implementations of the specifications work satisfactory.

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
[SNeW-ER]	"Social Network Web Combined Enabler Release", Open Mobile Alliance™, OMA-ER-SNeW-V1_0, URL:http://www.openmobilealliance.org/
[SNeW-ETR]	"Enabler Test Requirements for Social Network Web", Open Mobile Alliance™, OMA-ETR-SNeW-V1_0, URL:http://www.openmobilealliance.org/
[SNeW-EVP]	"Enabler Validation Plan for Social Network Web", Open Mobile Alliance™, OMA-EVP-SNeW-V1_0, URL: http://www.openmobilealliance.org/

2.2 Informative References

[OMADICT]	"Dictionary for OMA Specifications", Version 2.9, Open Mobile Alliance™, OMA-ORG-Dictionary-V2_9, 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", are normative, unless they are explicitly indicated to be informative.

The following numbering scheme is used:

> **xxx-y.z-con-number** where:
> | | |
> |---|---|
> | xxx | Name of enabler, e.g. MMS or Browsing |
> | y.z | Version of enabler release, e.g. 1.2 or 1.2.1 |
> | 'con' | Indicating this test is a conformance test case |
> | number | Leap number for the test case |

Or

> **xxx-y.z-int-number** where:
> | | |
> |---|---|
> | xxx | Name of enabler, e.g. MMS or Browsing |
> | y.z | Version of enabler release, e.g. 1.2 or 1.2.1 |
> | 'int' | Indicating this test is a interoperability test case |
> | number | Leap number for the test case |

3.2 Definitions

SNeW	Social Network Web

3.3 Abbreviations

OMA	Open Mobile Alliance

4. Introduction

The purpose of this document is to provide test cases for SNeW Enabler Release 1.0.

The implementation of some features is optional for the Clients and/or the Servers in the SNeW Enabler. The tests associated with these optional features are marked as "(Includes Optional Features)" in the test specification.

5. SNeW Conformance Test Cases

There are no conformance test cases at this time.

6. SNeW Interoperability Test Cases

There are 26 interoperability test cases.

6.1   User Management

6.1.1   User Account Creation

6.1.1.1   User account creation using telephone number

Test Case Id	SNeW-1.0-int-1
Test Object	SNEW Client, SNEW Server
Test Case Description	Creation of user account using his/her telephone number
Specification Reference	[ER_SNeW] sections 7.1, 7.1.1, 7.1.1.1, 7.1.1.2, 7.1.1.3, 7.1.3, 9.1.1.1, 9.3, 10.1.1
SCR Reference	SNeW-C-013-M, SNeW-C-017-M, SNeW-C-018-M, SNeW-C-037-M, SNeW-C-044-M, SNeW-C-045-O, SNeW-S-020-M, SNeW-S-023-O, SNeW-S-058-M, SNeW-S-067-M, SNeW-S-068-O, SNeW-S-070-O
ETR Reference	UMG-001, UAC-006
Tool	None
Test code	None
Preconditions	• User A has an unique and valid telephone number; • User B exists and has a valid account on the SNEW server; • SNEW Server URL is preconfigured in the SNEW Client
Test Procedure	1. User A accesses the SNEW Client and requests to register; 2. User A may enter his/her E164 telephone number and any other required personal information; 3. SNEW Client forwards the creation request to the SNEW Server; 4. SNEW Server accepts the user creation requesting any confirmation procedure (it may perform network-based authentication); 5. Another valid user (e.g. user B) discovers user A's profile using user A's telephone number
Pass-Criteria	1. User A is successfully created using the phone number and found after a profile discovery query on the SNEW Server using User A telephone number.

Table 1: Test Information for SNeW-1.0-int-1 Interoperability Test

6.1.1.2   User account creation using an account id

Test Case Id	SNeW-1.0-int-2
Test Object	SNEW Client, SNEW Server
Test Case Description	Creation of user account using an account id
Specification Reference	[ER_SNeW] sections 7.1, 7.1.1, 7.1.1.1, 7.1.1.2, 7.1.1.3, 7.1.3, 9.1.1.1, 9.3

SCR Reference	SNeW-C-013-M, SNeW-C-017-M, SNeW-C-018-M, SNeW-C-037-M, SNeW-C-044-M, SNeW-C-045-O, SNeW-S-020-M, SNeW-S-023-O, SNeW-S-058-M, SNeW-S-067-M, SNeW-S-068-O
ETR Reference	UMG-001, UAC-007
Tool	None
Test code	None
Preconditions	• User B exists and has a valid account on the SNEW server;
Test Procedure	1. User A accesses the SNEW Client and requests to register; 2. User A may enter his/her preferred identifier and any other required personal information; 3. SNEW Client forwards the creation request to the SNEW Server; 4. SNEW Server accepts the user creation and allocates an id of type "acct:" of User A. It may request any confirmation procedure; 5. Another valid user (e.g. user B) discovers user A's profile using the id assigned to User A.
Pass-Criteria	1. User A is successful created with an id of the type "acct:" and found after a profile discovery query on the SNEW Server using that id.

Table 2: Test Information for SNeW-1.0-int-2 Interoperability Test

6.1.2   User Account Deletion

Test Case Id	SNeW-1.0-int-3
Test Object	SNEW Client, SNEW Server
Test Case Description	Deletion of a user account
Specification Reference	[ER_SNeW] sections 7.1, 7.1.1, 7.1.1.1, 7.1.1.3, 8.1.1, 8.2.6, 10.2
SCR Reference	SNeW-C-004-M, SNeW-C-013-M, SNeW-C-018-M, SNeW-S-011-M, SNeW-S-023-O, SNeW-S-024-M
ETR Reference	UMG-001, SEC-003
Tool	None
Test code	None
Preconditions	• User A exists in SNEW Server and has a valid and active account; User B exists in SNeW server and has a valid and active id •
Test Procedure	1. User A accesses the SNEW Client and authenticates himself; 2. User A requests to delete his account; 3. User A's SNEW Client forwards the deletion request to the SNEW Server; 4. SNEW Server accepts the user deletion eventually requesting any confirmation procedure; 5. Another valid user (e.g. User B) attempts to discover User A's profile, which is not found.

