Enabler Test Specification for Instant Messaging using SIMPLE Interoperability

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1. Scope

This document describes in detail available test cases for Instant Messaging using SIMPLE V1.0 (http://www.openmobilealliance.org).

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.

If either conformance or interoperability tests do not exists at the creation of the test specification this part should be marked not available.

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
[3GPP_TS26141]	"IP Multimedia System (IMS) Messaging and Presence; Media formats and codecs", TS 26.141, V6.1.0 (2005-03), URL: http://www.3gpp.org/
[ERELD]	"Enabler Release Document for IM SIMPLE", Version 1.0, Open Mobile Alliance™, OMA-ERELD-SIMPLE_IM-V1_0, URL: http://www.openmobilealliance.org/
[IOPPROC]	"OMA Interoperability Policy and Process", Version 1.8, Open Mobile Alliance™, OMA-IOP-Process-V1_8, www.openmobilealliance.org
[OMA_IM_AD]	"Instant Messaging using SIMPLE Architecture", Version 1.0, Open Mobile Alliance™, OMA-AD-SIMPLE_IM-V1_0, URL: http://www.openmobilealliance.org/
[OMA_IM_RD]	"Instant Messaging Requirements", Version 1.0, Open Mobile Alliance™, OMA-RD-IM-V1_0, URL: http://www.openmobilealliance.org/
[OMA_IM_TS]	"Instant Messaging using SIMPLE", Version 1.0, Open Mobile Alliance™, OMA-TS-SIMPLE_IM-V1_0, URL: http://www.openmobilealliance.org/
[OMA_IM_XDM]	"IM XDM Specification", Version 1.0, Open Mobile Alliance™, OMA-TS-IM_XDM-V1_0, URL: http://www.openmobilealliance.org/

2.2 Informative References

[OMADICT]	"Dictionary for OMA Specifications", Version 2.7, Open Mobile Alliance™, OMA-ORG-Dictionary-V2_7, URL:http://www.openmobilealliance.org/
[OMA_DM]	"OMA Device Management", Version 1.2 , Open Mobile Alliance™, OMA-ERP-DM-V1_2, URL: http://www.openmobilealliance.org/
[OMA_Pres]	"OMA Presence Simple", Version 1.0, Open Mobile Alliance™, OMA-ERP-Presence_SIMPLE-V1_0, URL: http://www.openmobilealliance.org/
[OMA_X1]	"OMA XML Document Management", Version 1.0, Open Mobile Alliance™, OMA-ERP-XDM-V1_0, URL: http://www.openmobilealliance.org/
[OMA_X2]	"OMA XML Document Management", Version 2.0, Open Mobile Alliance™, URL: http://www.openmobilealliance.org/ Work in progress.
[RFC3261]	"SIP: Session Initiation Protocol", J. Rosenberg et al, June 2002, URL: http://www.ietf.org/rfc/rfc3261.txt

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

Ad-hoc Group Session	An IM session for multiple users that does not involve the use of predefined groups. The list of users for the Ad hoc Group Session is created dynamically and is disbanded after the Ad hoc Group session ends.
Controlling IM Server	A SIP application server responsible for IM Service functionality in the network side. Function of the Controlling IM Server relates to group communication, e.g., acting as a focus in an IM Session.
Conversation	An ordered exchange of immediate messages in the context of a session between users.
Deferred Message	If an intended recipient of an IM pager-mode or large mode message communication is not available, either due to the recipient's Inbox settings or the recipient being IM offline, the message is stored in the IM server for later delivery. I.e. the IM becomes deferred message.
Event Package	A specification for a set of events to be used with subscription and notification. The event package defines the semantics of the notification message body and of subscriptions to that event. Event packages are defined in [RFC3265].
File Transfer	A one-way transfer of data between entities in real-time fashion. The Session ends when the data has been transferred.
Group	A group is a nested collection of addresses or identifiers such as an address or record called as Group Members, and other information related to the group. A group is identified by a single address called Group Identity.
Group Advertisement	A message advertising a Group to Users. A Group Advertisement typically informs Users about a new Group and contains information about how to get access to the Group.
Group Session	A session at which two or more users participate.
History	Stored conversation, which may also be called conversation history. There are two types of data related to the history: metadata and the actual conversation.
IM Address	An IM Address identifies an IM User. The IM Address can be used by one IM User to request communication with other IM Users.
IM Client	An IM Service endpoint; The device used by an IM User.
IM Server	A network entity that provides messaging service.

IM Service	The instant message offering presented by a service provider that utilizes the IM Enabler and potentially other enablers.
IM Session Identity	SIP URI received by the IM Client during the IM Session establishment in the Contact header.
Instant Message (IM)	A message delivered to a user in an instant, interactive manner. Generally short, even brief. Instant Messages are often called IMs. IMs are often exchanged back-and-forth between users in a conversational fashion. Defined in [RFC2778].
	In other words, a type of messaging service by which the sender expects immediate message delivery in (near) real time fashion.
Invited IM User	An IM User receiving invitation or has been invited to an IM Session.
Inviting IM Client	An IM Client either initiating or triggering initiation of the IM Session.
Joining IM Client	An IM Client joining in a Group Session.
Large Message Mode	This mode is used to send a single large instant message using MSRP. Since MSRP is used, a SIP session must be established, but it is torn down after the single message is transmitted.
Notification	A message, delivered in response to a subscription, which delivers information about an associated event in the format defined by the relevant event package. Defined in [RFC3265].
One-to-One IM Session	One user communicates with a single user. It includes Peer-to-Peer, and Ad hoc Group Session with only two participants.
Pager Mode Message	A small size, one-shot message from an IM User to other IM User(s). SIP MESSAGE is used for carrying the message.
Participating IM Server	A SIP application server responsible for IM Service functionality in the network side. Function of the Participating IM Server relates to either originating or terminating user. The Participating IM Server is responsible for e.g. access control for a user.
Pre-defined Group	A Group whose members are permanently stored in XDMS before the actual group communication starts. The IM Server creates the IM Group Session according to the definition in the group, e.g., when the creator of the group definition joins in, the IM Server may invite other users to the IM Group Session.
Public Conference	A Pre-defined Group that is uniquely identified by a URI. A Public conference is usually hosted by a Service Provider which creates, maintains and manipulates the conferencing features.
Session	A stateful association of presence and other user preference, capability and identity data through which it is possible to communicate immediate messages. A session may be established between IM users or between an IM user and an IM Server.
Session based messaging	A type of IMS Messaging service by which the sender expects immediate message delivery in (near) real time fashion. In addition the sender(s) and the receiver(s) have to join to a messaging session e.g. chat room, before message exchange can take place [3GPP TS 22.340].
SIMPLE	A methodology and set of extensions to SIP supporting the Instant Messaging requirements defined by IETF.
SIP Session	A SIP Session is a SIP dialog. From [RFC 3261], a SIP dialog is defined as follows: A dialog is a peer-to-peer SIP relationship between two UAs that persists for some time. A dialog is established by SIP messages, such as a 2xx response to an INVITE request.
Subscription	A persistent relation between a subscriber and an event source (often a presence server for a presentity) by which the subscriber requests notifications of a specific even for a set duration. Defined in [RFC3265].
System	Assembly of entities comprising a whole with each and every element interacting or related to one another.
System Message	A special type of message sent by the IM Server for different purposes (e.g. advice of charge, service notifications, advertisements, instructions, etc). System Messages MAY contain a list of possible options and require actions or response from the user.
TestFest	Multi-lateral interoperability testing event
URI-list	A list of URIs issued by an IM Client to IM Server for exploding a SIP request to URIs contained in the list. The IM Client uses a URI-list for either creating an Ad-hoc Group Session or exploding a one-shot message to multiple recipients. The IM Server takes care of sending individual requests to URIs.
User	A human using the described features through a terminal device.

