

Library Changes from vMRF 1.4 to vMRF 1.5.0

Virtual Multimedia Resource Function

LIBRARY REVISION INFORMATION

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1 Introduction

This document shows the changes in the vMRF library between the following releases:

From vMRF 1.4 EN/LZN 745 0023 R5A
To vMRF 1.5.0 EN/LZN 745 0023 R6A

The following changes are shown:

- Documents added
- Documents changed
- Documents removed

The reason for a change is described, for example, new, updated, or removed features, as well as corrected faults and responses to change requests.

Minor changes, however, such as language corrections, link errors, and editorial improvements are not shown in the tables below unless these are the only corrections in the update.

2 Description of Changes

The structure in this section reflects the structure of the current library.

2.1 New and Changed Documents

2.1.1 Library Overview

Table 1 Library Overview

Title	Identity	Change
Glossary of Terms and Acronyms	0033-AXM 101 04/1 Uen S	Added the following acronyms: CIDR, NSX, vCD, MIP. Added CEP (Connection End Point). Added FM (File Management) in Glossary.
Free and Open Source Software	0962-AXM 101 04/1 Uen N	Editorial changes.
A Guide to Active Library Explorer	2/1424-AXM 101 01/11 Uen A	New document



2.1.2 Product Overview

Table 2 Product Overview

Title	Identity	Change
vMRF Overview	1/155 13-AXM 101 04/1 Uen F	Editorial changes only.
vMRF Infrastructure Requirements	1/1056-AXM 101 04/1 Uen Y	Removed information regarding VMware from section Other Requirements. Updated IP address allocation row in section Network Requirements. Rephrased description to show that deployment without a DHCP server configured is also possible for CEE. Storage requirement is increased to 6 GB. Rephrased Compute Host Requirement to clarify the purpose of the requirement.

Table 3 Product Overview/Statement of Compliance

Title	Identity	Change
Virtual MRF High Level Statement of Compliance	1/174 02-AXM 101 04/1 Uen F	Editorial changes only.

2.1.3 Planning

Table 4 Planning

Title	Identity	Change
vMRF Network Impact Report	10948-FGC 101 3314 Uen G	Updated for vMRF 1.5.0.

2.1.4 Installation

Table 5 Installation

Title	Identity	Change
VNF Life Cycle Management	17/1553-AXM 101 04/1 Uen H	Added note to section Initiate VNF. Updated figure Instantiate VNF. Updated Step 4 with Add Network Element in ENM/OSS-RC. Moved step on Get Instance Configuration after step on Zone and Region Details. Added in step Get OSS/ENM Parameters that is is dependent on selection of Add Network Element in ENM/OSS-RC in step 4. Updated the minimum version of LAF image to 4.0.16 in Prerequisites. Updated minimum LAF image version to 4.2.35 from 4.0.16 in Prerequisites. Updated figures Select VIM and Select Tenant, and step Select Zone and Region Details from Instantiate VNF. Updated step on selecting target VNF version and added new optional step on ENM in Upgrade VNF. Updated Prerequisites in Upgrade VNF.