Pass-Criteria	1. The user B can no longer find user A after user A's request to be deleted. Note: If a trace tool is available to verify that on the REST-HTTP request for the self deletion the Group-Id value used is "@self"

Table 3: Test Information for SNeW-1.0-int-3 Interoperability Test

6.1.3   User Account Search

Test Case Id	SNeW-1.0-int-4
Test Object	SNEW Client, SNEW Server
Test Case Description	Search of a user account based on personal information
Specification Reference	[ER_SNeW] sections 7.1., 7.1.1, 7.1.1.1, 7.1.1.4, 9.1.1.1, 9.3
SCR Reference	SNeW-C-020-O, SNeW-S-022-O, SNeW-S-025-O, SNeW-S-026-O, SNeW-S-027-O, SNeW-S-028-O, SNeW-S-058-M, SNeW-S-067-M, SNeW-S-068-O
ETR Reference	UMG-004
Tool	None
Test code	None
Preconditions	• User A exists in SNEW Server and has a valid and active account; • User B exists in SNEW Server and has a valid and active account; • User A has a display name associated with his account, which is known by User B (User B does not know User's A account)
Test Procedure	1. User B accesses the SNEW Client and authenticates himself; 2. User B searches for user A using user A's display name and finds him, including his account information;
Pass-Criteria	1. User B can obtain user A's account id

Table 4: Test Information for SNeW-1.0-int-4 Interoperability Test

6.1.4   User profile discovery

Test Case Id	SNeW-1.0-int-5
Test Object	SNEW Client A, SNEW Client B, SNEW Server A, SNEW Server B
Test Case Description	Discovery of a profile of an user in a remote OMA compliant SN (i.e. remote profile retrieval)
Specification Reference	[ER_SNeW] sections 7.1, 7.1.1, 7.1.1.1, 7.3.4, 8.2.1, 8.2.2, 8.2.4, 8.2.5, 8.2.6, 9.1, 9.1.1.1, 9.1.1.2, 9.3, Appendix F
SCR Reference	SNeW-C-013-M, SNeW-C-031-M, SNeW-C-037-M, SNeW-S-001-M, SNeW-S-002-M, SNeW-S-003-O, SNeW-S-004-O, SNeW-S-005-O, SNeW-S-008-M, SNeW-S-009-M, SNeW-S-010-M, SNeW-S-014-M, SNeW-S-022-O, SNeW-S-040-M, SNeW-S-050-M, SNeW-S-058-M, SNeW-S-059-M, SNeW-S-060-O, SNeW-S-067-M, SNeW-S-068-O
ETR Reference	UMG-005
Tool	None
Test code	None

Preconditions	• User A exists in SNEW Server A and has a valid and active account;
	• User B exists in SNEW Server B and has a valid and active account;
	• There is no friendship relationship between user A and user B;
	• User A knows user's B account;
	• Both SNEW Servers are federated
Test Procedure	1. User A accesses the SNEW Client A and authenticates himself;
	2. User B accesses the SNEW Client B and authenticates himself;
	3. User A attempts to discover user B's profile;
	4. SNEW Client A forwards the discovery request to the SNEW Server A;
	5. SNEW Server A accepts the request and performs a Webfinger query on SNEW Server B;
	6. SNEW Server A reads the relation link with the URL of the user's OpenSocial People Service endpoint on SNEW Server B;
	7. SNEW Server A requests to that endpoint on SNEW Server B the profile of user B;
	8. SNEW Server A returns User's B profile to SNEW Client A.
Pass-Criteria	1. User A gets the public profile of user B

Table 5: Test Information for SNeW-1.0-int-5 Interoperability Test

6.1.5   Social Data Portability

Test Case Id	SNeW-1.0-int-6
Test Object	SNEW Server A, SNEW Server B
Test Case Description	Social information export and subsequent import
Specification Reference	[ER_SNeW] sections 7.2, 7.2.3, 8.2.8
SCR Reference	SNeW-IE-S-001-M, SNeW-IE-S-002-M, SNeW-IE-S-003-M, SNeW-IE-S-004-O, SNeW-IE-S-005-M, SNeW-IE-S-006-M
ETR Reference	UMG-006
Tool	None
Test code	None
Preconditions	• User A exists in SNEW Server A and has a valid and active account, people being followed, followers, activities, content and reactions to activities
	• User A also exists in SNEW Server B and has a valid and active account

Test Procedure	1. User A accesses the SNEW Server A and authenticates himself;
	1. User A requests to export all of his social data;
	2. SNEW Server A creates a ZIP file with all the social data and package descriptor
	3. User A stores locally the ZIP, which contains all the profile information, relationships, activities and reactions
	4. User A accesses the SNEW Server B and authenticates himself with his other account;
	5. User A requests to import his social data and provides the SNEW Server B with the previously created ZIP file containing the social data;
	6. SNEW Server B checks the package descriptor inside the ZIP file;
	7. SNEW Server B extracts the "xrd.xml" file at the root of the ZIP file and checks the format used;
	8. SNEW Server B adds to user A account the friendships, activities, content and reactions contained in the package.
Pass-Criteria	1. User A account on SNEW Server B contains the list of friendships, activities, content and reactions existing on SNEW Server A.

Table 6: Test Information for SNeW-1.0-int-6 Interoperability Test

6.2   User Activity

6.2.1   User activities and reactions involving a single SNEW Server

Test Case Id	SNeW-1.0-int-7
Test Object	SNEW client A, SNEW client B, SNEW Server
Test Case Description	Activities and reactions involving a single SNeW Server
Specification Reference	[ER_SNeW] sections 7.1, 7.1.2, 7.1.3, 8.2.6, 9.1.1.1, 9.2, 9.2.1, 9.2.5
SCR Reference	SNeW-C-019-M, SNeW-C-024-M, SNeW-C-038-M, SNeW-C-039-M, SNeW-C-040-O, SNeW-C-041-O, SNeW-S-010-M, SNeW-S-011-M, SNeW-S-021-M, SNeW-S-032-M, SNeW-S-058-M, SNeW-S-061-M, SNeW-S-062-M, SNeW-S-063-O, SNeW-S-064-O
ETR Reference	UAC-001, UAC-002, UAC-003, UAC-005
Tool	None
Test code	None
Preconditions	• User A exists in the SNEW server and is already logged in using SNEW Client A; • User B exists in the same SNEW server and is logged in using SNEW Client B; • User B is a follower of User A.

