

**Oracle® Communications
User Data Repository**

Software Upgrade Procedure

Release 15.0.0.0.0

F87726-01

October 2023

ORACLE®

Copyright © 2023 Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are “commercial computer software” pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.



CAUTION:

Before recovering any system, please access My Oracle Support (MOS) (<https://support.oracle.com>) and review any Alerts that relate to this procedure.

My Oracle Support (MOS) (<https://support.oracle.com>) is your initial point of contact for all product support and training needs. A representative at Customer Access Support (CAS) can assist you with MOS registration.

Call the CAS main number at 1-800-223-1711 (toll-free in the US), or call the Oracle Support hotline for your local country from the list at <http://www.oracle.com/us/support/contact/index.html>.

See more information on MOS in the Appendix section.

TABLE OF CONTENTS

1. INTRODUCTION.....	6
1.1 Purpose and Scope.....	6
1.1.1 What is Not Covered by this Document.....	6
1.2 References.....	6
1.3 Acronyms.....	7
1.4 Terminology.....	8
1.5 How to use this Document.....	9
1.5.1 Executing Procedures.....	10
1.6 Recommendations.....	11
1.6.1 Frequency of Health Checks.....	11
1.6.2 Logging of Upgrade Activities.....	11
2. GENERAL DESCRIPTION.....	12
2.1 Supported Upgrade Paths.....	12
2.2 Traffic Management during Upgrade.....	12
2.3 Provisioning during Upgrade.....	13
2.4 Configurations.....	13
2.4.1 Cloud Configurations.....	13
2.5 Multi Active MPs.....	13
3. UPGRADE PLANNING AND PRE-UPGRADE PROCEDURES.....	14
3.1 Required Materials.....	14
3.1.1 Application and OL7 TPD ISO Image File / Media.....	14
3.1.2 Logins, Passwords and Site Information.....	15
3.2 Pre-Upgrade Procedures.....	15
3.2.1 Hardware Upgrade Preparation.....	17
3.2.2 Review Release Notes.....	17
3.2.3 Required Materials Check.....	17
3.2.4 Perform Health Check (Upgrade Preparation).....	17
3.2.5 ISO Administration.....	18
3.3 Order of Application Upgrade.....	20
3.4 Upgrade Execution Overview for Virtual Machine Configurations.....	20
3.4.1 Primary NOAMP / DR NOAMP Execution Overview.....	20
3.4.2 SOAM Server Upgrade Execution Overview.....	21
3.4.3 MP Server Upgrade Execution Overview.....	21
3.5 Upgrade Acceptance Overview.....	21
4. VM TO VM UPGRADE FROM UDR-12.11.X TO UDR-15.0.....	22
4.1 Primary NOAMP / DR NOAMP Upgrade Execution.....	22
4.1.1 Perform Health Check (Pre-Upgrade).....	23
4.1.2 Primary NOAMP / DR NOAMP Upgrade.....	23
4.1.3 Perform Health Check (Post Primary NOAMP / DR NOAMP Upgrade).....	35
4.2 SOAM site Upgrade Execution.....	35
4.2.1 Perform Health Check (Pre-Upgrade).....	35
4.2.2 SOAM Upgrade.....	36
4.2.3 MP Upgrade.....	39
4.2.4 Perform Health Check (Post SOAM Upgrade).....	42
4.3 Accept/Backout upgrade of VM to VM upgrade.....	42
5. BARE METAL MIGRATION FROM UDR-12.11.X TO UDR-15.0.....	43
5.1 Bare Metal to Virtual Machine Migration without split.....	43
5.2 Bare Metal to Virtual Machine Migration with Export/Import split procedures.....	47
6. SINGLE SERVER UPGRADE.....	55
6.1 Upgrading a Single Server.....	55

7. RECOVERY PROCEDURES	61
7.1 Order of Backout	61
7.2 Backout Setup	62
7.3 Backout of SOAM / MP	62
7.4 Backout of DR NOAMP NE	66
7.5 Backout of Primary NOAMP NE	69
APPENDIX A. ACCESSING THE OAM SERVER GUI (NOAMP / SOAM)	72
APPENDIX B. HEALTH CHECK PROCEDURES	74
APPENDIX C. UPGRADE OF A SERVER [VM TO VM – UDR-12.11.X TO UDR-15.0]	81
APPENDIX D. BACKOUT OF A SERVER	91
APPENDIX E. UPGRADE ACCEPTANCE	98
APPENDIX F. VERIFYING SERVERS ARE SYNCHRONIZED	100
APPENDIX G. CONFIGURING SERVICES FOR DUAL PATH HA	101
APPENDIX H. RESIZING VM GUEST DISK FOR UPGRADE	104
APPENDIX I. MY ORACLE SUPPORT (MOS)	118
APPENDIX J. LOCATE PRODUCT DOCUMENTATION ON THE ORACLE HELP CENTER SITE	119

