

### **Enabler Release Definition for DCD**

Approved Version 1.0 – 05 Jul 2011

Open Mobile Alliance OMA-ERELD-DCD-V1\_0-20110705-A

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# 1. Scope

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

#### 2. References

#### 2.1 Normative References

[DCD-AD] "Dynamic Content Delivery Architecture", Version 1.0, Open Mobile Alliance<sup>TM</sup>, OMA-AD-DCD -V1\_0,

URL:http://www.openmobilealliance.org/

[DCD-BCAST] "Dynamic Content Delivery Technical Specification – BCAST Adaptation", Version 1.0, Open Mobile

Alliance™, OMA-TS-DCD\_BCAST-V1\_0, <u>URL:http://www.openmobilealliance.org/</u>

[DCD-CBS] "Dynamic Content Delivery Technical Specification – CBS Adaptation", Version 1.0, Open Mobile

Alliance<sup>TM</sup>, OMA-TS-DCD\_CBS-V1\_0, <u>URL:http://www.openmobilealliance.org/</u>

[DCD-Charging] "OMA DCD Charging", Version 1.0, Open Mobile Alliance<sup>TM</sup>, OMA-TS-DCD\_Charging-V1\_0,

URL:http://www.openmobilealliance.org/

[DCD-MO] "OMA DCD Management Object", Version 1.0, Open Mobile Alliance<sup>TM</sup>, OMA-TS-DCD\_MO-V1\_0,

URL:http://www.openmobilealliance.org/

[DCD-RD] "Dynamic Content Delivery Requirements", Version 1.0, Open Mobile Alliance<sup>TM</sup>, OMA-RD-DCD -

V1\_0, <u>URL:http://www.openmobilealliance.org/</u>

[DCD-Semantics] "Dynamic Content Delivery Technical Specification – Session and Transactions", Version 1.0, Open

Mobile Alliance<sup>TM</sup>, OMA-TS-DCD\_Semantics-V1\_0, <u>URL:http://www.openmobilealliance.org/</u>

[DCD\_ETR] "Enabler Test Requirements for DCD", Version 1.0, Open Mobile Alliance<sup>TM</sup>, OMA-ETR-DCD-V1\_0,

URL:http://www.openmobilealliance.org/

[OMNA] "OMA Naming Authority". Open Mobile Alliance™.

http://www.openmobilealliance.org/tech/omna

[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

 $[\textbf{OMADICT}] \qquad \text{``Dictionary for OMA Specifications'', Version x.y, Open Mobile Alliance}^{TM},$ 

OMA-ORG-Dictionary-Vx\_y, <u>URL:http://www.openmobilealliance.org/</u>

### 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

**DCD Client** See [DCD-RD].

**DCD-Enabled Client** 

Application

See [DCD-RD].

**DCD Server** See [DCD-RD].

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.

#### 3.3 Abbreviations

DCD Dynamic Content Delivery

ERDEF Enabler Requirement Definition

ERELD Enabler Release Definition

OMA Open Mobile Alliance

OMNA Open Mobile Naming Authority

#### 4. Release Version Overview

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

The DCD enabler's primary goal is to facilitate simplified user access to content services, by providing automated delivery of personalized content direct to the user's device. [DCD-AD] defines the architectural context of the DCD enabler, which includes the enabler entities **DCD Server** and **DCD Client.** In illustration:



Figure 1: DCD Server and DCD Client

DCD's specifications address the interfaces and behaviors of the DCD Server and DCD Client, which collectively support DCD-enabled service definition, access, discovery, selection, and delivery. The specifications encompass the following overall functions:

- 1. Client activation and DCD session management
- 2. DCD-Enabled Client Application registration
- 3. Subscription to DCD-enabled services
- 4. Subscription personalization
- 5. Content delivery to DCD-Enabled Client Application via pull and push methods
- 6. Content submission by DCD-Enabled Client Application
- 7. DCD-enabled service suspension
- 8. Channel discovery for DCD-enabled services
- 9. Usage tracking
- 10. Dynamic device context awareness
- 11. Charging
- 12. Deployment in a default network context supporting point-to-point IP bearers for pull methods and OMA Push for push methods
- 13. Adaptation for broadcast operation in OMA BCAST and Cell Broadcast network contexts

### 4.1 Version 1.0 Functionality

This release includes support for all DCD requirements defined in [DCD-RD]. The minimum functionality required for DCD Servers and DCD Clients includes:

- 1. Client activation and DCD session management
- 2. DCD-Enabled Client Application registration
- 3. Subscription to DCD-enabled services
- 4. Content delivery to DCD-Enabled Client Application via pull and push methods
- 5. Content submission by DCD-Enabled Client Application

- 6. DCD-enabled service suspension
- 7. DCD-enabled service discovery
- 8. Charging
- 9. Deployment in a default network context supporting point-to-point IP bearers for pull methods and OMA Push for push methods

# 5. Document Listing for DCD

This section is normative.

