OMA IOP IMPS TZ Fest#2 Test Report
Draft Version 1.0 01-Apr-2003

Open Mobile Alliance
OMA-IOP-IMPS-TZ-Fest#2-Test-Report-v1.0-2003-04-01

Document History	
OMA-IOP-IMPS-FEST#2-Test_Report-V0.1-20030331-D	Draft
OMA-IOP-IMPS-FEST#2-Test_Report-V0.2-20030331-D	Reviewed
OMA-IOP-IMPS-FEST#2-Test_Report-V1.0-20030401-D	Current

Contents

1. OMA IOP FEST#2 Statistics

This document provides the technical feedback for OMA IOP Fest#2. Details of compliance for devices participating in the Fest are forwarded by Fest administration to the participants and published on the OMA-IOP-IMPS web site.

This document provides feedback on:

- test coverage at the event,

- the results of a static conformance review of the submitted CICS and SICS for the products attending the event,

- issues relating to the Functional Test Suites used at the event,

- issues relating to the IMPS specifications highlighted by testing at the event,

- logistical and technical issues relating to the effective running of the event.

1.1. Product Information

Number of OMA members attending the test program:	9
Number of Client Products:	11
Number of Server Products:	6
Number of Test Sessions attempted during event:	86
Number of test sessions completed:	68 (79%)

There were 18 incomplete test sessions. These were not finished for the following reasons:

Reason	Number
Time constraints - test session could not be completed in the allocated time period.	6
SMS transport matching error due to incorrect ICS submission	6
Connectivity issues with the LAN at the Fest location	6

1.2. CSP 1.1 Test Coverage

This section contains a breakdown of the recorded PASS verdicts per IMPS service.

1.2.1. Service Access Point
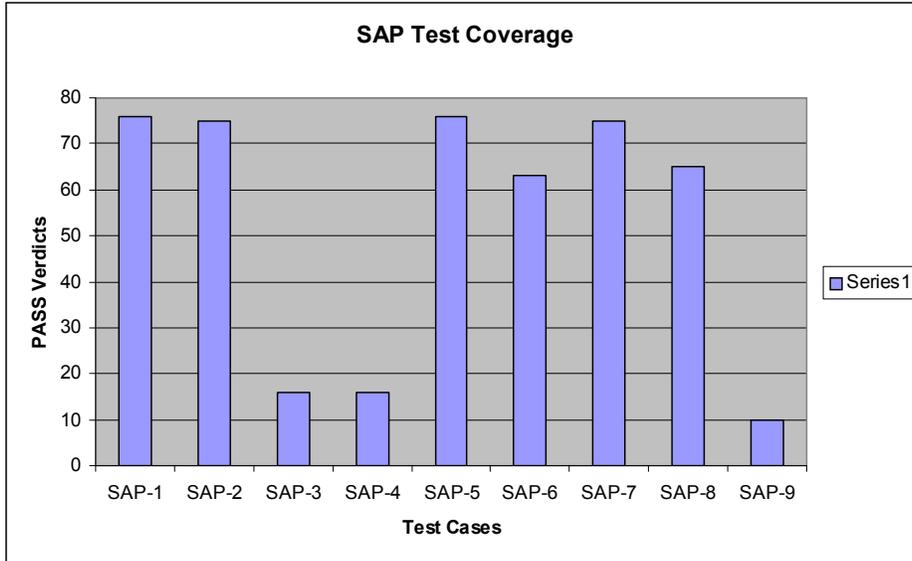
The optional feature for the Service Access Point service is SCR item SAP-4 Support for 4-way Login transaction. These are tested by test cases SAP-3 and SAP-4. Two of the eleven clients supported SAP-4, which is reflected in the results. The results of SAP-6 and SAP-9 reflects the different implementation specific capabilities of the Servers relating to the pre-conditions i.e. for SAP-6 (manual disconnect of clients) and SAP-9 (multiple client support).