Test Procedure	2. User A in the SNeW client A submits a new text/status;
	3. User A in the SNeW client A submits a new image;
	4. User A in the SNeW client A submits a new video;
	5. User A in the SNeW client A submits a new link to share;
	6. User A chooses a location and performs check-in at it;
	7. User B submits a "like" to User A's text/status;
	8. User B submits a comment to the image posted by User A;
Pass-Criteria	1. User B sees all 5 activities of User A
	2. User A sees the "like" to his text/status;
	3. User A sees the comment from User B to his image;

Table 7: Test Information for SNeW-1.0-int-7 Interoperability Test

6.2.2   User activities and reactions involving multiple SNEW Servers

Test Case Id	SNeW-1.0-int-8
Test Object	SNEW client A, SNEW client B, SNEW server A, SNEW server B
Test Case Description	Activities and reactions involving multiple SNeW Servers
Specification Reference	[ER_SNeW] sections 7.1.2, 7.1.3, 7.3.1, 7.3.2, 7.3.3, 8.2.1, 8.2.2, 8.2.3, 8.2.5, 8.2.6, 9.1.1.1, 9.1.1.2, 9.2, 9.2.1, 9.2.5, Appendix F
SCR Reference	SNeW-C-019-M, SNeW-C-024-M, SNeW-C-038-M, SNeW-C-039-M, SNeW-C-040-O, SNeW-C-041-O,
	SNeW-S-001-M, SNeW-S-002-M, SNeW-S-003-O, SNeW-S-004-O, SNeW-S-005-O, SNeW-S-006-M, SNeW-S-007-O, SNeW-S-009-M, SNeW-S-010-M, SNeW-S-011-M, SNeW-S-014-M, SNeW-S-015-M, SNeW-S-021-M, SNeW-S-032-M, SNeW-S-045-M, SNeW-S-046-M, SNeW-S-048-M, SNeW-S-058-M, SNeW-S-059-M, SNeW-S-060-O, SNeW-S-061-M, SNeW-S-062-M, SNeW-S-063-O, SNeW-S-064-O
ETR Reference	UAC-001, UAC-002, UAC-003, UAC-004, UAC-005
Tool	None
Test code	None
Preconditions	• User A exists in the SNEW server A and is already logged in SNEW Client A;
	• User B exists in the SNEW server B and is logged in SNEW Client B;
	• User B is a follower of User A.
Test Procedure	1. User A publishes a text/status;
	2. User A publishes an image;
	3. User A performs a check-in at a location;
	4. User B comments back User A's text/status;
	5. User B comments the User A image;
Pass-Criteria	1. User B sees the first 3activities from User A
	2. User A sees the first 2 reactions from User B

Table 8: Test Information for SNeW-1.0-int-8 Interoperability Test

6.2.3   Test Subscription-mode of activities and reactions

Test Case Id	SNeW-1.0-int-9
Test Object	SNEW client A, SNEW client B, SNEW server
Test Case Description	Subscription mode of activities and reaction
Specification Reference	[ER_SNeW] sections 7.1, 7.1.5, 7.2.2, Appendix H
SCR Reference	SNeW-C-024-M, SNeW-C-038-M, SNeW-C-039-M, SNeW-SUB-C-001-M, SNeW-SUB-C-002-O, SNeW-SUB-C-003-O, SNeW-SUB-C-004-M, SNeW-SUB-C-005-M, SNeW-SUB-S-001-O, SNeW-SUB-S-002-O, SNeW-SUB-S-003-O, SNeW-SUB-S-004-O, SNeW-SUB-S-005-O, SNeW-SUB-S-006-M,
ETR Reference	UAC-010
Tool	None
Test code	None
Preconditions	• User A exists in the SNEW server, is already logged in SNEW Client A and is a follower of User B; • User B exists in the SNEW server, is logged in SNEW Client B; • SNEW Client A and SNEW Client B support subscription-mode support
Test Procedure	1. User B publishes at least 5 textual notes randomly spaced in time within 2 or 3 minutes; 2. User A receives almost instantaneously each of the notes; 3. User A publishes a note; 4. User B comments that note at least 5 times randomly spaced in time within 2 to 3 minutes; 5. User A receives almost instantaneously the 5 comments.

Pass-Criteria	1. User A receives all of the 5 notes almost immediately after being published by user B;
	2. User A receives all of the 5 reactions (comments) immediately after being published by user B;
	3. If available verify the log at the server providing the hub service
	4. If available a trace tool verify that:
	    4.1 The Accept: header value "text/event-stream" is in the SNEW client request;
	    4.2 The SNEW server response has a Link Header with "rel=hub" containing the URL of the subscription endpoint;
	    4.3 The SNEW server response has a Link Header with "rel=self" containing the URL of the topic subscribed

Table 9: Test Information for SNeW-1.0-int-9 Interoperability Test

6.2.4   Share of links when browsing external websites

Test Case Id	SNeW-1.0-int-10

Test Object	SNEW client, SNEW server, External Web Server
Test Case Description	Share of links when browsing external websites
Specification Reference	[ER_SNeW] sections 7.2, 7.2.1, 8.2.1
SCR Reference	SNeW-S-001-M, SNeW-S-042-M,
ETR Reference	UAC-011
Tool	Note: It should be used a neutral External Web Server like Discovery Test Harness (http://www.oexchange.org/tools/discoveryharness/) or the Offer Test Harness (http://www.oexchange.org/tools/sourceharness/)
Test code	None
Preconditions	• User A exists in the SNEW server; • User B exists in the SNEW server, is logged in at SNEW Client and is a follower of User A; • SNEW server supports links sharing • There is a web page with a share capability (e.g. button) according to [SNeW-ER].
Test Procedure	1. User A using any browser existing in the device accesses the web page with a compliant share button; 2. User A clicks on the share button to trigger the share action that points to SNEW server; 3. (optional) The SNEW Server provides a user interface preloading the web page URL so that user A can confirm the share activity. 4. User B sees the activity from user A.
Pass-Criteria	1. User A can share the link directly from the webpage; 2. User B can see the link shared by User A;