3.3   Abbreviations

AD	Architecture Document
CDR	Charging Data Record
IETF	Internet Engineering Task Force
IM	Instant Messaging
MSRP	Message Session Relay Protocol
OMA	Open Mobile Alliance
RD	Requirements Document
SIMPLE	SIP Instant Message and Presence Leveraging Extensions
SIP	Session Initiation Protocol
URI	Universal Resource Identifier
URL	Uniform Resource Locator
XCAP	XML Configuration Access Protocol
XDM	XML Document Management
XDMC	XML Document Management Client
XDMS	XML Document Management Server
XML	Extensible Mark-up Language

4. Introduction

The purpose of this document is to provide test cases for Instant Messaging using SIMPLE Enabler Release V1.0.

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

5. IM Interoperability Test Cases

5.1   Session Mode Messaging

5.1.1   IM-1.0-int-101

Test Case Id	IM-1.0-int-101
Test Object	IM Client, IM Server
Test Case Description	Verify that the inviting IM client is able to establish a One to One IM session with the Invited IM Client. Including exchanges of messages.
Specification Reference	[OMA_IM_TS] 7.1.1.2, 7.2
SCR Reference	IMSpec-SMM-C-001-M, IMSpec-SMM-S-001-M
ETR Reference	SMM-001
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	  o 2 clients (A, B) / 1 server
	• State:
	  o Both clients are logged in the IMS network
	  o Each client has the other as a contact (optional)
	  o Each client appears online to the other (optional)
	  o Clients are non blocking (optional)

Test Procedure	1. Client A invites Client B to a 1-to-1 IM Session 2. Client B accepts the invitation to the 1-to-1 IM Session 3. Client A sends the message "Hello B" to Client B 4. Client B replies with "Hello A".
Pass-Criteria	1. The invitation sent by client A was successfully accepted by client B 2. A 1-1 session begins between client A and B 3. Client B receives "Hello B" from client A 4. Client A receives "Hello A " from client B

Table 1: Test Information for Establishing One to One IM Session Interoperability Test

5.1.2   IM-1.0-int-102

Test Case Id	IM-1.0-int-102
Test Object	IM Client, IM Server
Test Case Description	Verify that the IM client is able to establish an Ad-Hoc IM Conference and invited participants are able to join the conference and exchange messages.
Specification Reference	[OMA_IM_TS] 7.1.1.3, 7.2.1.2
SCR Reference	IMSpec-SMM-C-002-M, IMSpec-SMM-S-004-M, IMSpec-SMM-S-007-M
ETR Reference	SMM-002

Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	   o 3 clients (A, B,C) / 1 server
	• State:
	   o All 3 clients are logged in the IMS network
	   o Each client has the other clients as contacts (eg. Client A has clients B and C as contacts) (optional)
	   o Each client appears online to the other clients (optional)
	   o Clients are non blocking (optional)

Test Procedure	1. Client A invites clients B and C to an Adhoc IM Conference 2. Clients B and C accept the invitation to the Adhoc IM Conference 3. Client A sends the message "Hello B C" to the Adhoc Conference 4. Client B sends the message "Hello A C" to the Adhoc Conference 5. Client C sends the message "Hello A B" to the Adhoc Conference
Pass-Criteria	1. Clients B and C accept the invitation to the Adhoc Conference 2. An Adhoc Conference begins between clients A, B and C 3. Clients B and C receive "Hello B C" from client A 4. Clients A and C receive "Hello A C" from client B 5. Clients A and B receive "Hello A B" from client C

Table 2: Test Information for IM Adhoc Conference Interoperability Test

5.1.3   IM-1.0-int-103

Test Case Id	IM-1.0-int-103
Test Object	IM Client, IM Server
Test Case Description	Verify that the IM client is able to join a Pre-Defined IM conference and is able to exchange messages.
Specification Reference	[OMA_IM_TS] 7.1.1.4, 7.2.1.3
SCR Reference	IMSpec-SMM-C-003-M, IMSpec-SMM-S-005-M
ETR Reference	SMM-003
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	   o 3 clients (A, B,C) / 1 server
	• State:
	   o Server has IM Group 1
	   o Clients A, B and C are members of IM Group 1
	   o All 3 clients are logged in the IMS network
	   o Each client has IM Group 1 as a contact (optional)
	   o Each client appears online to the other clients (optional)
	   o IM Group 1 is non blocking (optional)

Test Procedure	1. A Pre-Defined IM Conference is created by client A 2. Client A invites IM Group 1 to a Pre-Defined IM Conference 3. Clients B and C accept the invitation to the Pre-Defined IM Conference 4. Client A sends the message "Hello B C" to the Pre-Defined Conference 5. Client B sends the message "Hello A C" to the Pre-Defined Conference 6. Client C sends the message "Hello A B" to the Pre-Defined Conference
Pass-Criteria	2. Clients B and C accept the invitation to the Pre-Defined Conference 3. A Pre-Defined IM Conference begins between clients A, B and C 4. Clients B and C receive "Hello B C" from client A 5. Clients A and C receive "Hello A C" from client B 6. Clients A and B receive "Hello A B" from client C