Doc Ref	Permanent Document Reference	Description					
Requirement Document							
[DCD_RD]	OMA-RD-DCD-V1_0-20110705-A	Requirement Document for DCD Enabler					
Architecture Document							
[DCD_AD]	OMA-AD-DCD-V1_0-20110705-A	Architecture Document for DCD Enabler					
Technical Specifica	Technical Specifications						
[DCD_Semantics]	OMA-TS-DCD_Semantics-V1_0-20110705-A	Specification that defines the interfaces and behaviors for the DCD Client and DCD Server.					
[DCD_Charging]	OMA-TS-DCD_Charging-V1_0-20110705-A	Specification that defines the charging interfaces of the DCD Server.					
[DCD_BCAST]	OMA-TS-DCD_BCAST_Adaptation-V1_0- 20110705-A	Specification that defines the adaptation of DCD for operation over broadcast networks based upon OMA BCAST.					
[DCD_CBS]	OMA-TS-DCD_CBS_Adaptation-V1_0-20110705-A	Specification that defines the adaptation of DCD for operation over broadcast networks based upon Cell Broadcast.					
[DCD_MO]	OMA-TS-DCD_MO-V1_0-20110705-A	Specification that defines the management object enabling configuration of DCD connection profiles via OMA Device Management.					
		Working file in Application Characteristics directory: file: MO_DCD_DDF-V1_0.ddf path: http://www.openmobilealliance.org/tech/omna/dm- mo					
Supporting File							
[DCD_XSD]	OMA-SUP-XSD_DCD-V1_0-20110705-A	XML schema for the messages and included elements of the DCD interfaces.					
		Working file in DTD directory: file: dcd_xsd-v1_0.xsd path:http://www.openmobilealliance.org/Tech/schemas.aspx					

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

#### 6. OMNA Considerations

DCD includes the following OMNA items:

- 1. OMA-based Uniform Resource Name (URN), used as the namespace identifier in the DCD schema
  - a. xmlns:dcd="http://www.openmobilealliance.com/oma-dcd/1.0"
- 2. Management Object
  - a. MO\_DCD\_DDF-V1\_0.ddf
- 3. PUSH Application Id
  - a. x-wap-application:dcd.ua
- 4. Content (MIME) Types and tokens
  - a. MIME type and token of DCD XML messages
    - i. application/vnd.oma.dcd
    - ii. 0x53
  - b. MIME type and token of binary XML tokenized DCD XML messages
    - i. application/vnd.oma.dcdc
    - ii. 0x54
- 5. DCD XML schema
  - a. http://www.openmobilealliance.org/tech/profiles/profiles/dcd-v1\_0.xsd
- 6. WBXML Document Public Identifier and token
  - a. -//OMA//DCD 1.0//EN
  - b. 0x15
- 7. User Agent Profile extension schema
  - a. http://www.openmobilealliance.org/tech/profiles/profiles/ccppschema\_dcd-v1\_0
- 8. CBS reserved ports for DCD over CBS
  - a. 7278

### 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 DCD - Client Requirements

This section is normative.

Item	Feature / Application	Requirement
OMA-ERDEF-DCD-C-001-M	DCD Client	[DCD-Semantics]:MCF

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

# 9. ERDEF for DCD - Server Requirements

This section is normative.

Item	Feature / Application	Requirement
OMA-ERDEF-DCD-S-001-M	DCD Server	[DCD-Semantics]:MSF

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

# Appendix A. Change History

# (Informative)

### A.1 Approved Version History

Reference	Date	Description
OMA-ERELD-DCD-V1_0-20110705-A	05 Jul 2011	Status changed to Approved by TP:
		OMA-TP-2011-0224-INP_DCD_V1_0_ERP_for_Final_Approval