![OMA Open Mobile Alliance logo]

Enabler Release Definition for Download

Approved Version 1.0 – 25 Jun 2004

Open Mobile Alliance
OMA-ERELD-DL-V1_0-20040625-A

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1. Scope

The scope of this document is limited to the Enabler Release Definition of Download according to OMA Release process and the Enabler Release specification baseline listed in section 5.

This Download Enabler defines application-level protocols and behaviours to provide confirmed content download functionality. It is anticipated that this will be an enabler for billing, to help make premium priced content available to mobile users.

2. References

2.1 Normative References

[CREQ]	"Specification of WAP Conformance Requirements". Open Mobile Alliance™. WAP-221-CREQ. 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
[OTA]	"Download OTA", Open Mobile Alliance™, OMA-Download-OTA-v1_0, http://www.openmobilealliance.org/

2.2 Informative References

[ARCH]	"Download Architecture", Open Mobile Alliance™, OMA-Download-ARCH-v1_0, http://www.openmobilealliance.org/
[HTTP]	"Hypertext Transfer Protocol - HTTP/1.1", RFC 2616, R. Fielding, et al., June 1999. http://www.ieft.org/rfc/rfc2616.txt
[MIDPOTA]	"Over The Air User Initiated Provisioning Recommended Practice", version 1.0, 2001, SUN Microsystems. http://java.sun.com
[MIDP]	"Mobile Information Device Profile", version 1.0, 2000, SUN Microsystems, http://java.sun.com/

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.

The formal notation convention used in sections 7 and 9 to formally express the structure and internal dependencies between specifications in the Enabler Release specification baseline is detailed in [CREQ].

3.2   Definitions

Enabler Release

Collection of specifications that combined together form an enabler for a service area, e.g. a download enabler, a browsing enabler, a messaging enabler, a location enabler, etc. The specifications that are forming an enabler should combined fulfil a number of related market requirements.

Minimum Functionality Description

Description of the guaranteed features and functionality that will be enabled by implementing the minimum mandatory part of the Enabler Release.

MIDlet Download

Refers to the Java^{TM} 2 Micro Edition (J2ME) Mobile Internet Device Profile Over-the-Air User Initiated Provisioning Recommended Practises. This defines the method of downloading and managing the lifecycle of J2ME applications, referred to as MIDlets.

3.3   Abbreviations

ERDEF	Enabler Requirement Definition
ERELD	Enabler Release Document
HTTP	HyperText Transfer Protocol
OMA	Open Mobile Alliance
MIDlet	Java™ MIDP program
MIDP	Mobile Information Device Profile
W-HTTP	Wireless Profiled HTTP
WSP	Wireless Session Protocol

4. Introduction

This document outlines the Enabler Release Definition for Download and the respective conformance requirements for clients and servers implementing claiming compliance to it as defined by Open Mobile Alliance across the specification baseline.

The purpose of OMA Download is to provide a service similar to MIDlet Download [MIDPOTA]. The difference between MIDlet Download and OMA Download is that OMA Download is not designed specifically for the downloading of Java™ MIDlets, or any other specific media type - OMA Download is a general download framework.

OMA Download, just like MIDlet Download, extends Basic HTTP Download with two additional steps:

1. **Before download**, a description of the media object is downloaded. The description is a small file, the *download descriptor*, containing metadata about the *media object* and instructions to the *download agent* in the device, how to download the *media object*.

   The *media object* is downloaded using standard Basic HTTP Download.

2. **After download**, a status report is posted to a Web site, indicating the outcome of the download. The user can be directed to a Web location provided in the *download descriptor*.

5. Enabler Release Specification Baseline

The following specifications comprise the Download enabler release:

"Download Architecture Version 1.0"   [ARCH]

"Download OTA Version 1.0"   [OTA]

6. Minimum Functionality Description

This section is informative.

The minimum functionality for the Download OTA specification includes:

- support for separate delivery of the download descriptor and media object

- delivery of the installation notification indicating success or failure if requested by the content provider

- preventing access to the media object:

    o   if the download process is aborted

    o   if a "well-intentioned" installation notification attempt cannot be made

- support for installation parameters

- support for HTTP ([W-HTTP], or [WSP]) at a minimum for delivering the download descriptor, media object, and installation notification

The Download OTA specification also defines the following optional functionality:

- support for co-delivery of the download descriptor and media object

7. Conformance Requirements Notation Details

This section is informative

The tables in following chapters use the following notation:

Item:
Entry in this column MUST be a valid ScrItem according to [CREQ].

Feature/Application:
Entry in this column SHOULD be a short descriptive label to the **Item** in question.

Status:
Entry in this column MUST accurately reflect the architectural status of the **Item** in question.
- M means the **Item** is mandatory for the class
- O means the **Item** is optional for the class
- NA means the **Item** is not applicable for the class

Requirement:
Expression in the column MUST be a valid TerminalExpression according to [CREQ] and it MUST accurately reflect the architectural requirement of the **Item** in question.

8. ERDEF for Download - Client Requirements

Table 1 ERDEF for Download Client-side Requirements

Item	Feature / Application	Status	Requirement
OMA-ERDEF-DL-C-001	Download Client	M	OTA:MCF

9. ERDEF for Download - Server Requirements

The Download Enabler Release does not specify server requirements.

Appendix A   Change History   (Informative)

A.1   Approved Version History

Reference	Date	Description
OMA-ERELD-DL-V1_0	25 Jun 2004	Initial document to address the basic starting point Ref TP Doc# OMA-TP-2004-0155-DL-V1_0-for-final-approval

A.2   Draft/Candidate Version 1.0 History

Document Identifier	Date	Sections	Description
Candidate Versions	04 Nov 2002	n/a	Status changed to Candidate by TP
OMA-ERELD-DL-V1_0	11 Jun 2004	Appendix B	Update of enabler release before final approval. OMA-Download-OTA-v1_0: Corrected some inconsistencies in the SCR items. [OMA-DLDRM-2004-0016R01-CR-DLOTA1.0-SCR-DDVersionR02]