Table 10: Test Information for SNeW-1.0-int-10 Interoperability Test

6.2.5   Usage of Push in own SNeW

Test Case Id	SNeW-1.0-int-11
Test Object	SNEW client A, SNEW client B, SNEW server, External PPG (optional)
Test Case Description	Usage of OMA Push in own SNeW
Specification Reference	[ER_SNeW] sections 7.5, 8.2.6, 8.2.7
SCR Reference	SNeW-C-033-M, SNeW-C-034-M, SNeW-C-035-M, SNeW-C-036-M, SNEW-S-010-M, SNEW-S-019-M,SNeW-S-051-M, SNeW-S-052-M, SNeW-S-053-M, SNeW-S-054-M, SNeW-S-055-M, SNeW-S-056-M, SNeW-S-057-M
ETR Reference	UAC-008
Tool	None
Test code	None

Preconditions	• User A exists in the SNEW server, is logged in SNEW Client A and is a follower of User B; • User B exists in the SNEW server, is logged in SNEW Client B and is a follower of User A; • Device of User A is registered for push • SNEW Server is push-capable using PAP (through an External PPG) or Push-OTA and a Push-OTA bearer is available to reach user's A device (e.g. through wap push, sip, etc).
Test Procedure	1. User B publishes a textual note; 2. User A sees the note from User B without the need to refresh explicitly.
Pass-Criteria	1. User A receives the note from User B almost immediately; 2. It is recorded on the SNEW Server (or External PPG) log that a push message was dispatched

Table 11: Test Information for SNeW-1.0-int-11 Interoperability Test

6.2.6   Usage of Push in another compliant SNeW

Test Case Id	SNeW-1.0-int-12
Test Object	SNEW client A, SNEW client B, SNEW server A, SNEW server B External PPG (optional)
Test Case Description	Usage of OMA Push in another compliant SNeW
Specification Reference	[ER_SNeW] sections 7.5, 8.2.5, 8.2.7
SCR Reference	SNeW-C-033-M, SNeW-C-034-M, SNeW-C-035-M, SNeW-C-036-M, SNEW-S-009-M, SNEW-S-017-O, SNEW-S-019-M, SNeW-S-051-M, SNeW-S-052-M, SNeW-S-053-M, SNeW-S-054-M, SNeW-S-055-M, SNeW-S-056-M, SNeW-S-057-M
ETR Reference	UAC-009
Tool	None
Test code	None
Preconditions	• User A exists in the SNEW server A, is logged in SNEW Client A and is a follower of User B; • User B exists in the SNEW server B, is logged in SNEW Client B and is a follower of User A; • Device of User A is registered for push • SNEW Server is push-capable using PAP (through an External PPG) or Push-OTA and a Push-OTA bearer is available to reach user's A device (e.g. through wap push, sip, etc).
Test Procedure	1. User B publishes a textual note; 2. User A sees the note from User B without the need to refresh explicitly
Pass-Criteria	1. User A receives the note from User B almost immediately; 2. It is recorded on the SNEW Server (or External PPG) log that a push message was dispatched

Table 12: Test Information for SNeW-1.0-int-12 Interoperability Test

6.2.7   Private messages inside SNeW

6.2.7.1   Private messages create and retrieve

Test Case Id	SNeW-1.0-int-13
Test Object	SNEW client A, SNEW client B, SNEW server
Test Case Description	Creation and retrieve of private messages
Specification Reference	[ER_SNeW] section 7.1
SCR Reference	SNeW-C-029-M, SNeW-S-038-M
ETR Reference	UAC-012
Tool	None
Test code	None
Preconditions	• User A exists in the SNEW Server and is logged in SNEW Client A • User B exists in the SNEW server;
Test Procedure	1. User A sends a private message to User B; 2. User B logs in SNEW Client B and sees he has received a new message; 3. User B retrieves the message from User A
Pass-Criteria	1. User A can send a private message to User B; 2. User B can see that there is new private message; 3. User B can retrieve the private message from User A

Table 13: Test Information for SNeW-1.0-int-13 Interoperability Test

6.2.7.2   Private messages update and deletion

Test Case Id	SNeW-1.0-int-14
Test Object	SNEW client A, SNEW client B, SNEW server
Test Case Description	Update and deletion of private messages
Specification Reference	[ER_SNeW] section 7.1
SCR Reference	SNeW-C-029-M, SNeW-C-030-O, SNeW-S-038-M, SNeW-S-039-O
ETR Reference	UAC-012
Tool	None
Test code	None
Preconditions	• User A and User B exists in the SNEW server • User A is already logged in SNEW client A; • User A has sent already a private message to User B

Test Procedure	1. User A chooses a previous message sent to User B and changes its content; 2. User B logs in SNEW Client B and retrieves his private messages; 3. User B sees the updated message from User A; 4. User B deletes previous message in SNEW Client B
Pass-Criteria	1. After the update the private message sent by User A to User B is correctly updated in User B messages collection; 2. After the deletion the private message sent by User A is deleted from User B messages collection