1.2.2. Presence Service Elements
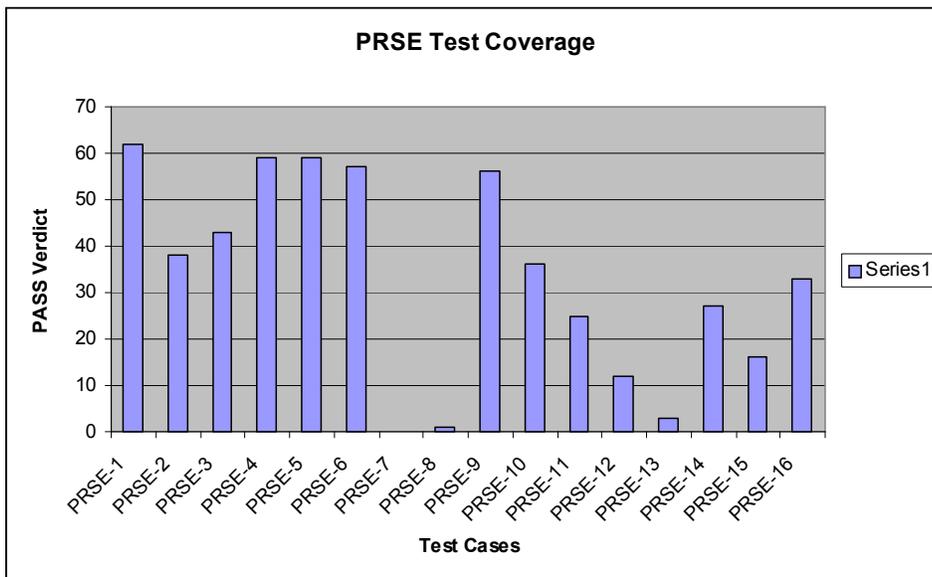
The test cases with the most number of pass verdicts are the mandatory test cases PRSE-1, PRSE4 and PRSE-5. Test cases PRSE-7 and PRSE-8 are low because most clients limit the number of characters within the User Interface.

1.2.3. Instant Message Service Elements

IM Test Coverage
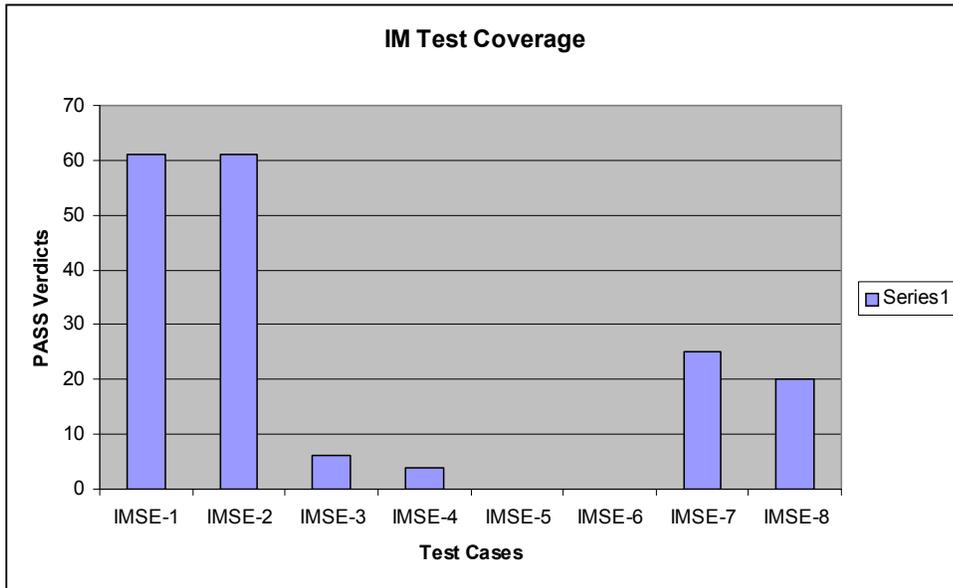
The test cases with the most number of pass verdicts are the mandatory test cases IMSE-1 and IMSE-2. It should be noted that the optional test cases IMSE-5 and IMSE-6 were not executed by any of the attending products.

1.2.4. Group Service Elements

GROUP Test Coverage
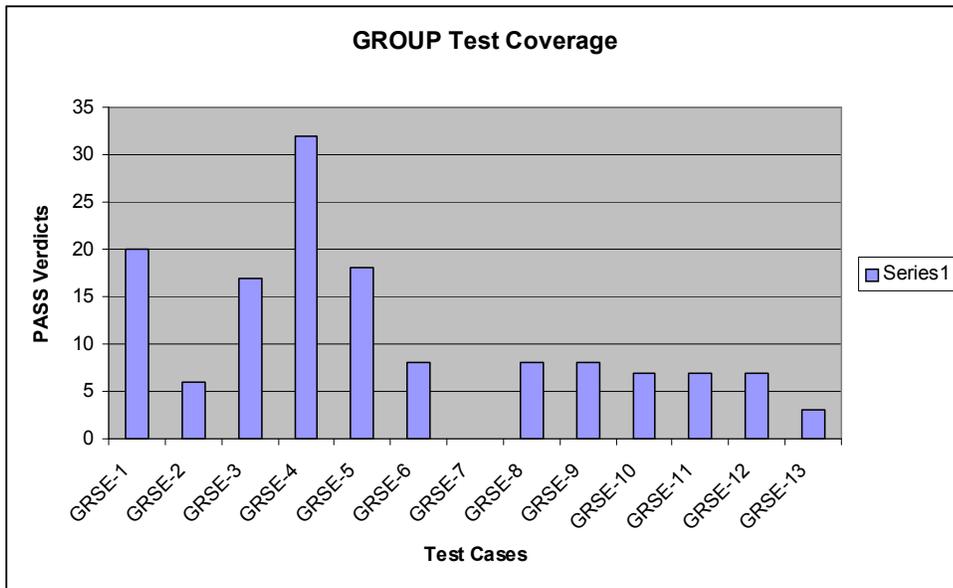
There were 7 clients and 5 servers supporting Group functionality that is reflected in the test coverage. There was a increase in support of Group functionality from the previous Fest.

