Enabler Release Definition for Unified Virtual Experience (UVE)

Candidate Version 1.0 – 30 Oct 2012

Open Mobile Alliance
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Contents

1. Scope

The scope of this document is limited to the Enabler Release Definition of Unified Virtual Expeience (UVE) 1.0 according to OMA Release process and the Enabler Release specification baseline listed in section 5.

2. References

2.1 Normative References

[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 2.7, Open Mobile Alliance™,
                      OMA-ORG-Dictionary-V2_7, 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 10 to formally express the structure and internal dependencies between specifications in the Enabler Release specification baseline is detailed in [SCRRULES].

3.2   Definitions

Watchee	Watchee is a UVE user with an existing UA session which is identified by another UVE user to be monitored.
Output Stream	Output Stream is a video stream generated by VM by capturing UA display periodically and putting them in a sequence to get a single video stream.
Local Resources	Local Resources are the various physical or logical entities, available to the devices, which need to be consumed by the UAs to perform their functions. Local Resources includes sensors (GPS, accelerometer etc.), camera, calendar, address book etc.
OS-Independent UAs	OS-Independent UAs refers to those UAs which users can use irrespective of the device OS they are using.
Remote Resources	Remote Resources are the resources available in the network including user profile data (preference, location) and hardware resources (printer, scanner).
UVE Application	UVE Application is an application hosted remotely in the network.
Watcher	Watcher is a UVE user who is authorized to monitor and/or suspend an existing UVE application session.
Reconnection Method	Reconnection Method is how UVE entities will behave in case of an un-expected session disconnect. There are two type of Reconnection Method defined in this enabler.

1. Normal re-connection: This type of reconnection allow user to reload the UA as per application logic.

2. No-loss re-connection: As per this type of re-connection no user specific UA data must be lost. User should start consuming the application from the point where he/she was disconnected.

3.3   Abbreviations

OMA	Open Mobile Alliance
CP	Content Provider
SP	Service Provider
UA	UVE Application

4. Release Version Overview

This enabler release aims to for a platform which enables uniform access to the end-user irrespective of terminal limitation, application compatibility and complexity. All the applications are integrated at the server-side, from where they are provided as service to end-users (CaaS, Content As A Service).

4.1   Version 1.0 Functionality

UVE enabler release aims to provide a new application consumption model with the following functionalities:

- OS-Independent UAs: This functionality enables users to use UA irrespective of the OS they are using. This will increase the UA availability for users and vice versa.

- On-line UAs: This functionality allows users to use applications online instead of downloading them on to their devices. This will allow users to overcome terminal barriers (e.g memory) and accessing UA from any terminal at any time.

- UA Monitoring: This functionality enables user to monitor an existing UVE application session and if allowed to suspend the monitored session.

- No-loss reconnection: This functionality enables users to reconnect to an abnormally suspended UVE application session without UA data being lost.

4.1.1   Actors Involved in UVE ecosystem (Informative)

UVE enabler consists for different actors namely Users, UVE SP, Content Provider (developers) and UA Servers. Content provider provides UAs to UVE SP. UVE SP hosts those UAs in their network forming a cloud based service. Users access these services from their terminals using cloud computing technologies.
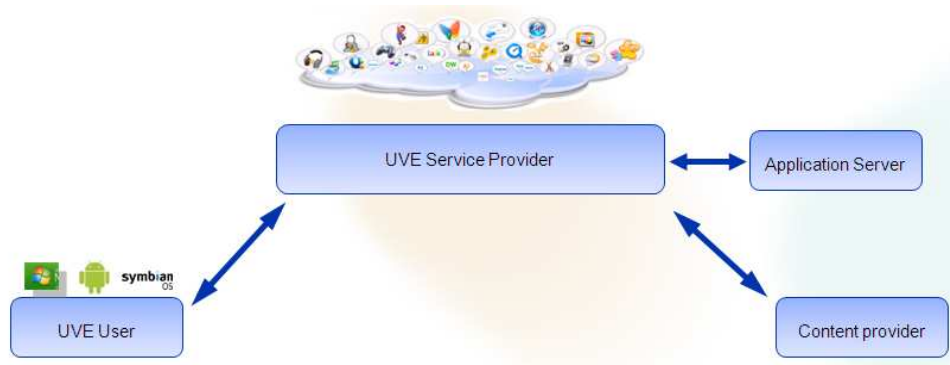
Figure 1: Actors involved in UVE ecosystem

5. Document Listing for UVE 1.0

This section is normative.

Doc Ref	Permanent Document Reference	Description
Technical Specifications		
[UVE-ER]	OMA-ER-UVE-V1_0-20120827-D	Specification that defines the architectural and technical aspect of the enabler.
[UVE-RD]	OMA-RD-UVE_RD-V1_0-20120824-D	Specification that defines the requirements.
[UVE-XSD]	OMA-SUP-UVE_V1.0_XSD-V1_0-20120928-D	This schema describes the structure and data types for Unified Virtual Experience

Table 1: Listing of Documents in UVE 1.0 Enabler

6. OMNA Considerations

There are no required OMNA registrations.

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 UVE 1.0 – UVE Client Requirements

This section is normative.

Item	Feature / Application	Requirement
OMA-ERDEF-UVE-C-001-M	UVE Client	UVE client procedures in [UVE-ER]

Table 2: ERDEF for UVE 1.0 UVE Client Requirements

9. ERDEF for UVE1.0 – VMM Requirements

This section is normative.

Item	Feature / Application	Requirement
OMA-ERDEF-UVE-VMM-001-M	Virtual Machine Manager	VMM procedures in [UVE-ER]

Table 3: ERDEF for UVE 1.0 VMM Requirements

10.ERDEF for UVE 1.0 – VM Requirements

This section is normative.

Item	Feature / Application	Requirement
OMA-ERDEF-UVE-VM-001-M	Virtual Machine	VM procedures in [UVE-ER]

Table 4: ERDEF for UVE 1.0 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 OMA-ERELD- UVE-V1_0	20 Feb 2012	All	Initial document to address the basic starting point
	24 Aug 2012	All Section 5	Clerical cleanup Update of current documents versions
	24 Aug 2012	Section 5	Update of current documents versions
	19 Oct 2012	Section 5	Update of documents listing
Candidate Version OMA-ERELD- UVE-V1_0	30 Oct 2012	All	Status changed to Candidate by TP TP ref # OMA-TP-2012-0383-INP_UVE_V1.0_ERP_and_ETR_for_Candidate_approval