Table 3: Test Information for IM Pre-Defined Conference Interoperability Test

5.1.4   IM-1.0-int-104

Test Case Id	IM-1.0-int-104
Test Object	IM Client, IM Server
Test Case Description	Verify joining a chat room with a chat alias and the chat room ensures that the chat Alias is unique. The joining Client should later leave the chat room.
Specification Reference	[OMA_IM_TS] 7.1.1.10, 7.1.1.15, 7.2.3.2
SCR Reference	IMSpec-SMM-C-004-M, IMSpec-MSRP-S-001-M
ETR Reference	SMM-004
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	   o 3 clients (A, B,C) / 1 server
	• State:
	   o Server contains an open IM Chat Group called 'ChatRoom1'
	   o All 3 clients are logged in the IMS network

Test Procedure	1. Client A joins the ChatRoom1 conference using 'ChatAliasX' as an alias
	2. Client B joins Chat Group 'ChatRoom1'
	3. Client C joins Chatroom1 using the alias 'ChatAliasX'
	4. Client C joins Chatroom1 using the alias 'ChatAliasY'
	5. Client A sends "Hello from A" to the chat room
	6. Client B sends the message "Hello from B" to the chat room
	7. Client C sends the message "Hello from C" to the chat room
	8. Client A leaves Chat Group A
Pass-Criteria	3. The alias 'ChatAliasX' is already in use by client A
	5. Clients B and C receive "Hello from A" from ChatAliasX
	6. Clients A and C receive "Hello from B" from client B
	7. Clients A and B receive "Hello from C" from client ChatAliaxY
	8. Clients B and C can no longer send /receive messages from Chat X

Table 4: Test Information for Joining a Chat Room Interoperability Test

5.1.5   IM-1.0-int-105

Test Case Id	IM-1.0-int-105
Test Object	IM Client, IM Server
Test Case Description	Verify that Private Message(s) can be sent and received in a conference session.
Specification Reference	[OMA_IM_TS] 7.2.3.4, 7.1.1.1
SCR Reference	IMSpec-SMM-C-021-M, IMSpec-MSRP-S-002-M
ETR Reference	SMM-006
Tool	Not Available
Test code	Not Available
Preconditions	• Equipment:
	○ 3 clients (A, B,C) / 1 server
	• State:
	○ All 3 clients are logged in the IMS network
	○ Each client has the other clients as contacts, eg. Client A has client B and C as contacts (optional)
	○ Clients appears online to the other clients (optional)
	○ Clients are non blocking (optional)
	○ Clients A, B and C have an ongoing IM Conference (type does not matter)
Test Procedure	1. Client A sends a private message, "Private 1" to B
	2. Client B sends a private message, "Private 2" to A
Pass-Criteria	1. Client B receives "Private 1" from A
	2. Client A receives "Private 2" from B
	3. Client C never sees the private messages

Table 5: Test Information for Sending Private Message Interoperability Test

5.1.6   IM-1.0-int-106

Test Case Id	IM-1.0-int-106
Test Object	IM Client, IM Server
Test Case Description	Verify that the client is able to add users to the existing IM conference session.
Specification Reference	[OMA_IM_TS] 7.1.1.7, 7.2.2.7, 7.2.1.7
SCR Reference	IMSpec-SMM-C-007-M, IMSpec-SMM-S-011-M
ETR Reference	SMM-007
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	  o 4 clients (A, B, C, D) / 1 server
	• State:
	  o All 4 clients are logged in the IMS network
	  o Each client has the other clients as contacts, eg. Client A has clients B, C and D as contacts (optional)
	  o Each client appears online to the other clients (optional)
	  o Clients are non blocking (optional)
	  o Clients A, B and C have an ongoing IM Conference

Test Procedure	1. Client A invites client D to the ongoing conference 2. Client D sends the message, "New Member" to the conference
Pass-Criteria	1. Client D receives and accepts the invitation to the conference. (OPTIONAL) Client B and C are notified that client D has joined the conference 2. Clients A, B and C receive, "New Member" from client D

Table 6: Test Information for Adding Users to an IM Conference Session Interoperability Test

5.1.7   IM-1.0-int-107

Test Case Id	IM-1.0-int-107
Test Object	IM Client, IM Server
Test Case Description	Verify that the client is able to add additional users to start or join a one to many session and that the initial one to one session is dismantled.
Specification Reference	[OMA_IM_TS] 7.1.1.6, Appendix L
SCR Reference	IMSpec-SMM-C-008-M
ETR Reference	SMM-008
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	   ○ 3 clients (A, B, C) / 1 server
	• State:
	   ○ All 3 clients are logged in the IMS network
	   ○ Each client has the other clients as contacts, eg. Client A has clients B and C as contacts (optional)
	   ○ Each client appears online to the other clients (optional)
	   ○ Clients are non blocking (optional)
	   ○ Clients A and B have an ongoing 1-1 IM Session

Test Procedure	1. Client A invites client C to the 1-1 IM Session 2. Client C sends, "Now we are 3" to the Adhoc conference
Pass-Criteria	1. Client C receives and accepts the invitation to the 1-1 IM Session (OPTIONAL) Client B is notified client C joined the 1-1 IM Session 2. Clients A and B receive the message "Now we are 3" from client C

Table 7: Test Information for Extending 1-1 to 1-Many Interoperability Test

5.1.8   IM-1.0-int-108

Test Case Id	IM-1.0-int-108
Test Object	IM Client, IM Server
Test Case Description	Verify that the server is able to remove a user from an IM session.
Specification Reference	[OMA_IM_TS] 7.1.1.14, 7.2.2.12
SCR Reference	IMSpec-SMM-C-009-M
ETR Reference	SMM-009
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	   ○ 3 clients (A, B, C) / 1 server
	• State:
	   ○ All 3 clients are logged in the IMS network
	   ○ Each client has the other clients as contacts, eg. Client A has clients B and C as contacts (optional)
	   ○ Each client appears online to the other clients (optional)
	   ○ Clients are non blocking (optional)
	   ○ Clients A, B and C have an ongoing IM Conference (type does not matter)

Test Procedure	1. The initiator of the conference expels client C from the conference 2. Client C attempts to send the message "Expelled" to the conference
Pass-Criteria	1. Client C is no longer in the conference. (OPTIONAL) Client A and B are notified that client C is no longer in the conference 2. Client C is unable to send messages to the conference

Table 8: Test Information for Expelling a User from a Session Interoperability Test

5.1.9   IM-1.0-int-109 (Includes Optional Features)

Test Case Id	IM-1.0-int-109
Test Object	IM Client, IM Server
Test Case Description	Verify that the IM client is able to rejoin an Adhoc IM Conference.
Specification Reference	[OMA_IM_TS] 7.1.1.9, 7.2.1.5
SCR Reference	IMSpec-SMM-C-015-O, IMSpec-SMM-S-010-M
ETR Reference	None
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	   o 3 clients (A, B,C) / 1 server
	• State:
	   o All 3 clients are logged in the IMS network
	   o Each client has the other clients as contacts, e.g. Client A has client B and C as contacts (optional)
	   o Each client appears online to the other clients (optional)
	   o Clients are non blocking (optional)