1.2.5. Content Service Elements

There were 3 Servers and 1 Client that supported this feature. No test sessions were executed because all the test cases require at a minimum 2 Clients.

1.3. CSP 1.2 Test Coverage

There was 1 server supporting CSP 1.2 functionality. No test sessions were executed because there was no client support.

1.4. SSP 1.1 Test Coverage

There was 1 server that claimed to support SSP functionality in their ICS. Although some informal SSP testing took place, no official test data was submitted.

2. OMA IMPS Fest#2 Test Observations

This section contains details of compliance issues recorded during the OMA IOP Fest#2 test event. Problems have been modified to remove vendor information associated with these issues to present the information in an anonymous manner.

2.1.1. SICS/CICS Observations

Observation: 001	
Test Case(s):	N/A
Verdict:	N/A
SCR items / ICS:	TRANSP-12 in CICS
Comment:	The pre-requisites for the SCR item are defined as: TRANSP-2 && { TRANSP-5 || TRANSP-6 } These are defined as: TRANSP-2: Support for bindings in CIR channel TRANSP-5: Support for WSP 1.2 binding in the data channel TRANSP-6: Support for WSP 2.0 binding in the data channel There needs to be an additional condition that one of TRANSP-8, TRANSP-9, TRANSP-10 and TRANSP-11 are selected.
Recommendation	The SCR item should include reference to TRANSP-8,9,10,11, in the pre-requisite definition since the description of TRANSP-12 refers to CIR behaviour.

Observation: 002	
Test Case(s):	N/A
Verdict:	N/A
SCR items / ICS:	SESSION-9 in CICS
Comment:	The SCR item reads: SESSION-9: If the client logs in with binary message format, the client and server sends all primitives using binary message format throughout the session. This is dependent on the Client supporting WBXML, i.e. SCR item XML-7.
Recommendation	The SESSION-9 SCR item should be updated to be a conditional SCR item with the pre-requisite of XML-7

Observation: 003	
Test Case(s):	None
Verdict:	None
SCR items / ICS:	SRCH-4, SRCH-5, SRCH-6 in the CICS
Comment:	These SCR items are defined as follows: SCR: SRCH-4 Pre-Requisite: SAP-11 or 12 Description: If the request includes more than one Search-Pair-List, the Search-Element is different in each Search-Pair-List. SCR: SRCH-5 Pre-Requisite: SAP-11 or 12 Description: If the request includes more than one Search-Pair-List, the Search-Element is of the same type (user or group) in each Search-Pair-List. SCR: SRCH-6 Pre-Requisite: SAP-11 or 12 Description: If the request includes more than one Search-Pair-List, logical AND operation is assumed between the different pairs. These items do not properly cater for the situation where the Client does not support multiple Search-Pair-Lists. If a Client only uses a single Search-Pair-List, it currently must select these items in the ICS since the pre-conditions are met, but there is actually no requirement on the Client.
Recommendation:	An extra ICS item should be added so that a Client can claim support for multiple Search-Pair-Lists. ICS items SRCH-4, SRCH-5 and SRCH-6 should have this new SCR item added to the Prerequisites.