List of Figures

Figure 1: Supported Upgrade Paths	12
Figure 2: OL6 to OL8 upgrade diagram	22
Figure 3: Baremetal site and VM site association.....	43
Figure 4: Separation of BM site from VM site after upgrade to UDR-15.0	44
Figure 5: Subscriber Migration to Cloud OCUDR from Bare metal OCUDR.....	47

List of Tables

Table 1 - Acronyms	7
Table 2 - Terminology	9
Table 3 - Sample Procedure.....	11
Table 4 - Pre-Upgrade Overview	15
Table 5 - DR NOAMP Upgrade Procedures for Virtual Machine Configurations.....	20
Table 6 - Primary NOAMP Upgrade Procedures for Virtual Machine Configurations.....	20
Table 7 - SOAM Upgrade Procedures for Virtual Machine Configurations	21
Table 8 – MP Server Upgrade Procedures for Virtual Machine Configurations.....	21
Table 9 – Upgrade Acceptance overview	21

List of Procedures

Procedure 1: Required Materials Check	17
Procedure 2: ISO Administration for Upgrades.....	18
Procedure 3: Remove Additional GUI Sessions	23
Procedure 4: Full Database Backup.....	26
Procedure 5: Upgrade DR NOAMP NE	29
Procedure 6: Upgrade Primary NOAMP NE.....	32
Procedure 7: Upgrade SOAM NE.....	36
Procedure 8: Upgrade MP NE	39
Procedure 9: Migration procedure from BM to VM.....	44
Procedure 10: Migration procedure from BM to VM using Export/Import tool	47
Procedure 11: Upgrade Single Server.....	55
Procedure 12: Backout of SOAM / MP	62
Procedure 13: Backout of DR NOAMP NE	66
Procedure 14: Backout of Primary NOAMP NE	69
Procedure 15: Accept Upgrade	98

1. INTRODUCTION

1.1 Purpose and Scope

This document describes the methods utilized and the procedures executed to perform a major upgrade from Oracle Communications User Data Repository 12.11.x to Oracle Communications User Data Repository 15.0.0.0.0 release. The audience for this document includes Oracle customers as well as the following internal groups: Software Development, Quality Assurance, Product Verification, Information Development, and Consulting Services including NPX. This document provides step-by-step instructions to execute Release 15.0.0.0.0 or later software upgrade. The Oracle Communications User Data Repository software includes all Oracle's Tekelec Platform Distribution (TPD) software. Any TPD upgrade necessary is included automatically as part of the software upgrade. The execution of this procedure assumes that the Oracle Communications User Data Repository software load (ISO file, CD-ROM or other form of media) has already been delivered to the customer's premises. This includes delivery of the software load to the local workstation being used to perform this upgrade.

1.1.1 What is Not Covered by this Document

- Distribution of Oracle Communications User Data Repository 15.0 software loads. Please visit the Oracle Software Delivery Cloud here: <https://edelivery.oracle.com/osdc/faces/Home.jsp>
- Initial Installation of Oracle Communications User Data Repository 12.11 software. Refer [1].

1.2 References

Oracle customer documentation is available on the web at the Oracle Help Center (OHC) site, <http://docs.oracle.com>. You do not have to register to access these documents. Viewing these files requires Adobe Acrobat Reader, which can be downloaded at www.adobe.com.

1. Log into the Oracle Technology Network site at <http://docs.oracle.com>.
2. Select the tab "Find a product"
3. Type "User Data Repository"
4. Takes you to "CGBU Documentation"
5. Select "User Data Repository" followed by version

[1] Oracle Communications User Data Repository *Installation and Configuration Guide, F56659-01, latest revision*

[2] Oracle Communications User Data Repository *Cloud Installation and Configuration Guide, F87587-01, latest revision*

1.3 Acronyms

This section describes acronyms used in this document.

