



Enabler Test Requirements for Content Management Interface

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1. Scope

The Enabler Test Requirements (ETR) document for the Enabler under consideration is created and maintained by the Technical Working Group (TWG) responsible for the technical specifications for the corresponding Enabler.

The ETR document is intended to cover at least those requirements collected in the Requirements Document (RD) and the Architecture Document (AD) in addition to any other items the TWG has identified as important enough to warrant attention from interoperability perspective and identify any technical functionalities that should be covered by testing.

2. References

2.1 Normative References

- [IOPPROC] “OMA Interoperability Policy and Process”, Version 1.3, Open Mobile Alliance™, OMA-ORG-IOP_Process-V1_3, [URL:http://www.openmobilealliance.org/](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](http://www.ietf.org/rfc/rfc2119.txt)
- [ERELED] “Enabler Release Document for Content Management Interface”, Open Mobile Alliance™, OMA-ERELED-CMI-V1_0, [URL:http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)

2.2 Informative References

- [OMADICT] “Dictionary for OMA Specifications”, Version 2.7, Open Mobile Alliance™, OMA-ORG-Dictionary-V2_7, [URL:http://www.openmobilealliance.org/](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 “Introduction”, are normative, unless they are explicitly indicated to be informative.

3.2 Definitions

TestFest Multi-lateral interoperability testing event

3.3 Abbreviations

AD	Architecture Document
BPC	Business Process Component
CMC	Content Management Component
CMI	Content Management Interface
OMA	Open Mobile Alliance
RD	Requirements Document

4. Introduction

The purpose of this Enabler Test Requirements document is to help guide the testing effort for the Enabler CMI 1.0, documenting those areas where testing is most important to ensure interoperability of implementations.

The Enabler under consideration comprises the following specifications:

- OMA-CMI-TS-: Brief description of the specification

Generally, the testing activity should aim at validating the normal working behaviour of the client/server interactions, as well as testing the error conditions whenever it is possible to set up the appropriate scenarios. The following sections provide a more detailed description of the testing requirements for CMI-1.0.

This document also intends to provide some guidance on the prioritization of the specifications and features to be tested within CMI-1.0.

5. Test Requirements

5.1 Enabler Test Requirements

The test requirements collected in this section are related to the Enabler CMI-1.0.

In this section, it should be defined what specific functionalities of this Enabler shall or should be tested to ensure adequate operational of the implementations, including any security requirements and constraints on usage if specified (e.g. user can forward a media object but can not visualize it). That means that devices (clients/serves) shall do what they have to do and they shall not do what they are not allowed to do. Both types of test requirements (positive and negative testing) should be included here if so required.

Besides this information, OMA Architecture specifies a “Framework Architecture”, consisting of a set of common functions that need to be invoked in most use cases involving the different Service Enablers. The functionality requirements defined in the OMA Framework Architecture, i.e. authentication, authorization, charging, billing, common directory, etc. should also be listed in this table. Use cases are the main input to identify test requirements.

The following test requirements should cover both Conformance test requirements (i.e. functionality to be tested to verify whether it is implemented either in the client side or in the server side) and Interoperability test requirements (i.e. client/server interactions one with another)

The following sections (Mandatory and Optional test requirements) could also be separated for client and server test requirements.

The tables for the mandatory and optional test requirements include the following columns:

- FEATURE KEY:** A set of characters uniquely identifying the enabler test requirement to be tested. It is suggested that the Feature Key is no longer than 4 to 5 characters. The purpose of the Feature Key is that when used, it distinctly refers to only one feature to be tested.
- FEATURE DESCRIPTION:** A description of a technical specification feature to be tested.
- FEATURE TEST REQUIREMENTS:** A description of what shall be tested for the feature,

5.1.1 Mandatory Test Requirements

Mandatory test requirements should cover those features and use cases that require validation in order to approve the enabler. These include areas with complex interactions between the different functional components of the enabler architecture or where the complexity of the specification(s) is such that there is some uncertainty that they have been correctly specified.

These features and use cases SHOULD cover mandatory and MAY recommend prioritisation of optional implementation features. If testing of some of the mandatory features is not required, then the ETR SHALL contain an explanation for their exclusion.

NOTE: This table needs to be filled out at a level where ambiguity is not present but details are not overwhelming.

Ambiguity means that the details do not have several meanings nor have more than one possible implementation path following.

	Feature Key	Feature Description	Feature Test Requirements
Normal Flow	Content Upload	CMI requestor uploads content and associated metadata for ingestion by the CMC using CMI-1.	Successful upload of content and metadata. Optional upload methods should include: Self-contained, Decoupled, With references to previously uploaded content Without references to previously uploaded content.

	Feature Key	Feature Description	Feature Test Requirements
Error Flow			

Table 1: Applicability Table for Enabler Specific Mandatory Test Requirements

5.1.2 Optional Test Requirements

Optional test requirements should cover those features and use cases that are not mandated to be tested, but it is still felt that their inclusion will enhance the quality of the enabler validation.

Additionally, important conformance test requirements MAY be listed.

These features and use cases SHOULD cover optional and MAY cover mandatory implementation features. In case a mandatory feature is listed here, the Feature Test Requirements column should provide an explanation why testing of this feature is not mandated.

NOTE: This table needs to be filled out at a level where ambiguity is not present but details are not overwhelming.

Ambiguity means that the details do not have several meanings nor have more than one possible implementation path following.

	Feature Key	Feature Description	Feature Test Requirements
Normal Flow	Content Purchasing	CMI requestor requests that content item becomes available for access by sperific end user(s).	Purchase Request processing and issue of successful response.
	Content Availability	CMI requestor requests that previously uploaded content item becomes available to consume	MakeAvailable Request processing and issue of successful response.
	Content Availability	CMI requestor requests that previously uploaded content item becomes unavailable to consume	MakeUnavailable Request processing and issue of successful response.
	Metrics Reporting	CMI requestor queries the BPC for available reports, using CMI-4	ReportQuery Request processing and issue of successful response.
	Metrics Reporting	CMI requestor retrieves a metrics report from the BPC.	The ability to successfully retrieve content metrics report that was referred in a ReportQuery Response sent from the BPC.
Error Flow	Content Upload	CMI requestor uploads content and associated metadata for ingestion by the CMC using CMI-1.	A case where the metadata does not comply with the metadata schema.
	Content Upload	CMI requestor uploads content and associated metadata for ingestion by the CMC using CMI-1.	A case where referenced content can not be found.
	Content Purchasing	CMI requestor requests that content item becomes available for access by sperific end user(s).	A case where referenced user is not recognized.
	Content Availability	CMI requestor requests that content item becomes available to consume.	A case where referenced content can not be found.

Table 2: Applicability Table for Enabler Specific Optional Test Requirements

5.2 Backwards Compatibility

There are no previous CMI Releases to consider.

5.3 Enabler Dependencies

CMI-1.0 has no dependencies on other Enablers.

Appendix A. Change History

(Informative)

A.1 Approved Version History

Reference	Date	Description
OMA-ETR-CMI-V1_0-20110705-A	05 Jul 2011	Status changed to Approved by TP: OMA-TP-2011-0223-INP_CMI_V1_0_ERP_for_Final_Approval