



# **Enabler Release Definition for LFC**

Candidate Version 1.0 – 26 Jun 2009

---

**Open Mobile Alliance**  
OMA-ERELD-LFC-V1\_0-20090626-C

Use of this document is subject to all of the terms and conditions of the Use Agreement located at <http://www.openmobilealliance.org/UseAgreement.html>.

Unless this document is clearly designated as an approved specification, this document is a work in process, is not an approved Open Mobile Alliance™ specification, and is subject to revision or removal without notice.

You may use this document or any part of the document for internal or educational purposes only, provided you do not modify, edit or take out of context the information in this document in any manner. Information contained in this document may be used, at your sole risk, for any purposes. You may not use this document in any other manner without the prior written permission of the Open Mobile Alliance. The Open Mobile Alliance authorizes you to copy this document, provided that you retain all copyright and other proprietary notices contained in the original materials on any copies of the materials and that you comply strictly with these terms. This copyright permission does not constitute an endorsement of the products or services. The Open Mobile Alliance assumes no responsibility for errors or omissions in this document.

Each Open Mobile Alliance member has agreed to use reasonable endeavors to inform the Open Mobile Alliance in a timely manner of Essential IPR as it becomes aware that the Essential IPR is related to the prepared or published specification. However, the members do not have an obligation to conduct IPR searches. The declared Essential IPR is publicly available to members and non-members of the Open Mobile Alliance and may be found on the “OMA IPR Declarations” list at <http://www.openmobilealliance.org/ipr.html>. The Open Mobile Alliance has not conducted an independent IPR review of this document and the information contained herein, and makes no representations or warranties regarding third party IPR, including without limitation patents, copyrights or trade secret rights. This document may contain inventions for which you must obtain licenses from third parties before making, using or selling the inventions. Defined terms above are set forth in the schedule to the Open Mobile Alliance Application Form.

NO REPRESENTATIONS OR WARRANTIES (WHETHER EXPRESS OR IMPLIED) ARE MADE BY THE OPEN MOBILE ALLIANCE OR ANY OPEN MOBILE ALLIANCE MEMBER OR ITS AFFILIATES REGARDING ANY OF THE IPR'S REPRESENTED ON THE “OMA IPR DECLARATIONS” LIST, INCLUDING, BUT NOT LIMITED TO THE ACCURACY, COMPLETENESS, VALIDITY OR RELEVANCE OF THE INFORMATION OR WHETHER OR NOT SUCH RIGHTS ARE ESSENTIAL OR NON-ESSENTIAL.

THE OPEN MOBILE ALLIANCE IS NOT LIABLE FOR AND HEREBY DISCLAIMS ANY DIRECT, INDIRECT, PUNITIVE, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE USE OF DOCUMENTS AND THE INFORMATION CONTAINED IN THE DOCUMENTS.

© 2009 Open Mobile Alliance Ltd. All Rights Reserved.

Used with the permission of the Open Mobile Alliance Ltd. under the terms set forth above.

# Contents

- 1. SCOPE .....4
- 2. REFERENCES .....5
  - 2.1 NORMATIVE REFERENCES.....5
  - 2.2 INFORMATIVE REFERENCES.....5
- 3. TERMINOLOGY AND CONVENTIONS .....6
  - 3.1 CONVENTIONS.....6
  - 3.2 DEFINITIONS.....6
  - 3.3 ABBREVIATIONS.....6
- 4. RELEASE VERSION OVERVIEW .....8
  - 4.1 VERSION 1.0 FUNCTIONALITY .....8
- 5. DOCUMENT LISTING FOR LFC.....9
- 6. OMNA CONSIDERATIONS .....10
- 7. CONFORMANCE REQUIREMENTS NOTATION DETAILS .....11
- 8. ERDEF FOR LFC - CLIENT REQUIREMENTS .....12
- 9. ERDEF FOR LFC - SERVER REQUIREMENTS .....13
- APPENDIX A. CHANGE HISTORY (INFORMATIVE).....14
  - A.1 APPROVED VERSION HISTORY .....14
  - A.2 DRAFT/CANDIDATE VERSION 1.0 HISTORY .....14

# Tables

- Table 1: Listing of Documents in LFC Enabler .....9
- Table 2: ERDEF for LFC Client-side Requirements.....12
- Table 3: ERDEF for LFC Server-side Requirements.....13

# 1. Scope

The scope of this document is limited to the Enabler Release Definition of LFC V1.0 enabler according to OMA Release process and the Enabler Release specification baseline listed in section 5.