Test Procedure	1. Client A invites clients B and C to an Adhoc IM Conference 2. Clients B and C accept the invitation to the Adhoc IM Conference 3. Client A sends the message "Hello B C" to the Adhoc Conference 4. Client B sends the message "Hello A C" to the Adhoc Conference 5. Client C sends the message "Bye A B" to the Adhoc Conference 6. Client C hangs up. 7. Client C rejoins the Adhoc Conference
Pass-Criteria	1. Clients B and C accept the invitation to the Adhoc Conference 2. An Adhoc Conference begins between clients A, B and C 3. Clients B and C receive "Hello B C" from client A 4. Clients A and C receive "Hello A C" from client B 5. Clients A and B receive "Bye A B" from client C 6. Clients A and B are informed that Client C has left the conference 7. Clients A and B are informed that Client C has joined the conference

Table 9: Test Information for Rejoining a group messaging session Interoperability Test

5.2   Pager Mode Messaging

5.2.1   IM-1.0-int-201

Test Case Id	IM-1.0-int-201
Test Object	IM Client

Test Case Description	Verify that the IM Client is able to send a page mode message to a user
Specification Reference	[OMA_IM_TS] 8.1.1
SCR Reference	IMSpec-PMM-C-001-M
ETR Reference	PMM-001
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	   o 2 clients (A, B) / 1 server
	• State:
	   o Clients are logged in the IMS network
	   o Each client has the other as a contact (optional)
	   o Each client appears online to the other (optional)
	   o Clients are non blocking (optional)

Test Procedure	1. Client A sends "Hello 1" to Client B
Pass-Criteria	1. Client B receives "Hello 1" from Client A

Table 10: Test Information for Sending a Page Mode Message to a User Interoperability Test

5.2.2   IM-1.0-int-202

Test Case Id	IM-1.0-int-202
Test Object	IM Client
Test Case Description	Verify that the IM client is able to send a message to a pre-defined group.
Specification Reference	[OMA_IM_TS] 8.1.1
SCR Reference	IMSpec-PMM-C-003-M
ETR Reference	PMM-002
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	   o 3 clients (A, B,C) / 1 server
	• State:
	   o Server has IM Group 1
	   o Clients A, B and C are members of IM Group 1
	   o Clients are logged in the IMS network
	   o Each client has IM Group 1 as a contact (optional)
	   o Each client appears online to the other clients (optional)
	   o IM Group 1 is non blocking (optional)

Test Procedure	1. Client A sends, "Hello Group 1" to IM Group 1
Pass-Criteria	1. Client B and C receive "Hello Group 1" from Client 1

Table 11: Test Information for Sending a Page Mode Message to a Group Interoperability Test

5.2.3   IM-1.0-int-203

Test Case Id	IM-1.0-int-203
Test Object	IM Client
Test Case Description	Test that the IM Client is able to send a Message to multiple users using a URI-List (Ad-Hoc-Group) and the receiving clients are able to receive the message
Specification Reference	[OMA_IM_TS] 8.1.1
SCR Reference	IMSpec-PMM-C-002-M
ETR Reference	PMM-003
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	     o 3 clients (A, B, C) / 1 server
	• State:
	     o Clients are logged in the IMS network
	     o Each client has the other clients as contacts, eg. Client A has client B and C as contacts (optional)
	     o Each client appears online to the other clients (optional)
	     o Clients are non blocking (optional)

Test Procedure	1. Client A sends, "Hello Adhoc Group" to the Adhoc Group
Pass-Criteria	1. Client B and C receive, "Hello Adhoc Group" from Client A

Table 12: Test Information for Sending a Page Mode Message to Multiple Users Interoperability Test

5.2.4   IM-1.0-int-204 (Includes Optional Features)

Test Case Id	IM-1.0-int-204
Test Object	IM Server
Test Case Description	Test that the IM server is able to send system messages destined to its users.
Specification Reference	[OMA_IM_TS] 5.4
SCR Reference	IMSpec-SM-S-001-O
ETR Reference	PMM-004
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	o 1 client (A) / 1 server
	• State:
	o Client is logged in the IMS network
	o Client is online (optional)
Test Procedure	1. A system message is sent
Pass-Criteria	1. Client A receives the system message

Table 13: Test Information for IM Server Sending System Message Interoperability Test

5.3 Large Message Mode

5.3.1 IM-1.0-int-301

Test Case Id	IM-1.0-int-301
Test Object	IM Client
Test Case Description	Test if the IM Client is able to send a Large message to one user
Specification Reference	[OMA_IM_TS] 9.1.1.2
SCR Reference	IMSpec-LMM-C-001-M
ETR Reference	LMM-001
Tool	Not Available
Test code	Not Available
Preconditions	• Equipment:
	o 2 clients (A, B) / 1 server
	• State:
	o Clients are logged in the IMS network
	o Each client appears online to the other clients (optional)
	o Clients are non blocking (optional)
Test Procedure	1. Client A sends a Multimedia message to client B
Pass-Criteria	1. Client B receives the Multimedia message from Client A

Table 14: Test Information for Sending Large Message to One User Interoperability Test

5.3.2 IM-1.0-int-302

Test Case Id	IM-1.0-int-302
Test Object	IM Client
Test Case Description	Test if the IM Client is able to send a Large message a predefined group
Specification Reference	[OMA_IM_TS] 9.1.1.2
SCR Reference	IMSpec-LMM-C-003-M
ETR Reference	LMM-002

Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	    o 3 clients (A, B, C) / 1 server
	 • State:
	    o Server has IM Group 1
	    o Clients A, B and C are members of IM Group 1
	    o Clients are logged in the IMS network
	    o Each client has IM Group 1 as a contact (optional)
	    o Clients appear online to the other clients (optional)
	    o IM Group 1 is non blocking (optional)

Test Procedure	1. Client A sends a Multimedia message to IM Group 1
Pass-Criteria	1. Clients B and C receive the Multimedia message from Client A

Table 15: Test Information for Sending a Large Message to a Group Interoperability Test