Table 14: Test Information for SNeW-1.0-int-14 Interoperability Test

6.3 Generic Management

6.4 Device Specific

6.4.1 Application communication in SNEW Client and local cache

Test Case Id	SNeW-1.0-int-15
Test Object	SNEW Application A1, SNEW Application A2, SNEW Client B, SNEW server
Test Case Description	Applications communication inside the device, centralised communication and local cache
Specification Reference	[ER_SNeW] sections 8.1, 8.1.3
SCR Reference	SNeW-C-005-M, SNeW-C-006-M, SNeW-C-007-M, SNeW-C-008-M, SNeW-C-009-M, SNeW-C-010-M, SNeW-C-011-O
ETR Reference	DEV-001; DEV-002; DEV-003; DEV-004
Tool	None
Test code	None
Preconditions	• User A and User B exist in the SNEW Server and are already logged in; • User B is registered as a follower of User A; • SNEW (enabled) Application A1 and SNEW Application A2 reside on the same device
Test Procedure	1. User A in the SNEW Application A1 submit a new textual note; 2. User B in the SNEW Client B is notified and views the note; 3. User A deactivates his data connectivity to SNEW Server and switches to SNEW Application A2 on the same device and sees his own note (due to local caching); 4. User B in the SNEW Client B comments the note back (reacts); 5. User A reactivates his data connectivity to SNEW Server and switches again to the SNeW Application A1 and sees the comment from User B;

Pass-Criteria	1. User B receives the notification of the availability of a new note from User A and is able to read it;
	2. The User A views his own note on the SNEW Application A2 even when offline
	3. The User A views the reaction from User B on the SNEW Application A1 when back online.

Table 15: Test Information for SNeW-1.0-int-15 Interoperability Test

6.4.2   Deletion and update of cache (contains optional features)

Test Case Id	SNeW-1.0-int-16
Test Object	SNEW client A, SNEW client B, SNEW server, SNEW Application B1, SNEW Application B2
Test Case Description	Local cache management of updates and deletions
Specification Reference	[ER_SNeW] sections 8.1, 8.1.2, 8.1.3
SCR Reference	SNeW-C-005-M, SNeW-C-006-M, SNEW-C-007-M, SNeW-C-008-M, SNeW-C-009-M, SNEW-C-011-O, SNEW-C-024-M, SNEW-C-025-O
ETR Reference	DEV-005, UMG-002, UMG-003
Tool	None
Test code	None
Preconditions	• User A exists in the SNEW server, is already logged in;
	• User B exists in the SNEW server, is logged in and is registered as a follower of User A;
	• SNEW Application B1 and B2 reside on the same device
	• There is already a textual note from User A received by User B. The starting point can be the end of previous test case.
Test Procedure	1. If update of a previous activity is supported:
	a. User A updates his previous note;
	b. User B sees the User A's updated note on SNEW Application B1;
	c. The data connection SNEW client B – server is artificially cut;
	d. User B starts SNEW Application B2 and sees the updated note as well;
	e. User B closes the SNEW Application B2;
	2. If update of a previous activity is NOT supported:
	a. The data connection SNEW client B – server is artificially cut;
	3. User A deletes his previous note;
	4. The data connection SNEW client B – server is re-established;
	5. User B does not see anymore the previous note from User A on SNEW Application B1;
	6. The data connection SNEW client B – server is artificially cut;
	7. User B starts SNEW Application B2 and does not see anymore the previous note;

Pass-Criteria	1.	If the update of a previous activity is supported the SNEW Application B2 shows the User A's note updated after the 1st connection cut. If NOT supported this criterion is ignored;
	2.	SNEW Application B2 does not show the User A's note anymore after the 2nd connection cut;

Table 16: Test Information for SNeW-1.0-int-16 Interoperability Test

6.4.3   Local queue management

Test Case Id	SNeW-1.0-int-17
Test Object	SNEW client A, SNEW client B, SNEW server, SNEW Application A1, SNEW Application A2
Test Case Description	Local queue management of outgoing requests
Specification Reference	[ER_SNeW] sections 8.1, 8.1.1, 8.1.3
SCR Reference	SNEW-C-001-M, SNEW-C-002-O, SNEW-C-003-O, SNEW-C-004-M, SNEW-C-010-M, SNEW-C-011-O, SNEW-C-012-M
ETR Reference	DEV-006
Tool	None
Test code	None
Preconditions	• User A exists in the SNEW server, is already logged in; • User B exists in the SNEW server, is logged in and is registered as a follower of User A; • SNEW Application A1 and A2 reside on the same device • There is no data connection from SNEW Client A to SNEW Server
Test Procedure	1. User A publishes a new textual note on SNEW Application A1, which is stored in the queue; 2. User A closes the SNEW Application A1 and starts SNEW Application A2; 3. User A publishes a picture on SNEW Application A2, which is stored in the queue; 4. The data connection SNEW Client A – server is re-established and the queue is processed automatically; 5. User B sees the note and the picture as separate activities from user A; 6. The data connection SNEW Client A – server is artificially cut 7. User A deletes his previous note from SNEW Application A2, which is stored in the queue; 8. User A closes the SNEW Application A2; 9. The data connection SNEW Client A – server is re-established; 10. User B does not see anymore the previous note from User A;
Pass-Criteria	1. User B sees User A activities (note and picture) after the 1st connection re-establishment; 2. User B does not see User A's note anymore after the 2nd connection re-establishment; 3. Queue on User'A device is processed even when no SNEW application is running on the device (managed by the SNEW Client A)

Table 17: Test Information for SNeW-1.0-int-17 Interoperability Test

6.5 Gateway Specific

6.5.1 Association to External SNs

Test Case Id	SNeW-1.0-int-18
Test Object	SNEW Client, External SN Client, SNEW server, External SN Server
Test Case Description	Association to External SNs and cross-posting towards selected External SNs
Specification Reference	[ER_SNeW] sections 7.1, 7.1.4, 7.1.4.4, 9.4.1, 9.4.2
SCR Reference	SNeW-GW-C-001-M, SNeW-GW-C-002-M, SNeW-GW-C-003-M, SNeW-GW-C-004-M, SNeW-GW-S-002-M, SNeW-GW-S-003-M, SNeW-GW-S-004-M, SNeW-GW-S-005-M
ETR Reference	GWR-001; GWR-004; GWR-005
Tool	None
Test code	None
Preconditions	• User A exists in the SNEW Server and is already logged in. • User A and User B exist in an External SN Server; • User B follows (or is friend with) User A in the External SN Server; • SNEW server supports the connection with External SN Server
Test Procedure	1. User A in the SNEW Client sees a list of the External SNs supported by his SNEW Server; 2. User A selects his External SN and starts the process of association with his SNEW identity; 3. User A creates a textual note for publication; 4. When publishing the note (or previously ; implementation decision) User A selects to cross-post the note also on External SN Server; 5. User B accesses External SN Server using his preferred access method e.g. an External SN Client; 6. User B sees the note previously entered by User A.
Pass-Criteria	1. User A can see the list of supported External SNs; 2. User A can select the External SN; 3. The association request to External SN is accepted and User A can see the status of the association; 4. User A can select to cross-post his note to the External SN; 5. User B sees User A's note from his External SN.

