Reference Release Definition for Multimodal and Multi-device

Approved Version 1.0 – 24 Oct 2008

Open Mobile Alliance

OMA-RRELD-MMMD-V1_0-20081024-A

Contents

Tables

1. Scope

The scope of this document is limited to the Reference Release Definition of Multimodal and Multi-device according to OMA Release process and the Reference Release document baseline listed in section 5.

2. References

2.1 Normative References

[MMMD_AD] "OMA Multimodal and Multi-device Enabler Architecture", , Open Mobile Alliance™, OMA-AD_MMMD-V1_0, URL:http//www.openmobilealliance.org/

[MMMD_RD] "Multimodal and Multi-device Services Requirements", , Open Mobile Alliance™, OMA-RD_Multimodal_Multi-device_Services-V1_1, URL:http//www.openmobilealliance.org/

[MMMD_RDRR] "Multimodal and Multi-Device Requirements Full Review Report", Open Mobile Alliance™, OMA-RDRR-Multimodal_Multi_device_Services-V1_0, URL:http//www.openmobilealliance.org/

[RFC2119] "Key words for use in RFCs to Indicate Requirement Levels", S. Bradner, March 1997, URL:http://www.ietf.org/rfc/rfc2119.txt

2.2 Informative References

[OMADICT] "Dictionary for OMA Specifications", Version x.y, Open Mobile Alliance™, OMA-ORG-Dictionary-Vx_y, 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” and "Release Version Overview" are normative, unless they are explicitly indicated to be informative.

3.2 Definitions

Reference Release	A set of specifications and/or white papers which form a formal deliverable of OMA. The release can be referenced or otherwise used to support implementable enabler releases, but it cannot by itself be implemented in products.
Reference Release Definition	A definition of the documents that are included in a Reference Release.

3.3 Abbreviations

MMMD	Multimodal Multi-device
OMA	Open Mobile Alliance
RRELD	Reference Release Definition

4. Release Version Overview

The Multimodal multi-device enabler provides an architecture for the management and synchronization of mixed modalities of interaction on mobile devices. It describes the different logical components required to support multimodal and multi-device interaction and the different deployment configurations that can be supported. The enabler does not assume particular authoring model for multimodal or multi-device interactions. The architecture supports the use of relevant standards from the W3C, IETF and others and identifies where OMA developed specifications are needed to create the desired open and heterogeneous computing environment. While the architecture is not limited to any set of modalities or associated languages, some examples of key modalities include speech, handwriting and haptic as well as visual input and output.

This work was done in tight cooperation with the Multi-modal Working Group of W3C. When the decision was taken in W3C to discontinue the development of technical support language, it left this work without a forward path. This reference release is the recognition of the fact that the architecture defined herein is applicable to any multi-modal work taken up in the future, whether by OMA or another organization.

4.1 Version 1.0 Functionality

Version 1 of the MMMD enabler describes the functional components required in a multi-modal environment, and the relationship of these components to other OMA enablers (e.g. browsing).

The components defined are the Interaction and Synchronization Manager and a registry for managing interaction states and preferences.,

Four interfaces (3 are I0, and one is an I2) are defined to interface between the MMMD components, other OMA enablers, and external functions. These are the “Multimodal and Multi-device Configuration Protocol”, the “Multimodal Synchronization Protocol”, and the “Multimodal Control Protocol”. Interface between the user agent and processing engines such as a “text-to-speech”, engine or a “voice-recognition” engine are considered I0 and not described. (Note: these interfaces are of key interest to W3C.)

Much of the functionality described by MMMD could reside either on a client device, or on a server. The interfaces are designed to allow various partitioning of the functionality amongst local and remote components, without having to redefine the interfaces.

Version 1 also defines the expected set of functional flows required to discover components (either local or remote) and to initialize and initiate multi-modal service.

5. Document Listing for Multimodal and Multi-device

This section is normative.

Doc Ref	Permanent Document Reference	Description
Requirement Document		
[MMMD_RD]	OMA-RD-Multimodal_Multi-device_Services-V1_1-20081024-A	Requirement Document for Multimodal and Multi-device Reference Package
Architecture Document		
[MMMD_AD]	OMA-AD-MMMD-V1_0-20081024-A	Architecture Document for Multimodal and Multi-device Reference Package

Table 1: Listing of Documents in MMMD Reference Release

Appendix A. Change History (Informative)

A.1 Approved Version 1.0 History

Reference	Date	Description
OMA-RRELD-MMMD-V1_0	24 Oct 2008	Status changed to Approved by TP: OMA-TP-2008-0394-INP_MMMD_V1_0_RRP_for_Final_Approval