5.3.3   IM-1.0-int-303

Test Case Id	IM-1.0-int-303
Test Object	IM Client
Test Case Description	Test if the IM Client is able to send a Large Message to an adhoc group.
Specification Reference	[OMA_IM_TS] 9.1.1.2
SCR Reference	IMSpec-LMM-C-002-M
ETR Reference	LMM-003
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	    o 3 clients (A, B, C) / 1 server
	 • State:
	    o All 3 clients are logged in the IMS network
	    o Each client has the other clients as contacts, eg. Client A has client B and C as contacts (optional)
	    o Each client appears online to the other clients (optional)
	    o Clients are non blocking (optional)

Test Procedure	1. Client A sends a Multimedia message to clients B and C
Pass-Criteria	1. Clients B and C receive the Multimedia message from Client A

Table 16: Test Information for Sending a Large Message to an Adhoc group Interoperability Test

5.3.4   IM-1.0-int-304

Test Case Id	IM-1.0-int-304

Test Object	IM Client
Test Case Description	The IM Client MUST be able to release from a Large Message session.
Specification Reference	[OMA_IM_TS] 9.2.2
SCR Reference	IMSpec-LMM-C-007-M
ETR Reference	LMM-005
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	   o Not Applicable
	• State:
	   o Execution of test case IM-1.0-int-301 or IM-1.0-int-302 or IM-1.0-int-303

Test Procedure	1. A Large Message is sent
Pass-Criteria	1. The IM Client releases the User Plane resources associated with the session

Table 17: Test Information for IM Client Large Message Release Interoperability Test

5.4   Deferred Messages

5.4.1   IM-1.0-int-401

Test Case Id	IM-1.0-int-401
Test Object	IM Client
Test Case Description	Test that the IM Client is able to retrieve deferred Message metadata
Specification Reference	[OMA_IM_TS] 12.1.2
SCR Reference	IMSpec-DM-C-001-M, IMSpec-DM-C-004-M
ETR Reference	DM-001
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	   o 2 clients (A, B) / 1 server
	• State:
	   o Clients are logged in the IMS network
	   o Each client appears online to the other clients (optional)
	   o Clients are non blocking (optional)

Test Procedure	1. Client B disables offline delivery 2. Client B goes offline 3. Client A sends and IM to client B 4. Client B goes online

Pass-Criteria	1. Client B will not get stored messages pushed when online
	3. A message is stored for Client B
	4. Client B retrieves the deferred message medata

Table 18: Test Information for Retrieving Deferred Message Metadata Interoperability Test

5.4.2   IM-1.0-int-402

Test Case Id	IM-1.0-int-402
Test Object	IM Server
Test Case Description	Verify that deferred messages are automatically pushed to the IM client when the client comes back online. Also, verify that the client has its settings for deferred messages to be pushed to it.
Specification Reference	[OMA_IM_TS] 12.2.2.5
SCR Reference	IMSpec-DM-S-003-M
ETR Reference	DM-002
Tool	Not Available
Test code	Not Available
Preconditions	• Equipment: o 2 clients (A, B) / 1 server • State: o Clients are logged in the IMS network o Each client appears online to the other clients (optional) o Clients are non blocking (optional)
Test Procedure	1. Client B enables offline delivery 2. Client B goes offline 3. Client A sends more than 1 message to Client B 4. Client B goes online
Pass-Criteria	1. Client B will have stored messages pushed when online 3. Messages are stored for Client B 4. Client B receives stored messages

Table 19: Test Information for Deferred Messages Pushed to an IM Client Interoperability Test

5.4.3   IM-1.0-int-403 (Includes Optional Features)

Test Case Id	IM-1.0-int-403
Test Object	IM Client
Test Case Description	Test the IM Client is able to retrieve one deferred message, some selected deferred messages and all deferred message
Specification Reference	[OMA_IM_TS] 12.1.1
SCR Reference	IMSpec-DM-C-002-O, IMSpec-DM-C-003-M

ETR Reference	DM-003
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	   o 2 clients (A, B) / 1 server
	• State:
	   o Clients are logged in the IMS network
	   o Each client appears online to the other client (optional)
	   o Clients are non blocking (optional)
	   o Client B disables offline delivery

Test Procedure	1. Client B goes offline 2. Client A sends one message to Client B 3. Client B goes online 4. Client B retrieves the stored message 5. Client B goes offline 6. Client A sends 5 messages to Client B 7. Client B goes online 8. Client B selects 2 of 5 deferred messages 9. Client B retrieves the 2 selected deferred messages 10. Client B goes offline 11. Client A sends 3 messages to Client B 12. Client B goes online 13. Client B retrieves all deferred messages
Pass-Criteria	4. Client B retrieves the contents of the message (when 1 message is deferred) 9. Client B retrieves the contents of 2 messages (when 5 messages are deferred) 13. Client B retrieves the remaining deferred messages

Table 20: Test Information for IM Client Retrieves Deferred Messages Interoperability Test

5.4.4   IM-1.0-int-404

Test Case Id	IM-1.0-int-404
Test Object	IM Client
Test Case Description	Verify that the IM Client is able to delete one deferred message, some deferred messages and all deferred messages. Deferred message metadata is updated when each deferred message function procedure occurs.
Specification Reference	[OMA_IM_TS] 12.1.3.2, 12.1.3.3, 12.1.3.4
SCR Reference	IMSpec-DM-C-005-M
ETR Reference	DM-004
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment: 　○ 2 clients (A, B) / 1 server • State: 　○ Clients are logged in the IMS network 　○ Each client appears online to each other (optional) 　○ Clients are non blocking (optional) 　○ Client B disables offline delivery
Test Procedure	1. Client B goes offline 2. Client A sends 10 messages to Client B 3. Client B goes online 4. Client B selects 1 message and deletes it 5. Client B selects 4 messages and deletes them 6. Client B chooses to delete all remaining messages
Pass-Criteria	2. Client B has 10 deferred messages 3. Client is notified of the awaiting messages 4. Client B has 1 less deferred message 5. Client B has 4 less deferred messages 6. Client B has 0 deferred messages

Table 21: Test Information for Deleting Deferred Messages Interoperability Test

5.4.5   IM-1.0-int-405

Test Case Id	IM-1.0-int-405
Test Object	IM Server
Test Case Description	Verify that a message is deferred when a recipient is unavailable, and that deferred messages are stored and their corresponding metadata are updated in IM XDMS.
Specification Reference	[OMA_IM_TS] 12.2.2.3
SCR Reference	IMSpec-DM-S-001-M
ETR Reference	DM-005
Tool	Not Available
Test code	Not Available
Preconditions	• Equipment: 　○ 2 clients (A, B) / 1 server • State: 　○ Clients are logged in the IMS network 　○ Each client appears online to each other (optional) 　○ Clients are non blocking (optional)