Acronym	Meaning
CGBU	Communications Global Business unit
CD-ROM	Compact Disc Read-only Media
CSV	Comma-separated Values
DB	Database
DIU	Dual Image Upgrade
DR	Disaster Recovery
FOA	First Office Application
GA	General Availability
GPS	Global Product Solutions
GUI	Graphical User Interface
HA	High Availability
IMI	Internal Management Interface
IP	Internet Protocol
IPM	Initial Product Manufacture
ISO	ISO 9660 file system (when used in the context of this document)
LA	Limited Availability
MOP	Method of Procedure
MOS	My Oracle Support
MP	Message Processing or Message Processor
MW	Maintenance Window
NE	Network Element
NO	Network OAM&P
NOAMP	Network OAM&P
OA	HP Onboard Administrator
OAM	Operations, Administration and Maintenance
OAM&P	Operations, Administration, Maintenance and Provisioning
OCUDR	Oracle Communications User Data Repository
PM&C	Platform Management and Configuration
RMS	Rack Mount Server
SO	System OAM
SOAM	System OAM
SPR	Subscriber Profile Repository
TPD	Tekelec Platform Distribution
TVOE	Tekelec Virtualized Operating Environment
UDR	User Data Repository
UI	User Interface
VIP	Virtual IP
VM	Virtual Machine
VPN	Virtual Private Network
XMI	External Management Interface
XSI	External Signaling Interface

Table 1 - Acronyms

Oracle Communications User Data Repository Software Upgrade Procedure

1.4 Terminology

This section describes terminology as it is used within this document.

Term	Meaning
Upgrade	The process of converting an application from its current release on a System to a newer release.
Major Upgrade	An upgrade from a current release to a newer major release. An example of a major upgrade is: release 12.11.x to release 15.0
Release	Release is any particular distribution of software that is different from any other distribution.
Single Server Upgrade	The process of converting an Oracle Communications User Data Repository server from its current release on a single server to a newer release.
Standalone Server Upgrade	Single server upgrade performed on a standalone server. This upgrade requires the use of the platcfg UI.
Software Only Upgrade	An upgrade that does not require a Database Schema change, only the software is changed.
DB Conversion Upgrade	An upgrade that requires a Database Schema change performed during upgrade that is necessitated by new feature content or bug fixes.
Backout	The process of converting a single Oracle Communications User Data Repository server to a prior version. This could be performed due to failure in Single Server Upgrade, or the upgrade cannot be accepted for some other reason. Backout is a user initiated process.
Downgrade/Backout	The process of converting an Oracle Communications User Data Repository server from its current release to a prior release. This could be performed due to a misbehaving system. Once the upgrade is accepted, servers cannot be backed out to previous release.
Rollback	Automatic recovery procedure that puts a server into its pre-upgrade status. This procedure occurs automatically during upgrade if there is a failure.
Source Release	Software release to upgrade from.
Target Release	Software release to upgrade to.
Oracle RMS	Oracle Server X5-2 or Netra X5-2
Primary NOAM Network Element	The network element that contains the active and standby NOAM servers in an Oracle Communications User Data Repository. If the NOAMs are deployed on a rack-mount server (and often not co-located with any other site), that RMS is considered the primary NOAM network element. If the NOAMs are virtualized on a C-class blade that is part of one of the sites, then the primary NOAM network element and the signaling network element hosting the NOAMs are one and the same.
DR NOAM Network Element	Disaster Recovery NOAMs that are ready to take over as the primary Site if a disaster should occur.
Signaling Network Element	Any network element that contains MPs (and possibly other C-level servers), thus carrying out Diameter signaling functions. Each SOAM pair and its associated C-level servers are considered a single signaling network element. And if a signaling network element includes a server that hosts the NOAMs, that signaling network element is also considered to be the primary NOAM network element.
Site	Physical location where one or more network elements reside.
Health Check	Procedure used to determine the health and status of the network. This includes statuses displayed from the GUI. This can be observed Pre-Server Upgrade, In-Progress Server Upgrade, and Post-Server Upgrade.

Oracle Communications User Data Repository Software Upgrade Procedure

Upgrade Ready	State that allows for graceful upgrade of a server without degradation of service. It is a state that a server is required to be in before it can be upgraded. The state is defined by the following attributes: Server is Forced Standby Server is Application Disabled (Signaling servers will not process any traffic)
UI	User interface. "Platcfg UI" refers specifically to the Platform Configuration Utility User Interface, which is a text-based user interface.
Management Server	Server deployed with HP c-class or RMS used to host PM&C application, to configure Cisco 4948 switches and to serve other configuration purposes.
Software Centric	The business practice of delivering an Oracle software product, while relying upon the customer to procure the requisite hardware components. Oracle provides the hardware specifications, but does not provide the hardware, and is not responsible for hardware installation, configuration, or maintenance.
Enablement	The business practice of providing support services (hardware, software, documentation, etc) that enable a 3rd party entity to install, configuration, and maintain Oracle products for Oracle customers.
1+1	Setup with one active and one standby MP.
N+0	Setup with N active MP(s) but no standby MP.
NO	Network OAM for Oracle Communications User Data Repository.
SO	System OAM for Oracle Communications User Data Repository.