Table 5 Installation

Title	Identity	Change
Deployment Guide for Cloud Execution Environment (CEE)	4/1531-AXM 101 04/1 Uen AA	<p>Updated folder names containing HOT files in Download and Extract vMRF Software Delivery Package. Added Table 1 in Download and Extract vMRF Software Delivery Package. Added information on Cinder block storage in vMRF Deployment Process for CEE. Added that vmrf.yaml and scaling_group.yaml must be edited for Cinder use in Download and Extract vMRF Software Delivery Package. Added in Upload the vMRF Image that the procedure must be skipped if Cinder is used. Added information on Cinder block storage in Instantiate and Check vMRF with One VM. Updated flavor ID to auto in Create flavor.</p> <p>Obsolete information on Compute Host requirement removed in Define an Availability Zone for vMRF. Added mrf_config parameter in Provide Initial Configuration. Root disk space requirement is increased to 6GB. Added in row mrf_config in Prepare Deployment Parameters that if no value is provided, initial configuration must be provided later. Added in Provide Initial Configuration that the procedure is for cases when initial configuration was not provided during VNF instantiation.</p>
Deployment Guide for OpenStack	1/1531-AXM 101 04/1 Uen AA	<p>Added in Step 2. g. that for updating the stack, OpenStack Heat is used in Deployment Process for vMRF Deployment. Updated folder names containing HOT files in Download and Extract vMRF Software Delivery Package. Clarified that other VMs running a different application are not allowed to execute on the same physical CPUs as the vMRF in Define an Availability Zone for vMRF. Clarified that OpenStack CLI must be used in step 1. b in Create Network Topology. Added information on Cinder block storage in vMRF Deployment Process for OpenStack. Added that vmrf.yaml and scaling_group.yaml must be edited for Cinder use in Download and Extract vBGF Software Delivery Package. Added that if Cinder is used, 0 GB of root disk space must be defined in Create Flavor. Added in Upload the vMRF Image that the procedure must be skipped if Cinder is used. Added information on Cinder block storage in Instantiate and Check vMRF with One VM. Updated flavor ID to auto in Create Flavor.</p> <p>Added in row mrf_config in Prepare Deployment Parameters that if no value is provided, initial configuration must be provided later. Added in Provide Initial Configuration that the procedure is for cases when initial configuration was not provided during VNF instantiation. Added mrf_config parameter in Provide Initial Configuration. Root disk space requirement increased to 6GB. Obsolete information on Compute Host requirement removed in Define an Availability Zone for vMRF.</p>
Deployment Guide for VMware vSphere	2/1531-AXM 101 04/1 Uen X	New document
Upgrade Guide	7/1553-AXM 101 04/1 Uen M	Replaced information on ENM with information on upgrade VNF LCM operation in About This Document.

2.1.5 Initial Configuration

Table 6 Initial Configuration

Title	Identity	Change
Initial Configuration Guide	9/1553-AXM 101 04/1 Uen S	Note added for configuring networkManagedElementId attribute.



2.1.6 Operation and Maintenance

Table 7 Operation and Maintenance

Title	Identity	Change
CLI Commands	10/1553-AXM 101 04/1-V2 Uen V	<p>Removed option -c from compute-resource. Added new subsection mpd Commands. Updated printout for the following commands: compute-resource and h248-counters.</p> <p>Changed option -i to -l and updated printout in h248interface-counters. Added new option -d and examples, and moved option -j to options without arguments in context-info. Added EVS in list of valid arguments for option -s and in example in service-pm-counters. Removed the following options: d, o, i, m, n e, and p in overload-control. Added new subsections ipp neigh and mdp-usage. Added the following options: -s, -t, -c, and -i in ipp ping. Updated command printout in ipp pm-counters. Added new option -n, -d, -i in ipp internals. Added lm to the list of arguments for the --check option in verify_vmrf_node_status.py. Updated command description in ipp discard-counters, ipp conf, and configure-statsd. Added options without arguments in ipp pm-counters. Updated printout in cache-test. Added option -h in the following sections: stop-statsd. Added option -h and positional options --ip, --port in configure-statsd. Updated POSIX group access for compute-resource in mrfl_appl Commands.</p> <p>Command "cli_tool ipp ethdev-counters" expanded with options: -x [--xstats] Extended stats; -d [--device] arg Ethernet device id.</p>

Table 8 Operation and Maintenance/vMRF Managed Object Model (MOM)

Title	Identity	Change
Managed Object Model for vMRF	190 89-4/AXM 101 04/1 Uen J	

Table 9 Operation and Maintenance/Fault Management

Title	Identity	Change
ERICSSON-ALARM-MIB	5/196 03-CXC 172 7549 Uen E	
ERICSSON-ALARM-PC-MIB	4/196 03-CXC 172 7549 Uen B	
ERICSSON-ALARM-TC-MIB	3/196 03-CXC 172 7549 Uen E	
ERICSSON-TC-MIB	2/196 03-CXC 172 7549 Uen D	

Table 10 Operation and Maintenance/Fault Management/Alarms

Title	Identity	Change
Compute Resource Threshold Value Exceeded	10/1543-AXM 101 04/1 Uen H	Added value minor (5) for Perceived severity in table Alarm Attributes.
License Management, Autonomous Mode Activated	5/1543-AXM 101 04/1 Uen B	Editorial changes only.
License Management, Emergency Unlock Reset Key Required	13/1543-AXM 101 04/1 Uen B	Editorial changes only.
License Management, Key File Fault	14/1543-AXM 101 04/1 Uen B	Editorial changes only.