Test Procedure	1. Client B disables offline delivery
	2. Client B goes offline
	3. Client A sends and IM to Client B
	4. Client B goes online
	5. Client B retrieves the deferred message
Pass-Criteria	1. Client B will not get stored messages pushed when online
	3. A message is stored for client B
	4. Client B retrieves the deferred message metadata
	5. Client B has the entire contents of the deferred message

Table 22: Test Information for Storing Deferred Messages Interoperability Test

5.5 Conversation History

5.5.1 IM-1.0-int-501 (Includes Optional Features)

Test Case Id	IM-1.0-int-501
Test Object	IM Client
Test Case Description	Test if the IM Client can invoke IM History
Specification Reference	[OMA_IM_TS] 13.1.1
SCR Reference	IMSpec-HIST-C-001-O
ETR Reference	HIST-001
Tool	Not Available
Test code	Not Available
Preconditions	• Equipment:
	o 2 clients (A, B) / 1 server
	• State:
	o Clients supports the conversation history feature
	o IM SP has a reliable system for conversation history management
	o IM SP must have enough storage space for all conversations of all users
	o Clients are logged in the IMS network
	o Each client appears online to each other (optional)
	o Clients are non blocking (optional)

Test Procedure	1. Client A invites Client B to a 1-1 IM Session
	2. Client B accepts the invitation to the 1-1 IM Session
	3. Client A sends, "Message 1"
	4. Client B replies with, "Message 2"
	5. Client A invokes the Conversation History Function
	6. Client A is prompted to enter a conversation file name
	7. Client A enters filename, "conversationX"
	8. Client A sends, "Message 3"
	9. Client B sends, "Message 4"
	10. Client 1 terminates the recording of the ongoing IM Session
	11. Client A sends, "Message 5"
	12. Client B sends, "Message 6"
	13. Client A terminates the IM Session
	14. Client A retrieves the stored conversation
Pass-Criteria	8. The text, "Message 3" is stored
	9. The text, "Message 4" is stored
	10. No more messages are being stored
	14. The stored conversation is located in file, conversationX, and contains the text, "Message 3" and "Message 4" from step 8 and 9

Table 23: Test Information for Invoking IM History function Interoperability Test

5.5.2   IM-1.0-int-502 (Includes Optional Features)

Test Case Id	IM-1.0-int-502
Test Object	IM Client
Test Case Description	Test if the IM Client is able to terminate an ongoing recording of an IM Session
Specification Reference	[OMA_IM_TS] 13.1.2
SCR Reference	IMSpec-HIST-C-002-O
ETR Reference	HIST-002
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	o 2 clients (A, B) / 1 server
	• State:
	o Clients supports the conversation history feature
	o IM SP has a reliable system for conversation history management
	o IM SP must have enough storage space for all conversations of all users
	o Clients are logged in the IMS network
	o Each client appears online to each other (optional)
	o Clients are non blocking (optional)
Test Procedure	1. Client A invites Client B to a 1-1 IM Session
	2. Client B accepts the invitation to the 1-1 IM Session
	3. Client A sends, "Message 1"
	4. Client B replies with, "Message 2"
	5. Client A invokes the Conversation History Function
	6. Client A is prompted to enter a conversation file name
	7. Client A enters filename, "conversationY"
	8. Client A sends, "Message 3"
	9. Client B sends, "Message 4"
	10. Client A terminates the recording of the ongoing IM Session
	11. Client A sends, "Message 5"
	12. Client B sends, "Message 6"
	13. Client A terminates the IM Session
	14. Client A retrieves the stored conversation
Pass-Criteria	8. The text, "Message 3" is stored
	9. The text, "Message 4" is stored
	10. No more messages are being stored
	14. The stored conversation is located in file, conversationY, and contains the text, "Message 3" and "Message 4" from step 8 and 9

Table 24: Test Information for Terminate Recording Interoperability Test

5.5.3   IM-1.0-int-503 (Includes Optional Features)

Test Case Id	IM-1.0-int-503
Test Object	IM Client
Test Case Description	Test if the IM Client is able to retrieve an IM history
Specification Reference	[OMA_IM_TS] 13.1.3
SCR Reference	IMSpec-HIST-C-003-O
ETR Reference	HIST-003
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	   o 1client (A) / 1 server
	• State:
	   o Client supports the conversation history feature
	   o IM SP has a reliable system for conversation history management
	   o IM SP must have enough storage space for all conversations of all users
	   o Client is logged in the IMS network

Test Procedure	1. Client A opens the IM History feature 2. Client A requests the list with all stored conversations 3. Client A selects "conversationX" 4. Client A gets "conversationX" 5. Client A opens the stored conversation
Pass-Criteria	2. A list of stored conversations is shown 5. Client A can read the contents of the conversation

Table 25: Test Information for Retrieving an IM History Interoperability Test

5.5.4   IM-1.0-int-504

Test Case Id	IM-1.0-int-504
Test Object	IM Client
Test Case Description	Test if the IM Client is able to retrieve an history metadata
Specification Reference	[OMA_IM_TS] 13.1.4
SCR Reference	Not Available
ETR Reference	HIST-004
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	   o 1 client (A) / 1 server
	• State:
	   o Client supports the conversation history feature
	   o Client is logged in the IMS network
	   o Client is online (optional)

Test Procedure	1. Client A opens the IM History feature 2. Client A requests the History Metadata
Pass-Criteria	1. The History Metadata for stored messages is shown

Table 26: Test Information for Retrieving History Metadata Interoperability Test

5.5.5   IM-1.0-int-505 (Includes Optional Features)

Test Case Id	IM-1.0-int-505
Test Object	IM Client, IM Server
Test Case Description	Verify that the IM client is able to delete one or more or all IM history conversation messages. IM conversation message metadata is updated when each IM history function procedure occurs
Specification Reference	[OMA_IM_TS] 13.2.5
SCR Reference	IMSpec-HIST-C-004-O , IMSpec-HIST-S-006-O
ETR Reference	HIST-005
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	    o 2 clients (A, B) / 1 server
	• State:
	    o Clients supports the conversation history feature
	    o IM SP has a reliable system for conversation history management
	    o IM SP must have enough storage space for all conversations of all users
	    o Clients are logged in the IMS network
	    o Each client appears online to each other (optional)
	    o Clients are non blocking (optional)

