In-Game Communications Requirements

Candidate Version 1.0 – 16 Mar 2004

Open Mobile Alliance

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Contents

1. Scope   (Informative)

This document presents the requirements for in-game communication. By this we mean communication such as: chat, IM or voice, during a game session between people involved in the game or other people.

The term in-game communication refers to personal communication between the players that is beyond the game moves relayed between them. This can be communication while the game is active or paused and can take the forms of text or multimedia messaging or voice between some or all the players in the session. In addition, communication between players and non-players can also be considered.

This document refers to the minimum requirements, for the first version of the OMA Games Platform 2.0 specification.

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

[RFC2234]   "Augmented BNF for Syntax Specifications: ABNF". D. Crocker, Ed., P. Overell.
                     November 1997. URL:http://www.ietf.org/rfc/rfc2234.txt

2.2   Informative References

None.

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" and "Introduction", are normative, unless they are explicitly indicated to be informative.

3.2 Definitions

None.

3.3 Abbreviations

None.

4. Introduction   (Informative)

This document refers to in-game communication. The term in-game communication refers to personal communication between the players that is beyond the game moves relayed between them. This can be communication while the game is active or paused and can take the forms of text or multimedia messaging or voice between some or all the players in the session. In addition, communication between players and non-players can also be considered.

5. Use Cases (Informative)

5.1 Use Case A

5.1.1 Short Description

This use case describes the private text messaging among a particular group of people.

5.1.2 Actors

Alice: Player / User.

John: Watcher / User.

Game Service Provider

5.1.2.1 Actor Specific Issues

Alice needs to communicate with John privately to seek advice from him.

5.1.2.2 Actor Specific Benefits

Alice can share her game plan and have advice from John without exposing the informationt to other game players.

5.1.3 Pre-conditions

Alice has joined the game as a player and John has joined the game as Alice's advisor/teammate. He can view Alice's game information (like her cards in a bridge game). John's and Alice's game clients are aware of each other's IM address.

5.1.4 Post-conditions

None.

5.1.5 Normal Flow

Alice, Bob, Carole and Dan are playing a game together with their new handsets. Bob is teaming with Alice with his handset as an advisor. During the game, Alice and Bob chat privately using text-based messages from within the game.

1. To send a message Alice selects the "Send message" option in the game console and defines to whom.

2. Alice enters her message in the dialogue that opens up and sends the message.

3. Bob gets the message that appears as for example a ticker at the bottom of his game console.

4. Bob clicks on the ticker, opens the chatting window and types a reply.

5.1.6 Alternative Flow

None.

5.1.7 Operational and Quality of Experience Requirements

The user should easily see who are in the group to which he is sending a message.

5.2 Use Case B

5.2.1 Short Description

This use case describes the text messaging among all the participants of a game.

5.2.2 Actors

Alice, Bob, Carole and Dan: Players / User.

John: Watcher / User.

Game Service Provider

5.2.2.1 Actor Specific Issues

Dan wants to share his comments with all the participants.

5.2.2.2 Actor Specific Benefits

The participants can share their comments, game related or not, among themselves. It is a close simulation of the real-life gaming experience with physical presence.

5.2.3 Pre-conditions

All participants have joined the game as players or watchers. The game clients of the participants with instant messaging capability are aware of one another's address.

5.2.4 Post-conditions

None.

5.2.5 Normal Flow

Alice, Bob, Carole and Dan are playing bridge together with their new handsets. Dan just had a funny comment, so

1. Dan selects the "Send message to all" option from the menu.

2. Dan enters his text message.

3. The message is sent to all the players in this game session with the nickname of Dan in front of it.

5.2.6 Alternative Flow

None.

5.2.7 Operational and Quality of Experience Requirements

The user should easily see all the participants in the game.

5.3   Use Case C

5.3.1   Short Description

This use case describes the text messaging for pausing and resuming a game.

5.3.2   Actors

Alice, Bob, Carole and Dan: Players / User.

John: Watcher / User.

Game Service Provider

5.3.2.1   Actor Specific Issues

Dan wants to get out of the game for a while and resume it later.

5.3.2.2   Actor Specific Benefits

The participants can pause the game and know when other players are ready to resume it.

5.3.3   Pre-conditions

All participants have joined the game as players or watchers. The game clients of the participants with instant messaging capability are aware of one another's address. The paritipants then choose "Suspend the game" menu and exit the game.

5.3.4   Post-conditions

All participants have re-joined the game and the game is resumed, Or some participants can not continue the game and the game session is terminated.

5.3.5   Normal Flow

Alice, Bob, Carole and Dan have to pause the game (for example pause could mean disconnecting from the server), as Dan has to get out of the game for a while. After a while, Dan is able to play the game again. So,

1. Dan resumes the game session again.

2. Dan's game client automatically sends a message to all the players in the game session, informing them that he is ready to play again.

3. Each participant gets a "please wait for the other players" message.

4. When all players have resumed the game session again, the game continues.

5.3.6   Alternative Flow

Alice, Bob, Carole and Dan have to pause their game, as Dan has to get out of the game for a while.

1. Bob does not want to continue the game. The game platform automatically sends a message to all the other players that Bob has quit the game.

5.3.7   Operational and Quality of Experience Requirements

The user should be able to know who have received the "resume notification" message.

5.4   Open Issues

None.

6. Requirements   (Normative)

6.1   High-Level Functional Requirements

The gaming platform SHALL cover the following requirements.:

▪ The ability to allow nicknames – the players may not want to reveal their network IDs;

▪ The ability to send in-game messages between individual users and to broadcast to groups.

6.1.1   Security

The messaging in a game session requires the same degree of privacy protection as for a regular IM chat. The messaging service may use encryptions on the messages.

6.1.2   Charging

Users are able to get advice of charge on the messaging between them, if it deviates from their normal rates.

6.1.3   Administration and configuration

Industry standard solutions can be used for filtering the message content.

6.1.4   Usability

Though the messaging service may be independent of the gaming service, the gaming platform should avoid making the user aware of that. The user should experience a seamless integration of the gaming and messaging

6.1.5   Interoperability

There MUST be a common API for the game implementors, to access and use the nicknames and in-game communication features.

The API for text-based messages, should support international charactersets.

6.1.6   Privacy

Users are able to see other player's properties only according to the users defined policy, for example as defined in the game; esp. players MSISDN is confidential.

6.2   Overall System Requirements

6.3   System Elements

The system has the below elements:

1. Game client

2. Game Platform

6.3.1   Game Client

The game client that supports in-game communication MUST support the OMA in-game communication protocol.

6.3.2   Game Platform

The game platform MUST be able to collect users identifications/addresses and distribute them.

6.3.3   Network interfaces

The protocol between the handset and the server of the GP, can for example be based on HTTP, TCP or UDP.

The protocol should be optimised in terms of size and performance.

Appendix A.   Change History   (Informative)

A.1   Approved Version History

Reference	Date	Description
n/a	n/a	No prior version

A.2   Draft/Candidate Version 1.0 History

Document Identifier	Date	Sections	Description
Draft Version	19-Jun-2003		
Candidate Version OMA-RD-In-Game-Communications-V1_0	16 Mar 2004	n/a	Status changed to Candidate by TP TP ref # OMA-TP-2004-0072R01-LATE-In-game-communication-RD-Package-for-Approval