Observation: 004	
Test Case(s):	N/A
Verdict:	N/A
SCR items / ICS:	NEWM-6, NEWM-7, NEWM-8 within SICS
Comment:	These SCR items are contradictory: NEWM-6: The MessageInfo structure refers to a message using MessageID : M NEWM-7: The MessageInfo structure refers to a message using MessageURI : M NEWM-8: The MessageInfo structure refers to a message using either MessageID or MessageURI but not both : M i.e. NEWM-8 contradicts the Mandatory status of NEWM-6 and NEWM-7
Recommendation	The Mandatory/Optional status of the SCR items needs to be updated: NEWM-6 and NEW-7 should be defined as Conditional features with NEWM-8 being a Mandatory feature mandating that either NEWM-6 or NEWM-7 should be supported, i.e. NEWM-8 : Mandatory NEWM-6: Conditional - with pre-requisite of NEWM-8

	NEWM-7: Conditional - with pre-requisite of NEWM-8

Observation: 005	
Test Case(s):	None
Verdict:	None
SCR items / ICS:	CAINV-7
Comment:	Item "CAINV-7" has comment "Assuming Recall-Reason is actually Cancel-Reason".
Recommendation:	The item "CAINV-7" in the SICS should be reviewed to ensure the requirement is correct.

Observation: 006	
Test Case(s):	N/A
Verdict:	N/A
SCR items / ICS:	IMSE-14, IMSE-15, IMSE-16 for SSP in SICS
Comment:	The SCR items refer to Group functionality in SSP: IMSE-14: The save history is part of the IM service if the group history caching is supported. IMSE-15: The GetJoinedMembers (Group features) transaction is used by the IM service element to get the list of the joined members of the group to route a message addressed to a group in case of complementary service. IMSE-16: The GetJoinedMembers (Group features) transaction is used by the IM service element to check the validity of the GetMessageList requester user to receive the history in case of complementary service. These SCR items should have a pre-requisite of SERV-5 GRSE.
Recommendation	The SCR items are updated to be Conditional 'C' items with a pre-requisite of SERV-5.

Observation: 007	
Test Case(s):	N/A
Verdict:	N/A
SCR items / ICS:	SSP in SICS
Comment:	A server implementation may forward messages using SSP for services the server itself does not support i.e. if the server only supports SAP and PRSE, it may forward IMSE and GRSE messages using SSP. The SICS definition for SSP does not allow this functionality to be described.
Recommendation	Update the SSP section of the SICS to allow this functionality to be claimed by the submitter.

2.1.2. Functional Test Suite Observations

Observation: 008	
Test Case(s):	PRSE-1, PRSE-4, PRSE-5
Verdict:	N/A
SCR items / ICS:	-
Comment:	PRSE-1, PRSE-4 and PRSE-5 have the pre-condition: Client B is not blocking Client A from accessing its OnlineStatus presence attribute by means of the proactive authorization If proactive authorization is not supported then the mandatory (unconditionally) test cases for the Presence service cannot be executed meaning that there are no mandatory test cases for the presence service. This also highlights that there is no SCR item for clients/servers to be able to claim for support of proactive authorization.
Recommendation	There should be an SCR item for proactive authorization. It is recommended that this is assigned as mandatory.

Observation: 009	
Test Case(s):	GROUP-13
Verdict:	N/A
SCR items / ICS:	SERV-4 SAP-14
Comment:	There should be an additional pre-condition in this test case that both clients support the option to send the RejectListRequest message, and the server supports the RejectListResponse message. If one of the clients doesn't support the reject message, then the 2nd verdict cannot be achieved.
Recommendation:	Test case needs to be updated to include a pre-condition that the clients can send a RejectListRequest message to the server.

Observation: 010	
Test Case(s):	GROUP-13
Verdict:	N/A
SCR items / ICS:	SERV-4 SAP-14
Comment:	It was reported in the test report that the client does not support displaying the rejection in the User Interface. The verdict currently reads: After action #4: Client A displays rejection It was argued that this is implementation specific and outside the scope of the

	specifications. It was also argued that the verdict should be tightened to explicitly state: After action #4: Client A displays rejection in the user interface
Recommendation:	Test case needs to be updated to avoid ambiguity of test verdict.

Observation: 011	
Test Case(s):	PRSE-14
Verdict:	PASS
SCR items / ICS:	PRSE-14, PRSE-15
Comment:	It was reported in the test results form, that in order for this test case to pass, the client has to change presence before a notification is sent from the server to the subscriber. It was reported that the test verdict for this test case is not strict enough. It currently reads: "Client B receives a presence notification." It should be updated to read that "Client B receives a presence notification every time the presence is updated" rather than when the user logs in.
Recommendation	Test case needs to be updated to avoid ambiguity of test verdict.

Observation: 012	
Test Case(s):	PRSE-4
Verdict:	N/A
SCR items / ICS:	SERV-3, PRSE-9
Comment:	It was reported in the test results form, that the client needs to re-subscribe after every presence notification. This behaviour is not excluded by the test case in its current form, however, it was perceived to be a deviation from the intent of the specifications.
Recommendation	Test case needs to be updated to clearly specify expected behaviour.