Test Procedure	1. Client A invites Client B to a 1-1 IM Session 2. Client B accepts the invitation to the 1-1 IM Session 3. Client A invokes the Conversation History Function 4. Client A sends, "Message 1" 5. Client B replies with, "Message 2" 6. Client A terminates the recording of the ongoing IM Session 7. Repeat steps 3 to 7 until Client A has at least 5 stored conversations 8. Client A requests the History Metadata 9. Client A deletes 1 stored conversation 10. Client A request the History Metadata 11. Client A deletes 2 stored conversations 12. Client A requests the History Metadata 13. Client A deletes the remaining stored conversations 14. Client A requests the History Metadata
Pass-Criteria	9. Client A has 1 less stored conversation 10. Client A has 1 less history element 11. Client A has 2 less stored conversation 12. Client A has 2 less history elements 13. Client A has no stored conversations 14. Client A has no history elements

Table 27: Test Information for Deleting IM Conversation Interoperability Test

5.6   File Transfer

5.6.1   IM-1.0-int-601 (Includes Optional Features)

Test Case Id	IM-1.0-int-601
Test Object	IM Client
Test Case Description	Verify that a client can send a file transfer request to another user that consists of a file
Specification Reference	[OMA_IM_TS] 10
SCR Reference	IMSpec-FT-C-001-O, IMSpec-FT-C-002-O, IMSpec-FT-C-003-O
ETR Reference	FT-001
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	   o 2 clients (A, B) / 1 server
	• State:
	   o Clients are logged in the IMS network
	   o Each client appears online to each other (optional)
	   o Clients are non blocking (optional)

Test Procedure	1. Client A selects Client B from the contact list 2. Client A selects File Transfer 3. Client A selects a file to send 4. Client A sends the file 5. The file transfer goes by unnoticed by client B 6. Later, client B notices that a file transfer was missed 7. Client B sends a file transfer request to Client A for the file that was not received earlier 8. Client B waits for the file transfer to complete
Pass-Criteria	8. Client B opens the file and views the content

Table 28: Test Information for File Transfer Request of One File Interoperability Test

5.6.2   IM-1.0-int-602 (Includes Optional Features)

Test Case Id	IM-1.0-int-602
Test Object	IM Client
Test Case Description	Verify that a client can send a file transfer request to another user that consists of multiple files
Specification Reference	[OMA_IM_TS] 10
SCR Reference	IMSpec-FT-C-001-O, IMSpec-FT-C-002-O, , IMSpec-FT-C-003-O

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ETR Reference	FT-001
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	   o 2 clients (A, B) / 1 server
	• State:
	   o Clients are logged in the IMS network
	   o Each client appears online to each other (optional)
	   o Clients are non blocking (optional)

Test Procedure	1. Client A selects Client B from the contact list 2. Client A selects File Transfer 3. Client A selects more than one file to send 4. Client A sends the files 5. The file transfer goes by unnoticed by client B 6. Later, client B notices that a file transfer was missed 7. Client B sends a file transfer request to Client A for the files that was not received earlier 8. Client B waits for the file transfer to complete
Pass-Criteria	8. Client B opens the files and views the contents

Table 29: Test Information for File Transfer Request of Multiple Files Interoperability Test

5.6.3   IM-1.0-int-603 (Includes Optional Features)

Test Case Id	IM-1.0-int-603
Test Object	IM Client
Test Case Description	Verify that a client can send one file to one user. This file transfer does not occur in an IM Session.
Specification Reference	[OMA_IM_TS] 10
SCR Reference	IMSpec-FT-C-001-O, IMSpec-FT-C-002-O
ETR Reference	FT-003
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	   o 2 clients (A, B) / 1 server
	• State:
	   o Clients are logged in the IMS network
	   o Each client appears online to each other (optional)
	   o Clients are non blocking (optional)

Test Procedure	1. Client A selects Client B from the contact list
	2. Client A selects a file and sends it to Client B
	3. Client B accepts the file transfer
	4. Client B waits for the file transfer to complete
Pass-Criteria	4. Client B opens the file and views its contents

Table 30: Test Information for Sending One File to One User Outside an IM Session Interoperability Test

5.6.4   IM-1.0-int-604 (Includes Optional Features)

Test Case Id	IM-1.0-int-604
Test Object	IM Client
Test Case Description	Verify that a client can send one file to one user during a 1-1 IM Session
Specification Reference	[OMA_IM_TS] 10
SCR Reference	IMSpec-FT-C-001-O, IMSpec-FT-C-002-O
ETR Reference	FT-003
Tool	Not Available
Test code	Not Available
Preconditions	• Equipment:
	o 2 clients (A, B) / 1 server
	• State:
	o Clients are logged in the IMS network
	o Each client appears online to each other (optional)
	o Clients are non blocking (optional)
Test Procedure	1. Client A selects Client B from the contact list
	2. Client A invites Client B to a 1-1 IM Session
	3. Client A sends the text, "Sending you a file" to Client B
	4. Client A selects a file and sends it
	5. Client B accepts the file transfer
	6. Client B waits for the file transfer to complete
Pass-Criteria	6. Client B opens the file and views its contents

Table 31: Test Information for Sending One File to One User in an IM Session Interoperability Test

5.6.5   IM-1.0-int-605 (Includes Optional Features)

Test Case Id	IM-1.0-int-605
Test Object	IM Client
Test Case Description	Verify that a client can send a file to multiple users outside an IM Session
Specification Reference	[OMA_IM_TS] 10
SCR Reference	IMSpec-FT-C-001-O, IMSpec-FT-C-002-O

ETR Reference	FT-002
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	   o 3 clients (A, B, C) / 1 server
	• State:
	   o Clients are logged in the IMS network
	   o Each client appears online to each other (optional)
	   o Clients are non blocking (optional)

Test Procedure	1. Client A selects Clients B and C from the contact list 2. Client A selects File Transfer 3. Client A selects a file to send 4. Client A sends the file 5. Clients B and C accept the file transfer 6. Clients B and C wait for the file transfer to complete
Pass-Criteria	7. Clients B and C open the file and views the content

Table 32: Test Information for Sending One File to Many Users Outside an IM Session Interoperability Test

5.6.6   IM-1.0-int-606 (Includes Optional Features)

Test Case Id	IM-1.0-int-606
Test Object	IM Client, IM Server
Test Case Description	Verify that the IM client is able to select a gallery item and then send the file in the group messaging session
Specification Reference	[OMA_IM_TS] 10
SCR Reference	IMSpec-FT-C-001-O, IMSpec-FT-C-002-O, IMSpec-FT-C-003-O
ETR Reference	FT-002, FT-003
Tool	Not Available
Test code	Not Available

Preconditions	• Equipment:
	   o 3 clients (A, B,C) / 1 server
	• State:
	   o All 3 clients are logged in the IMS network
	   o Each client has the other clients as contacts, e.g. Client A has client B and C as contacts (optional)
	   o Each client appears online to the other clients (optional)
	   o Clients are non blocking (optional)