Table 10 Operation and Maintenance/Fault Management/Alarms

Title	Identity	Change
MRF Announcement File Missing	8/1543-AXM 101 04/1 Uen C	Editorial changes only.
MRF Announcement Storage Unavailable	9/1543-AXM 101 04/1 Uen C	Editorial changes only.
MRF H.248 Link Unavailable	2/1543-AXM 101 04/1 Uen L	Editorial changes only.
MRF Instance 80% Capacity Limit Exceeded	4/1543-AXM 101 04/1 Uen J	Editorial changes only.
MRF Instance Overloaded	15/1543-AXM 101 04/1 Uen J	Editorial changes only.
MRF IP Auto-Configuration Failure	12/1543-AXM 101 04/1 Uen E	Editorial changes only.
MRF Media Stream Recording Active	7/1543-AXM 101 04/1 Uen J	Editorial changes only.
MRF Next Hop Router Unreachable	18/1543-AXM 101 04/1 Uen C	Editorial changes only.
Service Level Agreement Violation	11/1543-AXM 101 04/1 Uen G	Editorial changes only.

Table 11 Operation and Maintenance/Fault Management/Events

Title	Identity	Change
Event List	5/1551-AXM 101 04/1 Uen C	Event MRF Compute Resource Lost is introduced.

Table 12 Operation and Maintenance/Fault Management/Troubleshooting Information

Title	Identity	Change
vMRF Troubleshooting Guideline	6/1553-AXM 101 04/1 Uen S	Removed information on gracefully locking through MTAS configuration in Manual Recovery Flow. Removed Reference List. "vMRF Cannot Play Announcement" case is expanded with 2 new possible causes. New case "Client cannot hear announcement" is introduced.
Media Stream Recording	11/1553-AXM 101 04/1 Uen E	Editorial changes only.

Table 13 Operation and Maintenance/Fault Management/Data Collection

Title	Identity	Change
Data Collection Guideline	6/1543-AXM 101 04/1 Uen G	Editorial changes only.

Table 14 Operation and Maintenance/Configuration Management

Title	Identity	Change
Configuration Management	5/1553-AXM 101 04/1 Uen Z	Added note to section Handling of Announcement Files. Removed information on graceful locking through MTAS in Locking a VM. Removed Reference List. Added in section Local Storage that announcement files are deleted during VNF upgrade procedure.



Table 15 Operation and Maintenance/Configuration Management/File Management

Title	Identity	Change
File Management	6/1551-AXM 101 04/1 Uen B	Editorial changes only.

Table 16 Operation and Maintenance/Performance Management

Title	Identity	Change
Performance Indicators	2/1551-AXM 101 04/1 Uen L	Editorial changes only.

Table 17 Operation and Maintenance/Security Management

Title	Identity	Change
vMRF Security Management	14/1553-AXM 101 04/1 Uen U	<p>Changed the maximum allowed number of failed login attempts from 10 to 5 in section "Brute-Force Attack Protection". New section: 2.3.1. Reserved POSIX Group. Updated Column Command and File Access for the following roles: MrfApplicationOperator, MrfApplicationSecurityAdministrator, MrfApplicationAdministrator, MrfApplicationSftpUser, SystemSecurityAdministrator, and SystemTroubleshooter.</p> <p>Added new section Privacy, and its subsections Notice and Consent and Personal Data Classification.</p> <p>Step "Activate the local authorization method..." is inserted to prevent LDAP users from having access to configuration data. MO navigation corrected by Step "Activate the local authorization method...".</p>
vMRF Hardening Guideline	12/1553-AXM 101 04/1 Uen H	Editorial changes only.

Table 18 Operation and Maintenance/SW Management

Title	Identity	Change
vMRF Backup and Restore Guideline	13/1553-AXM 101 04/1 Uen N	<p>Added new topic Restore Without Re-Deployment. Changed recommendation from re-deployment to restore and added prerequisites in When to Restore. Added new first step in Post-restore Checks.</p> <p>Added information about announcement storage to topic Restore Procedure.</p>

Table 19 Operation and Maintenance/SW Management/License Management

Title	Identity	Change
License Management	1/1553-AXM 101 04/1 Uen B	Editorial changes only.
Update NeLS Connection	1/1543-AXM 101 04/1 Uen B	Editorial changes only.

2.1.7 Emergency

Table 20 Emergency

Title	Identity	Change
Emergency Recovery Procedure for vMRF	16/1553-AXM 101 04/1 Uen F	Editorial changes only.



2.2

Removed Documents

No documents removed.