## 2. References

### 2.1 Normative References

- [OMA-LFC-AD] “Look and Feel Customization Architecture”, Open Mobile Alliance™, OMA-AD-LFC-V1\_0, URL:<http://www.openmobilealliance.org/>
- [OMA-LFC-RD] “Look and Feel Customization Requirements”, Open Mobile Alliance™, OMA-RD-LFC-V1\_0, URL:<http://www.openmobilealliance.org/>
- [OMA-LFC-TS] “Look and Feel Customization Architecture”, Open Mobile Alliance™, OMA-TS-LFC-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>
- [SCRRULES] “SCR Rules and Procedures”, Open Mobile Alliance™, OMA-ORG-SCR\_Rules\_and\_Procedures, URL:<http://www.openmobilealliance.org/>

### 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”, "Release Version Overview" and “Conformance Requirements Notation Details”, are normative, unless they are explicitly indicated to be informative.

The formal notation convention used in sections 8 and 9 to formally express the structure and internal dependencies between specifications in the Enabler Release specification baseline is detailed in [SCRRULES].

### 3.2 Definitions

|  |   |
|--|---|
| <b>Enabler Release</b>                   | 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. |
| <b>LFC Content Server</b>                | An entity that supports the delivery of LFC Packages to an LFC enabled device   |
| <b>LFC Element</b>                       | One characteristic of a device’s LFC (e.g. screen saver, incoming data message alert, ringtone per caller, etc).  |
| <b>LFC Element Settings</b>              | The combination of an LFC Element and an associated value for it  |
| <b>LFC Management Server</b>             | An entity that issues and handles the commands to perform Remote Management operations to an LFC enabled device   |
| <b>LFC Operations</b>                    | Operations targeted on LFC Packages or LFC Element Settings which may be invoked on a LFC Client.   |
| <b>LFC Packages</b>                      | Group of LFC Element Settings that are part of the device’s Look and Feel. This package is used by a Service Provider to describe part or the whole Look and Feel Customization of the device.  |
| <b>Look and Feel</b>                     | Appearance and behavior of the device’s user interface.   |
| <b>Look and Feel Customization</b>       | Process by which all or part of a device’s Look and Feel is modified  |
| <b>Management Object</b>                 | A data model for information which is a logical part of the interfaces exposed by DM components.  |
| <b>Minimum Functionality Description</b> | Description of the guaranteed features and functionality that will be enabled by implementing the minimum mandatory part of the Enabler Release.  |
| <b>Remote Management</b>                 | LFC Operations originating from an entity residing on the network to be performed on an LFC capable device  |
| <b>Secure Removable Card</b>             | It refers to secure physical devices able to be inserted to and removed from terminal equipments. These devices must be able to protect not only logically but physically the data and/or applications they carry. Typical secure removable medias in the LFC are the UICC’s (see [OMADICT])      |

### 3.3 Abbreviations

|              |                                |
|--------------|--------------------------------|
| <b>ERDEF</b> | Enabler Requirement Definition |
| <b>ERELD</b> | Enabler Release Definition     |
| <b>DLOTA</b> | DownLoad Over The Air          |
| <b>DM</b>    | Device Management              |

---

|             |                              |
|-------------|------------------------------|
| <b>LFC</b>  | Look and Feel Customization  |
| <b>OMA</b>  | Open Mobile Alliance         |
| <b>OMNA</b> | Open Mobile Naming Authority |
| <b>SRC</b>  | Secure Removable Card        |

## 4. Release Version Overview

The LFC V1.0 enabler supports the Lightweight Model and Remote Management Model. The Lightweight Model is mandatory and the Remote Management Model is optional. Both models support LFC Package operations. LFC Element Setting is not supported in the LFC V1.0 enabler.