Table 18: Test Information for SNeW-1.0-int-18 Interoperability Test

6.5.2 Import and aggregation of activities from External SNs

Test Case Id	SNeW-1.0-int-19
Test Object	SNEW Client, External SN Client, SNEW server, External SN Server
Test Case Description	Import and aggregation of activities from External SNs

Specification Reference	[ER_SNeW] sections 7.1, 7.1.4, 7.1.4.4, 9.4.1, 9.4.2
SCR Reference	SNeW-GW-C-001-M, SNeW-GW-C-002-M, SNeW-GW-C-004-M, SNeW-GW-S-002-M, SNeW-GW-S-003-M, SNeW-GW-S-004-M, SNeW-GW-S-005-M,
ETR Reference	GWR-001, GWR-003
Tool	None
Test code	None
Preconditions	• User A exists in the SNEW Server; • User A and User B exist in the External SN Server; • User B does not exist in the SNEW Server; • User B follows (or is friend with) User A in the External SN Server; • User A follows (or is friend with) User B in the External SN Server • SNEW server supports the connection with External SN Server; • User A has already associated his account in the SNEW Server with his External SN Server account (User A has granted access to their activities).

Test Procedure	1. User B accesses the External SN using his preferred method e.g. an External SN Client and posts a textual note;
	
	 2. User A accesses the External SN using his preferred method e.g. an External SN Client and performs the following activities (if supported by the External SN):
	
	     a. Updates his status;
	
	     b. Uploads a picture;
	
	     c. Shares a link;
	
	     d. Reacts to the previous note from User B.
	
	 3. User A enters the SNEW Client;
	
	 4. User A sees his activities previously entered in the External SN as well as User B's note;

Pass-Criteria	1. User A can see (at least partially) the activities performed on the External SN as well as User B's note entered in the External SN Client.

Table 19: Test Information for SNeW-1.0-int-19 Interoperability Test

6.5.3 Cross-posting of activities towards selected External SNs

Test Case Id	SNeW-1.0-int-20
Test Object	SNEW Client, External SN Client, SNEW server, External SN Server
Test Case Description	Cross-posting of activities towards selected External SNs
Specification Reference	[ER_SNeW] sections 7.1, 7.1.4, 9.4.1, 9.4.2
SCR Reference	SNeW-GW-C-002-M, SNeW-GW-C-003-M, SNeW-GW-C-004-M, SNeW-GW-S-003-M, SNeW-GW-S-004-M, SNeW-GW-S-005-M,
ETR Reference	GWR-004, GWR-005
Tool	None
Test code	None

Preconditions	• User A exists in the SNEW Server and is already logged in.
	• User A exists in the External SN Server;
	• SNEW server supports the connection with External SN Server;
	• User A has already associated his account in the SNEW Server with his one in the External SN Server (User A has granted access to publish on their behalf).
Test Procedure	1. User A in the SNEW Client performs the following activities and shares them to his account in:
	a. Updates his status;
	b. Uploads a picture;
	c. Shares a link;
	2. User A accesses the External SN using his preferred method e.g. an External SN Client;
	3. In the External SN Client User A sees the activities they previously performed;
Pass-Criteria	1. User A can see on his External SN Client (at least part of) the activities he performed in the SNEW Client.

Table 20: Test Information for SNeW-1.0-int-20 Interoperability Test

6.5.4 Deletion of associations to External SNs

Test Case Id	SNeW-1.0-int-21
Test Object	SNEW Client, External SN Client, SNEW server, External SN Server
Test Case Description	Deletion of associations to external SNs
Specification Reference	[ER_SNeW] sections 7.1, 7.1.4, 7.1.4.3, 8.2.3
SCR Reference	SNeW-GW-C-004-M,
	SNeW-GW-S-001-M, SNeW-GW-S-005-M
ETR Reference	GWR-002
Tool	None
Test code	None
Preconditions	• User A exists in the SNEW Server and is already logged in.
	• User A and User B exist in an External SN Server;
	• User B follows (or is friend with) User A in the External SN Server;
	• SNEW server supports the connection with External SN Server;
	• User A has successfully associated his account at the SNEW server with his one at the External SN Server

Test Procedure	1. User A in the SNEW Client sees a list of his associated External SNs and their current association status;
	2. User A selects his External SN and deletes the association;
	3. User A creates a textual note for publication;
	4. When publishing the note (or previously, implementation decision) User A verifies it is impossible to select the External SN to also cross-post the note;
	5. User B accesses External SN Server using his preferred access method, e.g. an External SN Client;
	6. User B doesn't see the note previously entered by User A.
Pass-Criteria	1. User A can see the list of supported External SNs with the correct status of the association with his External SN;
	2. User A can select the External SN and request the deletion of the association;
	3. The deletion of the association to External SN is accepted and User A can see that the association does not exist anymore;
	4. User A cannot select to cross-post his note to the External SN;
	5. User B doesn't see User A's note from his External SN.

Table 21: Test Information for SNeW-1.0-int-21 Interoperability Test

6.6 Security

6.6.1 Privacy level

Test Case Id	SNeW-1.0-int-22
Test Object	SNEW Client A, SNEW Client B, SNEW server
Test Case Description	Privacy level configuration and observation
Specification Reference	[ER_SNeW] sections 7.1.2, 9.2.3
SCR Reference	SNEW-C-027-M, SNEW-S-35-M, SNEW-S-36-O
ETR Reference	SEC-001; SEC-004
Tool	None
Test code	None
Preconditions	• User A exists in the SNEW Server; • User B exists in the SNEW Server; • User B is not a follower of User A but knows their identifier.