Table 2 - Terminology

1.5 How to use this Document

When executing this document, there are a few key points which help to ensure that the user understands the author's intent. These points are as follows:

1. Before beginning a procedure, completely read the instructional text (it will appear immediately after the Section heading for each procedure) and all associated procedural WARNINGS or NOTES.
2. Before execution of a STEP within a procedure, completely read the left and right columns including any STEP specific WARNINGS or NOTES.
3. If a procedural STEP fails to execute successfully or fails to receive the desired output, STOP and contact the CAS main number at 1-800-223-1711 (toll-free in the US), or call the Oracle Support hotline for your local country from the list at <http://www.oracle.com/us/support/contact/index.html> for assistance before attempting to continue.

Oracle Communications User Data Repository Software Upgrade Procedure

1.5.1 Executing Procedures

The user should be familiar with the structure and conventions used within these procedures before attempting execution. **Table 3** and the details below provide an example of how procedural steps might be displayed within this document.

Column 1: Step

- Column 1 in **Table 3** contains the Step number and a checkbox if the step requires action by the user.
- Sub-steps within a given Step X are referred to as Step X.Y. (See example: Step 1 has sub-steps Steps 1.1 to 1.2).
- Each checkbox should be checked-off to keep track of the progress during execution of the procedure.

Column 2: Procedure

- Column 2 in **Table 3** contains a heading which indicates the server/IP being accessed as well as text instructions and/or notes to the user. This column may also describe the operations to be performed or observed during the step.

Column 3: Result

- Column 3 in **Table 3** generally displays the results of executing the instructions (shown in column 2) to the user.
- The Result column may also display any of the following:
 - Inputs (commands or responses) required by the user.
 - Outputs which should be displayed on the terminal.
 - Illustrations or graphic figures related to the step instruction.
 - Screen captures from the product GUI related to the step instruction.

Procedure x: Verifying the Time in GMT

Step	Procedure	Result
1. <input type="checkbox"/>	Active NOAMP VIP: 1)Access the command prompt. 2)Log into the server as the "admusr" user.	Login as: admusr Using keyboard-interactive authentication. Password: <password> NOTE: The password will not appear on the screen as the characters are typed.
2. <input type="checkbox"/>	Active NOAMP VIP: Output similar to that shown on the right will appear as the server returns to a command prompt.	*** TRUNCATED OUTPUT *** VPATH=/opt/TKLCcomcol/runcm6.3:/opt/TKLCcomcol/cm6.3 PRODPATH= RELEASE=6.3 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/udr:/usr/TKLC/awpcomm on:/usr/TKLC/comagent- gui:/usr/TKLC/comagent:/usr/TKLC/dpi:/usr/TKLC/capm/prod/plugins PRODPATH=/opt/comcol/prod RUNID=00 [admusr@908070109-NO-A ~]\$
3. <input type="checkbox"/>	Active NOAMP VIP: Verify that the correct Date & Time are displayed in GMT (+/- 4 min.)	date -u Thu Apr 24 17:13:17 UTC 2014 [admusr@908070109-NO-A filemgmt]\$

Oracle Communications User Data Repository Software Upgrade Procedure

Procedure x: Verifying the Time in GMT

Step	Procedure	Result
THIS PROCEDURE HAS BEEN COMPLETED		

Table 3 - Sample Procedure

1.6 Recommendations

This section provides some recommendations to consider when preparing to execute the procedures in this document.

1.6.1 Frequency of Health Checks

The user may execute the **Perform Health Check** or **View Logs** steps freely or repeat as many times as desired in between procedures during the upgrade process. It is not recommended to do this in between steps within a procedure unless there is a failure to troubleshoot.

1.6.2 Logging of Upgrade Activities

It is a best practice to use a terminal session with logging enabled to capture user command activities and output during the upgrade procedures. These can be used for analysis in the event of issues encountered during the activity. These logs should be saved offline at the completion of the activity.

Note that GUI activities are logged in a security log, but it is also recommended to use a screen capture tool to collect a sequence of screen shots before, during, and after the upgrade. This can also be useful for later analysis.

2. GENERAL DESCRIPTION

This document defines the step-by-step actions performed to execute a software upgrade of an in-service Oracle Communications User Data Repository from the source release to the target release. A major upgrade advances the Oracle Communications User Data Repository software from 12.11.x source release to 15.0 target release.

2.1 Supported Upgrade Paths

The supported Oracle Communications User Data Repository upgrade paths are shown in **Figure 1** below.