Test Procedure	1. Client A invites clients B and C to an Adhoc IM Conference
	2. Clients B and C accept the invitation to the Adhoc IM Conference
	3. Client A sends the message "Hello B C" to the Adhoc Conference
	4. Client B sends the message "Hello A C" to the Adhoc Conference
	5. Client C sends the message "Sending a picture " to the Adhoc Conference
	6. Client C selects a file, e.g. BMP, JPG, and sends it
Pass-Criteria	1. Clients B and C accept the invitation to the Adhoc Conference
	2. An Adhoc Conference begins between clients A, B and C
	3. Clients B and C receive "Hello B C" from client A
	4. Clients A and C receive "Hello A C" from client B
	5. Clients A and B receive "Sending a picture" from client C
	6. Clients A and B opens the file and views the image

Table 33: Test Information for Sending One File to Many User in an IM Session Interoperability Test

5.6.7   IM-1.0-int-607 (Includes Optional Features)

Test Case Id	IM-1.0-int-607
Test Object	IM Client
Test Case Description	Verify that a client can send multiple files to multiple users outside an IM Session
Specification Reference	[OMA_IM_TS] 10
SCR Reference	IMSpec-FT-C-001-O, IMSpec-FT-C-002-O
ETR Reference	FT-002, FT-003
Tool	Not Available
Test code	Not Available
Preconditions	• Equipment:
	o 3 clients (A, B, C) / 1 server
	• State:
	o Clients are logged in the IMS network
	o Each client appears online to each other (optional)
	o Clients are non blocking (optional)
Test Procedure	1. Client A selects Clients B and C from the contact list
	2. Client A selects File Transfer
	3. Client A selects more than one file to send
	4. Client A sends the files
	5. Clients B and C accept the file transfer
	6. Clients B and C wait for the file transfer to complete
Pass-Criteria	7. Clients B and C open the files and views the content

Table 34: Test Information for Sending Many Files to Many Users Outside an IM Session Interoperability Test

5.6.8   IM-1.0-int-608 (Includes Optional Features)

Test Case Id	IM-1.0-int-608
Test Object	IM Client
Test Case Description	Verify that a client can send multiple files to multiple users in an IM Session
Specification Reference	[OMA_IM_TS] 10
SCR Reference	IMSpec-FT-C-001-O, IMSpec-FT-C-002-O
ETR Reference	FT-002, FT-003
Tool	Not Available
Test code	Not Available
Preconditions	• Equipment: o 3 clients (A, B, C) / 1 server • State: o Clients are logged in the IMS network o Each client appears online to each other (optional) o Clients are non blocking (optional)
Test Procedure	1. Client A selects Clients B and C from the contact list 2. Client A invites Clients B and C to an Adhoc conference 3. Client A sends, "Sending a file" to the conference 4. Client A selects a file and sends it 5. Clients B and C accept the file transfer 6. Clients B and C wait for the file transfer to complete
Pass-Criteria	6. Clients B and C open the files and views the content

Table 35: Test Information for Sending Many Files to Many Users in an IM Session Interoperability Test

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 Versions OMA-ETS-SIMPLE_IM_INT-V1_0	05.Jun.2007	All	First draft
	14.Aug 2007	n/a	IOP-MEC agreed
	22 Aug 2007	All	Incorporated CR: OMA-IOP-MEC-2007-0116
	28 Jan 2008	All	Incorporated CR: OMA-IOP-MEC-2007-0134
	14 Feb 2008	5.1.2.1.1, 5.1.2.1.2, 5.1.2.1.3, 5.1.2.1.4 5.1.3.1.1, 5.1.3.1.2, 5.1.3.1.3, 5.1.3.1.4	Incorporated CRs: OMA-IOP-MEC-2007-0135R01-CR_IM_ETS_INT OMA-IOP-MEC-2008-0006-CR_IM_ETS_INT OMA-IOP-MEC-2007-0136R01-CR_IM_ETS_INT
	20 Feb 2008	5.1.4.1.1, 5.1.4.1.2, 5.1.4.1.3, 5.1.4.1.4, 5.1.4.1.5	Incorporated CRs: OMA-IOP-MEC-2008-0018 OMA-IOP-MEC-2008-0019 OMA-IOP-MEC-2008-0020 OMA-IOP-MEC-2008-0021R01 OMA-IOP-MEC-2008-0022R01
	11 Mar 2008	5.1.5.1.1, 5.1.5.1.2, 5.1.5.1.3, 5.1.5.1.4, 5.1.5.1.5	Incorporated CRs: OMA-IOP-MEC-2008-0036 OMA-IOP-MEC-2008-0037 OMA-IOP-MEC-2008-0038 OMA-IOP-MEC-2008-0039 OMA-IOP-MEC-2008-0040
	10 Apr 2008	n/a	Editorial updates
	22 Apr 2008	5.1.6.1.1, 5.1.6.1.2	Incorporated CR: OMA-IOP-MEC-2008-0073
	13 May 2008	5.1.6.1.3, 5.1.6.1.4, 5.1.6.1.1, 5.1.6.1.2, 5.1.6.1.5	Incorporated CRs: OMA-IOP-MEC-2008-0074 OMA-IOP-MEC-2008-0082 OMA-IOP-MEC-2008-0084
	08 Jul 2008	5.1.1.1.5, 5.1.3.1.3, 5.1.4.1.2, 5.1.6.1.3, 5.1.6.1.4	Incorporated CR: OMA-IOP-MEC-2008-0114
	16 Sep 2008	Template	Incorporated CR: OMA-IOP-MEC-0150
	15 Dec 2008	5.12	Incorporated CR: OMA-IOP-MEC-0215
Candidate Versions OMA-ETS-SIMPLE_IM_INT-V1_0	20 Jan 2009	n/a	TP approved R&A: Ref# OMA-TP-2008-0507
Draft Version OMA-ETS-SIMPLE_IM_INT-V1_0	26 Jun 2009	5.32, 5.33, 5.34, 5.35	Incorporated CR: OMA-IOP-MEC-2009-0117
	11 Aug 2009	all	Incorporated CR: OMA-IOP-MEC-2009-0132

	18 Aug 2009	all	Incorporated CR: OMA-IOP-MEC-2009-0140
Candidate Versions OMA-ETS-SIMPLE_IM_INT-V1_0	04 Sep 2009	n/a	TP notification: OMA-TP-2009-0420- INP_SIMPLE_IM_1.0_ETS_for_notification