Test Procedure	1. User A publishes a text note, photo and a location setting the privacy level to "Followers" ;
	2. User B searches for User A on the SNEW Client B using their identifier;
	3. User B finds User A and can see some activities but does not see the text, photo and location previously published by User A;
	4. User A publishes a second text note, photo and location setting the privacy level to "Public";
	5. User B checks again for User A's activities and sees the second note, photo and location;
	6. User B becomes a follower of User A;
	7. User B checks again for User A's activities and can see now also the first note, photo and location;
	Note: If past posts are not inherited in the particular SNeW Server implementation, User A has to post again the first note, photo and location with "Followers" privacy level
	8. User A publishes a third note, photo and location setting the privacy level to "Private";
	9. User B checks for User A's activities;
	10. User B continues to see the first and second text note, photo and location but not the third note, photo and location.
Pass-Criteria	1. User A can select the privacy level among the 3 levels indicated;
	2. On step 3 User B cannot see the first textual note, photo and location;
	3. On step 5 User B can see both the first and second note, photo and location;
	4. On step 10 User B cannot see the third note, photo and location

Table 22: Test Information for SNeW-1.0-int-22 Interoperability Test

6.6.2   User authentication and device applications authorization – credentials-based flow

Test Case Id	SNeW-1.0-int-23
Test Object	SNEW Client, SNEW Application, SNEW server
Test Case Description	User authentication and authorization of device applications – credentials-based flow
Specification Reference	[ER_SNeW] sections 8.2.1, 10.1, 10.2, 10.2.1.1, 10.2.1.2, Appendix J
SCR Reference	SNEW-C-004-M, SNEW-C-046-M, SNEW-C-047-M, SNEW-C-048-M, SNEW-C-049-M, SNEW-C-050-M,
	SNEW-S-001-M, SNEW-S-011-M, SNEW-S-069-M, SNEW-S-071-M, SNEW-S-072-M, SNEW-S-073-M, SNEW-S-074-O
ETR Reference	SEC-002, SEC-003
Tool	None
Test code	None

Preconditions	• User A exists in the SNEW Server with explicit credentials (e.g. username & password) and has already published several activities and reactions; • User A is not yet authenticated on the SNeW Server
Test Procedure	1. User A installs if required and executes the SNEW Application; 2. If a default SNEW Server is not preconfigured, the SNEW Application prompts User A for his identity (e.g. username@domain) to identify the SNEW Server; 3. The SNEW Application asks the SNEW Client to start the authorization process; 4. The SNEW Client performs the discovery of the OAuth2 authorization endpoint on the SNEW Server and opens the device browser on that endpoint; 5. In the browser, the SNEW Server displays a webpage requesting User A to authenticate using his credentials (e.g. username and password) 6. If authentication was successful, the SNEW Server displays a webpage showing that SNEW Application requests authorization to access and manage User A's data (e.g. activities, profile) and asking if he authorizes it; 7. User A accepts and the browser returns to the SNEW Client, which informs the SNEW Application of the successful procedure 8. User A can now see his past activities and reactions in SNEW Application; 9. User A accesses SNEW Server and revokes the access of SNEW Application to his activities and reactions; 10. User A refreshes his past activities and cannot see them anymore in SNEW Application.
Pass-Criteria	1. User A is prompted by the SNEW Server to authenticate and perform the authorisation of SNEW Application; 2. User A can see his past activities and reactions after the SNEW Application being authorised; 3. User A can revoke the SNEW Application at the SNEW Server; 4. After SNEW Application being revoked, User A can no longer see the past activities and reactions in SNEW Application

Table 23: Test Information for SNeW-1.0-int-23 Interoperability Test

6.6.3 User authentication and device applications authorization – network-based flow

Test Case Id	SNeW-1.0-int-24
Test Object	SNEW Client, SNEW Application, SNEW server
Test Case Description	User authentication and authorization of device applications – network-based flow
Specification Reference	[ER_SNeW] sections 8.2.1, 10.1, 10.1.1, 10.2, 10.2.1.1, 10.2.1.2, Appendix J

SCR Reference	SNEW-C-004-M, SNEW-C-046-M, SNEW-C-047-M, SNEW-C-048-M, SNEW-C-049-M, SNEW-C-050-M, SNEW-S-001-M, SNEW-S-011-M, SNEW-S-069-M, SNEW-S-070-O, SNEW-S-071-M, SNEW-S-072-M, SNEW-S-073-M, SNEW-S-074-O
ETR Reference	SEC-002, SEC-003
Tool	None
Test code	None
Preconditions	- User A exists in the SNEW Server with its phone number identity registered and has already published several activities and reactions; - The SNEW Server supports authentication based on authentic network information - The SNEW Application is aware of the user being authenticated based on authentic network information
Test Procedure	1. User A installs if required and executes the SNEW application; 2. The SNEW Application asks the SNEW Client to start the authorization process; 3. The SNEW Client performs the discovery of the OAuth2 authorization endpoint on the SNEW Server identified by the mobile network information (or preconfigured), and opens the device browser on that endpoint; 4. In the browser, the SNEW Server displays a webpage showing that SNEW Application requests authorization to access and manage User A's data (e.g. activities, profile) and asking if he authorizes it (The SNEW Server has automatically authenticated User A based on network information); 5. User A accepts and the browser returns to the SNEW Client, which informs the SNEW Application of the successful procedure 6. User A can now see his past activities and reactions in SNEW Application; 7. User A accesses SNEW Server and revokes the access of SNEW Application to his activities and reactions; 8. User A refreshes his past activities and cannot see them anymore in SNEW Application
Pass-Criteria	1. The network infrastructure allows the authentication of User A; 2. User A is prompted by the SNEW Server to authorize SNEW application; 3. User A can see his past activities and reactions after the SNEW Application being authorised; 4. User A can revoke SNEW Application at the SNEW Server; 5. After the SNEW Application being revoked, User A can no longer see the past activities and reactions in the SNEW Application.