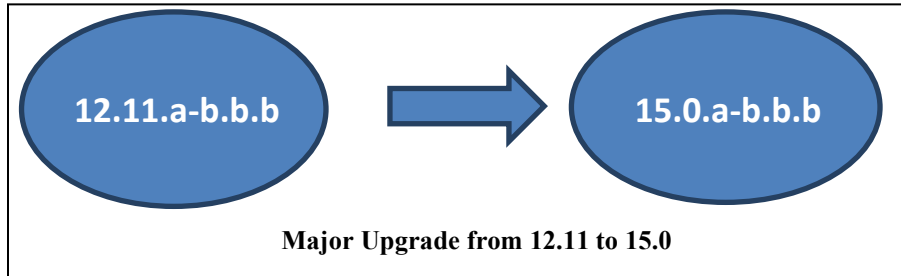


Figure 1: Supported Upgrade Paths

NOTE: Initial installation is not within the scope of this upgrade document. See [1] for initial installation requirements.

2.2 Traffic Management during Upgrade

Upgrade of NOAM and SOAM servers is not expected to affect traffic handling at the MPs and other traffic-handling servers.

For the upgrade of the MPs, traffic connections are disabled only for the servers being upgraded. The remaining servers continue to service traffic.

2.3 Provisioning during Upgrade

For Oracle Communications User Data Repository 12.11.x, Provisioning (live traffic) will still continue while upgrade is being executed. While the standby NOAMP is being upgraded, the Active NOAMP will still receive provisioning requests. After the upgrade is complete, replication will be turned on to the Standby NOAMP to sync the most recent requests from the active NOAMP. Then the Standby NOAMP will become active to start receiving provisioning requests, while the previous Active NOAMP is being upgraded.

2.4 Configurations

2.4.1 Cloud Configurations

This includes all Oracle Communications User Data Repository software running within a cloud environment. This can be deployed either as a single site or as a geo-redundant deployment, with 1 or two 2 servers filling each role at each site. See reference [4] for full details.

Non HA				
Min number of VMs	Max number of VMs	Min number of VMs	Max number of VMs	HA config
1	2	2	2	Active-Standby
1	2	2	2	Active-Standby
1	1	2	4	Active-Active

2.5 Multi Active MPs

The site upgrade procedure is for multi-Active MPs. This includes two per site for Low Capacity configurations or up to 4 per site for Normal Capacity Configurations. Single server configurations only have one active MP.

3. UPGRADE PLANNING AND PRE-UPGRADE PROCEDURES

This section contains all information necessary to prepare for and execute an upgrade. The materials required to perform an upgrade are described, as are pre-upgrade procedures that should be run to ensure the system is fully ready for upgrade. Then, the actual procedures for each supported upgrade path are given.

There are overview tables throughout this section that help you plan the upgrade and estimate how long it will take to perform various actions. The stated time durations for each step or group of steps are estimates only. Do not use the overview tables to execute any actions on your system. Only the procedures should be used when performing upgrade actions, beginning with Procedure 1: Required Materials Check.

3.1 Required Materials

The following materials and information are needed to execute an upgrade:

- Target-release application DIU ISO image file, or target-release application media.
- GUI access to the Oracle Communications User Data Repository Network OAM&P VIP with Administrator privileges.
- User logins, passwords, IP addresses and other administration information. See Section 3.1.2.
- SSH/SFTP access to the Oracle Communications User Data Repository Network OAM&P XMI VIP as the “admusr” user.

NOTE: All logins into the Oracle Communications User Data Repository NO servers are made via the External Management (XMI) VIP unless otherwise stated.

- VPN access to the customer’s network is required if that is the only method to log into the OAM servers.
- Direct access to server IMI IP addresses from the user’s local workstation is preferable in the case of a Backout.

NOTE: If direct access to the IMI IP addresses cannot be made available, then target server access can be made via a tandem connection through the Active Primary NO (i.e., An SSH connection is made to the Active Primary NO XMI first, then from the Active Primary NO, a 2nd SSH connection can be made to the target server’s IMI IP address).

3.1.1 Application and OL7 TPD ISO Image File / Media

You must obtain a copy of the target release DIU ISO image file. This file is necessary to perform the upgrade. The Oracle Communications User Data Repository ISO image file will be in the following format:

Example: UDR-15.0.0.0.0_115.11.0-x86_64-DIU.iso

OL7 based TPD ISO image file will be in the following format:

Example: TPD.install-8.0.0.0.0_90.13.0-OracleLinux7.4-x86_64-DIU.iso

NOTE: Actual number values may vary between releases.

Prior to the execution of this upgrade procedure, it is assumed that the Oracle Communications User Data Repository DIU ISO image file has already been delivered to the customer’s premises. The DIU ISO image file must reside on the local workstation used to perform the upgrade, and any user performing the upgrade must have access to the ISO image file. If the user performing the upgrade is at a remote location, it is assumed the DIU ISO file is already available to them before starting the upgrade procedure.