### 4.1 Version 1.0 Functionality

This LFC V1.0 enabler provides the following main functionalities depending on the model applied:

- For the lightweight model which is the mandatory part of this enabler:
  - Delivery of LFC Packages
  - Installation of the LFC Package
  - Activation and deactivation of LFC Package
  - Removal of LFC Package
- For the Remote Management model which is optional in this release, the main functionalities in addition to those mentioned above are:
  - Locking and unlocking LFC Package
  - Query LFC Package
  - Marking default LFC Package



## 5. Document Listing for LFC

This section is normative.

| Doc Ref                         | Permanent Document Reference                            | Description   |
|---------------------------------|---|---|
| <b>Requirement Document</b>     |   |   |
| [OMA_LFC_RD]                    | OMA-RD-LFC-V1_0-20090626-C                              | Requirement Document for LFC Enabler  |
| <b>Architecture Document</b>    |   |   |
| [OMA_LFC_AD]                    | OMA-AD-LFC-V1_0-20090626-C                              | Architecture Document for LFC Enabler   |
| <b>Technical Specifications</b> |   |   |
| [OMA_LFC_TS]                    | OMA-TS-LFC-V1_0-20090626-C                              | Specification that defines the protocol for LFC Enabler.  |
| <b>Supporting Files</b>         |   |   |
| [LFC_XSD}                       | OMA-SUP-XSD_LFC_Package_Metadata_Schema-V1_0-20090626-C | <p>This schema provides the LFC Package Metadata schema for the LFC 1.0 enabler.</p> <p>Working file in directory:<br/> file: LFC_Package_Metadata_Schema-v1_0.txt<br/> path: <a href="http://www.openmobilealliance.org/Tech/profiles">http://www.openmobilealliance.org/Tech/profiles</a></p> |

**Table 1: Listing of Documents in LFC Enabler**

## 6. OMNA Considerations

Management Object Identifier for the LFC MO is: “urn:oma:mo:oma-lfcmo:1.0”.

## 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 [SCRRULES].
- Feature/Application:** Entry in this column **SHOULD** be a short descriptive label to the **Item** in question.
- Requirement:** Expression in the column **MUST** be a valid TerminalExpression according to [SCRRULES] and it **MUST** accurately reflect the architectural requirement of the **Item** in question.

## 8. ERDEF for LFC - Client Requirements

This section is normative.

| Item                        | Feature / Application | Requirement |
|-----------------------------|-----------------------|-------------|
| OMA-ERDEF-LFC-C-001-<<M/O>> | LFC Client            |             |

**Table 2: ERDEF for LFC Client-side Requirements**

## 9. ERDEF for LFC - Server Requirements

This section is normative.

| Item  | Feature / Application | Requirement |
|---|-----------------------|-------------|
| OMA-ERDEF-LFC-S-001- <i>&lt;&lt;M/O&gt;&gt;</i> | LFC Content Server    |             |
| OMA-ERDEF-LFC-S-002- <i>&lt;&lt;M/O&gt;&gt;</i> | LFC Mnagement Server  |             |

**Table 3: ERDEF for LFC Server-side Requirements**

## 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<br>OMA-ERELED-LFC-V1_0     | 18 Dec 2008 | n/a         | Baseline Document  |
|   | 29 Apr 2009 | All         | Editorial fixes<br>2009 template<br>References sorted<br>History table<br>Section 5 updated with the list of PDs |
| Candidate Version:<br>OMA-ERELED-LFC-V1_0 | All         | 26 Jun 2009 | Status changed to Candidate by TP:<br>OMA-TP-2009-0269-INP_LFC_V1_0_ERP_for_Candidate_Approval                   |