



Reference Release Definition for DiagVoLTE

Approved Version 1.0 – 26 May 2015

Open Mobile Alliance
OMA-RRELD-DiagVoLTE-V1_0-20150526-A

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1. Scope

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

2. References

2.1 Normative References

- [3GPP-TS_23.032] 3GPP TS 23.032: Technical Specification Group Services and System Aspects; Universal Geographical Area Description (GAD)
- [3GPP-TS_23.038] 3GPP TS 23.038 “Alphabets and language-specific information”,
[URL:http://www.3gpp.org/ftp/Specs/archive/23_series/23.038/](http://www.3gpp.org/ftp/Specs/archive/23_series/23.038/)
- [3GPP-TS_24.301] 3GPP TS 24.301: Technical Specification Group Core Network and Terminals; Non-Access-Stratum (NAS) protocol for Evolved Packet System (EPS); Stage 3
- [3GPP-TS_36.331] 3GPP TS 36.331: Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Resource Control (RRC)
- [DiagMon1_2] “OMA DiagMon Management Object Enabler Release Definition”, Version 1.2, Open Mobile Alliance, OMA-ERELED-DiagMon_V1_2,
[URL:http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [DiagMonTS] “DiagMon Management Object Framework”, Version 1.2, Open Mobile Alliance, OMA-TS-DiagMonMOFrame-V1_2,
[URL:http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [DiagVoLTE_SUP] “DiagMon VoLTE Function MO”, Version 1.0, Open Mobile Alliance, OMA-SUP-MO_DiagMon_VoLTE_Function-V1_0-20140822, [URL:http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [DiagVoLTE_TS] “Diagnostics and Monitoring VoLTE Function Specification”, Version 1.0, Open Mobile Alliance, OMA-TS-DiagMon_VoLTE_Function-V1_0, [URL:http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [DM] “OMA Device Management Enabler Release Package”, Version 1.2, Open Mobile Alliance, OMA-ERP-DM_V1_2,
[URL:http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [ISO8601] ISO 8601:2004, Data elements and interchange formats -- Information interchange -- Representation of dates and times.
[URL:http://www.iso.ch/](http://www.iso.ch/)
- [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)
- [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)
- [RFC3261] “SIP: Session Initiation Protocol”, June 2002, [URL:http://www.ietf.org/rfc/rfc3261.txt](http://www.ietf.org/rfc/rfc3261.txt)
- [RFC3326] “The Reason Header Field for the Session Initiation Protocol (SIP)”, December 2002,
[URL:http://tools.ietf.org/html/rfc3326](http://tools.ietf.org/html/rfc3326)
- [RFC3986] “Uniform Resource Identifier (URI): Generic Syntax”, January 2005,
[URL:http://www.ietf.org/rfc/rfc3986.txt](http://www.ietf.org/rfc/rfc3986.txt)
- [RFC5481] “Packet Delay Variation Applicability Statement”, March 2009, [URL:http://tools.ietf.org/html/rfc5481](http://tools.ietf.org/html/rfc5481)
- [SCRRULES] “SCR Rules and Procedures”, Open Mobile Alliance™, OMA-ORG-SCR_Rules_and_Procedures,
[URL:http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)

2.2 Informative References

- [DMSTDOBJ1_3] “OMA Device Management Standardized Objects, Version 1.3”. Open Mobile Alliance™. OMA-TS-DM_StdObj-V1_3. [URL:http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [OMADICT] “Dictionary for OMA Specifications”, Version 2.9, Open Mobile Alliance™, OMA-ORG-Dictionary-V2_9, [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 “Release Version Overview” are normative, unless they are explicitly indicated to be informative.

3.2 Definitions

Reference Release A set of specifications and/or white papers which form a formal deliverable of OMA. The release can be referenced or otherwise used to support implementable enabler releases, but it cannot by itself be implemented in products.

Reference Release Definition A definition of the documents that are included in a Reference Release.

3.3 Abbreviations

OMA Open Mobile Alliance
OMNA Open Mobile Naming Authority
RRELD Reference Release Definition
VoLTE Voice Over Long Term Evolution

4. Release Version Overview

The DiagMon VoLTE Function enabler defines an additional instantiation of the DiagMon Management Object Framework specifically for obtaining diagnostic and performance information related to Voice over LTE (VoLTE). The DiagMon version 1.2 enabler provides an interface between a Management Authority and Devices, based on OMA DM, which allows collection and retrieval of device diagnostic information and performance metrics. The DiagMon Function specification, which is part of DiagMon V1.2, defines a number of standardised instantiations of the DiagMon Management Object Framework for the purposes of obtaining specific diagnostic and performance information. DiagVoLTE extends this capability to include VoLTE diagnostics.

4.1 Version 1.0 Functionality

Version 1.0 of the DiagMon VoLTE Function enabler will allow a mobile network operator to configure compliant devices to capture, record, and report performance metrics associated with Voice Over LTE calls. In conjunction with the DiagMon v1.2 enabler this information may be captured in response to various triggers, such as device location, time of day, or in response to abnormal behaviour such as call drops. The information can include VoLTE SIP call session statistics and call status, as well as SIP registration state changes. This information can be used by a network operator to assess VoLTE performance and diagnose network and device problems related to VoLTE.

5. Document Listing for DiagVoLTE V1.0

This section is normative.

Doc Ref	Permanent Document Reference	Description
Technical Specification		
[DiagVoLTE_TS]	OMA-TS-DiagMon_VoLTE_Function-V1_0-20150526-A	Technical specification for the DiagVoLTE function
Supporting File		
[DiagVoLTE_SUP]	OMA-SUP-MO_DiagMon_VoLTE_Function-V1_0-20150526-A	Support File containing the DiagVoLTE MO XML description

Table 1: Listing of Documents in DiagVoLTE Reference Release

6. OMNA Considerations

The OMNA portal needs to add and maintain the following MO into its registry:

MO Identifier	Description	Owner	Version	MO DDF	MO Spec
urn:oma:mo:oma-diag:volte_metrics:1.0	DDF Document for DiagMon DiagVoLTE	OMA	V1.0	mo_diagmon_function_diagvolte-v1_0.ddf	OMA-TS-DiagMon_VoLTE_Function-V1_0

7. API Considerations

Not applicable

Appendix A. Change History (Informative)

A.1 Approved Version History

Reference	Date	Description
OMA-RRELD-DiagVoLTE-V1_0-20150526-A	26 May 2015	Status changed to Approved by TP TP Ref # OMA-TP-2015-0083- INP_DiagVoLTE_V1_0_RRP_for_final_Approval