3.1.2 Logins, Passwords and Site Information

Obtain all the	Description	Recorded Value
Credentials	GUI Admin Username 1	
	GUI Admin Password	
	Admusr Password2	
	Root Password3	
	Blades iLO Admin Username	
	Blades iLO Admin Password	
VPN Access Details	Customer VPN information (if needed)	
NO	Primary NOAM&P	
	DR NOAM&P	
	XMI VIP address4	
	NO 1 XMI IP Address	
	NO 2 XMI IP Address	
SO	XMI VIP address	
	SO 1 XMI IP Address (Site 1)	
	SO 2 XMI IP Address (Site 1)	
	SOAM 1 XMI IP Address (Site 2)	
	SOAM 2 XMI IP Address (Site 2)	
	SO 2 iLO IP Address	
	MP 1 iLO IP Address	
	MP 2 iLO IP Address	
	
MP(n) iLO IP Address (optional)		
Software	Source Release Number	
	Target Release Number	
	ISO Image (.iso) file name	

3.2 Pre-Upgrade Procedures

The pre-upgrade procedures shown in the following table have no effect on the live system.

Table 4 - Pre-Upgrade Overview

Procedure Number	Procedure Title	Elapsed Time (Hours:Minutes)	
		This Step	Cumulative
1	<i>Required Materials Check</i>	00:15	00:15

¹ Note: The user must have administrator privileges. This means the user belongs to the **admin** group in Group Administration.

² Note: This is the password for the **admusr** login on the servers. This is not the same login as the GUI Administrator. The admusr password is required if recovery procedures are needed. If the admusr password is not the same on all other servers, then all those servers’ root passwords must also be recorded; use additional space at the bottom of this table.

³Note: This is the password for the **root** login on the servers. This is not the same login as the GUI Administrator. The root password is required if recovery procedures are needed. If the root password is not the same on all other servers, then all those servers’ root passwords must also be recorded; use additional space at the bottom of this table.

⁴ Note: All logins into the NO servers are made via the External Management VIP unless otherwise stated.

Oracle Communications User Data Repository Software Upgrade Procedure

2	ISO Administration	*	*
Appendix B	Health Check Procedures (depends on number of servers)	0:10-1:15	00:25-01:30

***NOTE:** ISO transfers to the target systems cannot be estimated since times will vary significantly depending on the number of systems and the speed of the network.

The ISO transfers to the target systems should be performed prior to, outside of, the scheduled maintenance window. The user should schedule the required maintenance windows accordingly.

3.2.1 Hardware Upgrade Preparation

There is no hardware preparation necessary when upgrading to release 15.0 since we are performing dual image upgrade from 12.11.x to 15.0 on cloud-based server. Hence, we do not need to prepare the hardware. In case of Bare metal to cloud migration, we will only perform the health checkup.

3.2.2 Review Release Notes

Before starting the upgrade, review the Release Notes for the new Oracle Communications User Data Repository 15.0 release to understand the functional differences and possible traffic impacts of the upgrade. **Also, very important to check Oracle Communications UDR-PCRF compatibility before performing Major Upgrade since all versions are not compatible.** Release notes for this and all release are available at <https://docs.oracle.com>.

3.2.3 Required Materials Check

This procedure verifies that all required materials needed to perform an upgrade have been collected and recorded.