Table 24: Test Information for SNeW-1.0-int-24 Interoperability Test

6.7   Network API

Editor Note: This chapter might be better indicated for conformance testing

6.7.1 Third-party Authorization

Test Case Id	SNeW-1.0-int-25
Test Object	SNEW Third-party Application, SNEW Server
Test Case Description	To verify the authorisation grant of the user towards third-party applications
Specification Reference	[ER_SNeW] sections 7.1, 7.2.2, 10.1, 10.2
SCR Reference	SNEW-S-043-M, SNEW-S-044-O, SNEW-S-069-M, SNEW-S-071-M, SNEW-S-072-M, SNEW-S-073-M, SNEW-S-074-O
ETR Reference	NAPI-001, NAPI-003; NAPI-004
Tool	None
Test code	None
Preconditions	• User A exists in the SNEW Server and has already several activities; • The SNEW Third-Party Application only uses SNeW Network APIs to access the SNEW Server; • The SNEW Third-Party Application has no cached credentials and is not yet authorised by User A.
Test Procedure	1. User A accesses the SNEW Third-Party Application (for example a web application) 2. If a default SNEW Server is not preconfigured, the SNEW Third-Party Application prompts User A for his identity (e.g. username@domain) to identify the SNEW Server (the user does not provide his password); 3. The SNEW Third-Party Application performs the discovery of the OAuth2 authorization endpoint on the SNEW Server (if not already known to the SNEW Third-Party Application) and 4. Redirects the browser on that endpoint; 5. User A is requested to enter his credentials: user name and password; 6. The browser shows the need to authorise the SNEW Third-Party Application; 7. User A does not authorise the SNEW Third-Party Application and exits the SNEW Third-Party Application; 8. User A returns to SNEW Third-Party Application and tries to access the SNEW Server; 9. The SNEW Third-Party Application redirects again the browser on the SNEW Server endpoint; 10. User A inputs the credentials unless he is already logged in from the previous access; 11. The browser shows the need to authorise the SNEW Third-Party Application; 12. User A authorises the SNEW Third-Party Application with the scope value of oma_rest_snew.all_1.0; 13. User A returns to SNEW Third-Party Application and tries to access the SNEW Server; 14. SNEW Third-Party Application shows his past activities to User A.

Pass-Criteria	1. User A does not enter directly his credentials in SNEW Third-Party Application;
	2. Before step 12 the use cannot access his activities from the SNEW Third-Party Application;
	3. In step 14 User A can see his past activities

Table 25: Test Information for SNeW-1.0-int-25 Interoperability Test

6.7.2   Services and type of methods authorised to SNEW Third-party Applications

Test Case Id	SNeW-1.0-int-26
Test Object	SNEW Third-party Application, SNEW Server, SNEW Client
Test Case Description	Selection of the information to be delivered to the SNEW Third-party Application and the type of activities that will be allowed
Specification Reference	[ER_SNeW] sections 8.2.6, 10.1, 10.2
SCR Reference	SNEW-S-010-M, SNEW-S-069-M, SNEW-S-073-M, SNEW-S-074-O, SNEW-S-075-M
ETR Reference	NAPI-002
Tool	None
Test code	None
Preconditions	• User A exists in the SNEW Server and has there some activities already;
	• The SNEW Third-Party Application only uses SNeW Network APIs to access the SNEW Server;
	• The SNEW Third-Party Application is already authorised to access User A data for all the operations;
	• User B exists in the SNEW Server and follows and is friend of User A
Test Procedure	1. User A accesses the SNEW Server by his preferred mechanism e.g. SNEW Client to select what kind of services he wants to be accessed by the SNEW Third-Party Application, for instance only activities (not people information);
	2. User A selects he wants only to receive activities streams and will not be allowed to post. For instance of type text notes, photos, locations and links. The type of operations allowed will be then only "read";
	3. User A tries to post a text note in SNEW Third-party Application but cannot;
	4. User B reacts from his SNEW Client to a previous activity from User A;
	5. User A sees the reaction of User B in the SNEW Third-Party Application;
Pass-Criteria	1. User A can select the type of services he wants to access from the SNEW Third Party Application and the type of operations;
	2. User A cannot post a text note from the SNEW Third-party Application after only allowed the "read" type of operation
	3. User A can see User B's reaction to his text note.

Table 26: Test Information for SNeW-1.0-int-26 Interoperability Test

Appendix A.   Change History   (Informative)

A.1   Approved Version History

Reference	Date	Description
		No prior version

A.2   Draft/Candidate Version 1.0 History

Document Identifier	Date	Sections	Description
Draft Versions OMA-SNeW-V1_0	06 Jul 2012	All	First draft with the baseline
	19 Oct 2012	6.2	Incorporated agreed CR: OMA-IOP-BRO-2012-0039R03-CR_User_Management_test_cases
	10 Dec 2012	6	Incorporated agreed CRs: OMA-IOP-BRO-2012-0043R02-CR_User_Activity_Test_Cases OMA-IOP-BRO-2012-0049R05-CR_SNeW_1.0_More_User_Activity_Test_Cases OMA-IOP-BRO-2012-0050R04-CR_SNeW_1.0_Device_Test_Cases OMA-IOP-BRO-2012-0058R03-CR_Gateway_Test_Cases OMA-IOP-BRO-2012-0063R02-CR_Security_Test_Cases
	01 Feb 2013	6.4.2, 6.7	Incorporated agreed CRs: OMA-IOP-BRO-2013-0001R01-CR_Nertwork_API_test_cases, OMA-IOP-BRO-2013-0005-CR_Optionality_Cache_Update
	19 Feb 2013	All	Test case and bullet numbering in tables in the whole document
	20-Feb-2013	All	Corrected the correction on the numbering online during the F2F meeting
Candidate Version OMA-SNeW-V1_0	17 Sep 2013	N/A	Status changed to Candidate by TP TP Ref#OMA-TP-2013-0268-INP_SNeW_V1_0_ETS_for_Candidate_approval