Observation: 013	
Test Case(s):	GROUP-1 to GROUP-13
Verdict:	N/A
SCR items / ICS:	N/A
Comment:	There was a general comment that the GROUP test cases do not provide enough coverage of GROUP SCR features and do not provide enough granularity to test individual optional items in isolation. Many of the test cases validate several optional features in the same test case rather than having

	separate test cases for each optional feature.
	It was commented:
	The test cases need to be more specific in terms of actions and pass conditions. How to achieve pass conditions is still a grey area for testers. Companies involved in testing should be involved also in overall test procedure design. Probably announcements like SSP (as it is now) or CSP 1.2 should be well done in advance to prepare the clients and servers better. Overall experience remains satisfactory but needs lot of process improvement.
	Some of the tests are trivial/redundant. Perhaps a slight modification is required to update them and make it more meaningful.
Recommendation	Contributions from OMA members for proposed updates to the test cases are needed to provide process improvement.

2.1.3. Specification Issues

Observation: 014	
Test Case(s):	GROUPS [10,11,12,13]
Verdict:	N/A
SCR items / ICS:	See test cases for SCR items
Comment:	During execution of the GROUP test cases, most servers will interpret the denotation used for Group ID definition to define the group as public or private. In section 5.2.6 of the CSP specification, it provides the following examples of Group ID: wv:john/mygroup@imps.com wv:john/mygroup wv:/technicalforum wv:/technical_forum@imps.com Most servers will interpret the first two of these as Public Groups (since the username is included) and the last two as Private Groups (since no username is specified). It is not thought that this convention is not explicitly stated within any of the specifications.
Recommendation:	The relevant areas of the specification should be revisited, with a view to including a description of this convention. A PR should be raised on this area of the specification requesting clarification of the denotation.

Observation: 015	
Test Case(s):	N/A
Verdict:	N/A
SCR items / ICS:	N/A
Comment:	Within section 6.4.1 Transactions of the CSP v1.2 specification, line 3 reads: *When the login operation into the Service Access Point is not successful, a status message indicates the login failure instead of the login response message.* This could be more explicitly stated with an amendment to Figure 3 to show the other message sequence.
Recommendation	The IOP event shows that this is an item that is overlooked and to add the additional detail will help with standardising implementations.

2.1.4. IOP Issues and Feedback

Observation: 016	
Test Case(s):	PRSE-8
Verdict:	FAIL
SCR items / ICS:	SERV-3, PRSE-4
Comment:	Within this test case, the test specifies the name should be 'Nick Name'. This caused a problem with the Server because it did not support the white space character. Nickname, however, is an UTF-8 format and should support white space. The Server was fixed and the test cases re-tested.
Recommendation	-

Observation: 017	
Test Case(s):	SAP-1
Verdict:	FAIL
SCR items / ICS:	SERV-1, SAP-3
Comment:	Client could not log into the server because the server defines an Integer as a string.
Recommendation:	This can be addressed and corrected with a longer pre-test period at the next event.

Observation: 018	
Test Case(s):	N/A
Verdict:	N/A
SCR items / ICS:	N/A
Comment:	There were approximately 15 devices on the GPRS network that caused the service to intermittently be dropped. MicroCell were contacted to try to improve performance such that the number of allocated timeslots in the cell was increased to 16. There was a marked improvement in GPRS connectivity.
Recommendation:	As the IMPS technology matures and there are more real devices participating in the Fest, the network support is a bigger factor when planning events of this type.

Observation: 019	
Test Case(s):	N/A
Verdict:	N/A
SCR items / ICS:	N/A
Comment:	There was a problem with a router upstream from the Fest LAN causing the network performance to be severely degraded. This was resolved by the IT support at the event, but did impact test time.
Recommendation:	The IT requirements, loads, capacities may need to be specified in more detail to allow the IT planning for the event to be fully aware of traffic levels and IT expectations.

Observation: 020	
Test Case(s):	N/A
Verdict:	N/A
SCR items / ICS:	N/A
Comment:	It was commented: *The list of vendors which have indicated they want to pre-test was sent out too late to be effective. It should be sent out at least 5 business days prior to the event.*
Recommendation:	The pre-test list is dependent on submission of the ICS for the product. This would mean the timeline is as follows: ICS submission deadline - Friday Pre-Testing info issued - previous Monday (i.e. 8 days earlier) Fest Start - Tuesday