Procedure 1: Required Materials Check

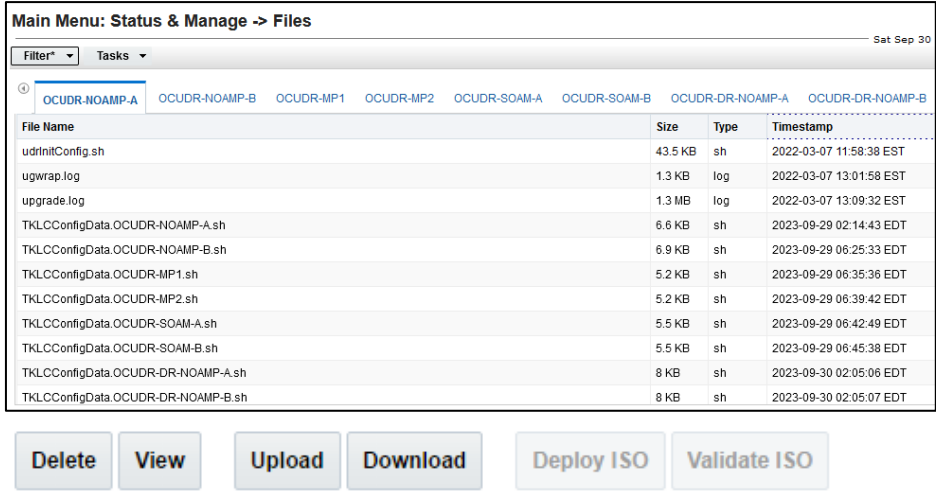
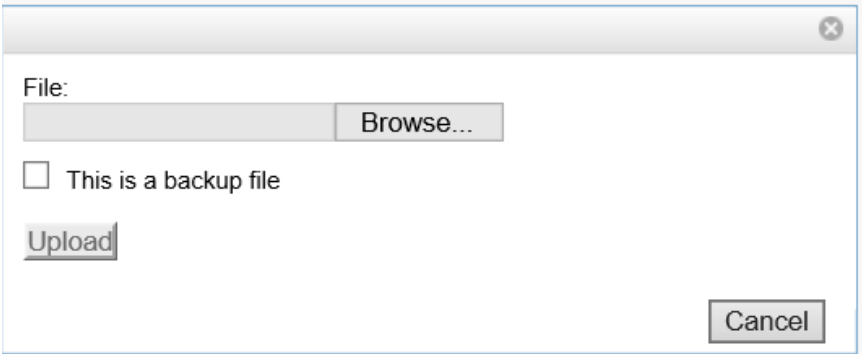
Step	This procedure verifies that all required materials are present. Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.	
1. <input type="checkbox"/>	Verify all required materials are present.	Materials are listed in Section 3.1. Verify all required materials are present.
2. <input type="checkbox"/>	Verify all administration data needed during upgrade.	Double-check that all information in Section 3.1.2 is filled-in and accurate.
3. <input type="checkbox"/>	Contact Oracle CGBU Customer Care Center	Contact the My Oracle Support and inform them of plans to upgrade this system. See for these instructions.

3.2.4 Perform Health Check (Upgrade Preparation)

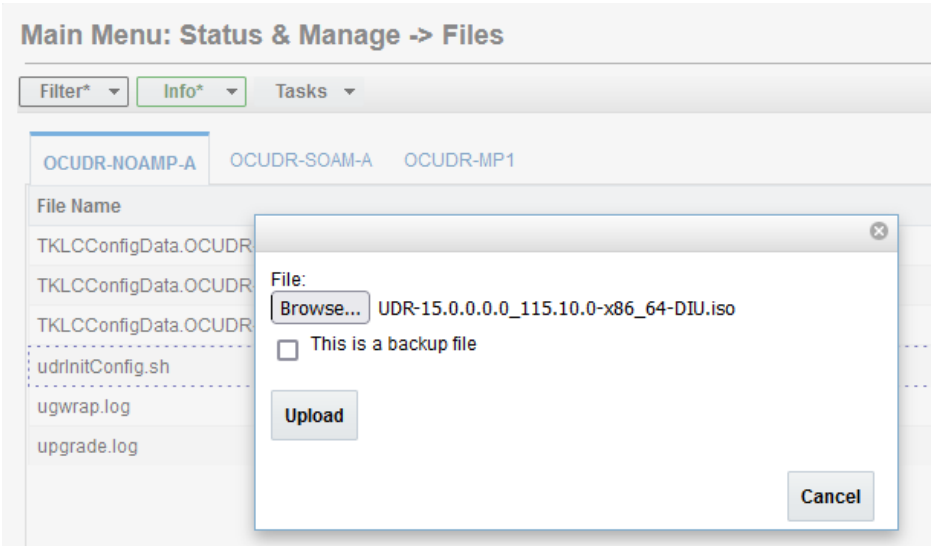
<input type="checkbox"/>	<p>This procedure is part of Software Upgrade Preparation and is used to determine the health and status of the Oracle Communications User Data Repository network and servers. This may be executed multiple times but must also be executed at least once within the time frame of 24-36 hours prior to the start of the upgrade procedures.</p> <ul style="list-style-type: none"> Execute Health Check procedures as specified in Appendix B.
--------------------------	---

3.2.5 ISO Administration

Procedure 2: ISO Administration for Upgrades

Step	Procedure	Result																																																
<p>1.</p> <input type="checkbox"/>	<p>Using the VIP address, access the Primary NOAMP GUI.</p>	<p>Access the Primary NOAMP GUI as specified in Appendix A.</p>																																																
<p>2.</p> <input type="checkbox"/>	<p>Active NOAMP VIP: Upload ISO file to the Active NOAMP server 1) Select... Main Menu → Status & Manage → Files 2) Using the cursor, select the active NOAMP server from the list tabs. 3) Click on the “Upload” button.</p>	 <table border="1"> <thead> <tr> <th>File Name</th> <th>Size</th> <th>Type</th> <th>Timestamp</th> </tr> </thead> <tbody> <tr> <td>udrinitConfig.sh</td> <td>43.5 KB</td> <td>sh</td> <td>2022-03-07 11:58:38 EST</td> </tr> <tr> <td>ugwrap.log</td> <td>1.3 KB</td> <td>log</td> <td>2022-03-07 13:01:58 EST</td> </tr> <tr> <td>upgrade.log</td> <td>1.3 MB</td> <td>log</td> <td>2022-03-07 13:09:32 EST</td> </tr> <tr> <td>TKLCConfigData.OCUDR-NOAMP-A.sh</td> <td>6.6 KB</td> <td>sh</td> <td>2023-09-29 02:14:43 EDT</td> </tr> <tr> <td>TKLCConfigData.OCUDR-NOAMP-B.sh</td> <td>6.9 KB</td> <td>sh</td> <td>2023-09-29 06:25:33 EDT</td> </tr> <tr> <td>TKLCConfigData.OCUDR-MP1.sh</td> <td>5.2 KB</td> <td>sh</td> <td>2023-09-29 06:35:36 EDT</td> </tr> <tr> <td>TKLCConfigData.OCUDR-MP2.sh</td> <td>5.2 KB</td> <td>sh</td> <td>2023-09-29 06:39:42 EDT</td> </tr> <tr> <td>TKLCConfigData.OCUDR-SOAM-A.sh</td> <td>5.5 KB</td> <td>sh</td> <td>2023-09-29 06:42:49 EDT</td> </tr> <tr> <td>TKLCConfigData.OCUDR-SOAM-B.sh</td> <td>5.5 KB</td> <td>sh</td> <td>2023-09-29 06:45:38 EDT</td> </tr> <tr> <td>TKLCConfigData.OCUDR-DR-NOAMP-A.sh</td> <td>8 KB</td> <td>sh</td> <td>2023-09-30 02:05:06 EDT</td> </tr> <tr> <td>TKLCConfigData.OCUDR-DR-NOAMP-B.sh</td> <td>8 KB</td> <td>sh</td> <td>2023-09-30 02:05:07 EDT</td> </tr> </tbody> </table>	File Name	Size	Type	Timestamp	udrinitConfig.sh	43.5 KB	sh	2022-03-07 11:58:38 EST	ugwrap.log	1.3 KB	log	2022-03-07 13:01:58 EST	upgrade.log	1.3 MB	log	2022-03-07 13:09:32 EST	TKLCConfigData.OCUDR-NOAMP-A.sh	6.6 KB	sh	2023-09-29 02:14:43 EDT	TKLCConfigData.OCUDR-NOAMP-B.sh	6.9 KB	sh	2023-09-29 06:25:33 EDT	TKLCConfigData.OCUDR-MP1.sh	5.2 KB	sh	2023-09-29 06:35:36 EDT	TKLCConfigData.OCUDR-MP2.sh	5.2 KB	sh	2023-09-29 06:39:42 EDT	TKLCConfigData.OCUDR-SOAM-A.sh	5.5 KB	sh	2023-09-29 06:42:49 EDT	TKLCConfigData.OCUDR-SOAM-B.sh	5.5 KB	sh	2023-09-29 06:45:38 EDT	TKLCConfigData.OCUDR-DR-NOAMP-A.sh	8 KB	sh	2023-09-30 02:05:06 EDT	TKLCConfigData.OCUDR-DR-NOAMP-B.sh	8 KB	sh	2023-09-30 02:05:07 EDT
File Name	Size	Type	Timestamp																																															
udrinitConfig.sh	43.5 KB	sh	2022-03-07 11:58:38 EST																																															
ugwrap.log	1.3 KB	log	2022-03-07 13:01:58 EST																																															
upgrade.log	1.3 MB	log	2022-03-07 13:09:32 EST																																															
TKLCConfigData.OCUDR-NOAMP-A.sh	6.6 KB	sh	2023-09-29 02:14:43 EDT																																															
TKLCConfigData.OCUDR-NOAMP-B.sh	6.9 KB	sh	2023-09-29 06:25:33 EDT																																															
TKLCConfigData.OCUDR-MP1.sh	5.2 KB	sh	2023-09-29 06:35:36 EDT																																															
TKLCConfigData.OCUDR-MP2.sh	5.2 KB	sh	2023-09-29 06:39:42 EDT																																															
TKLCConfigData.OCUDR-SOAM-A.sh	5.5 KB	sh	2023-09-29 06:42:49 EDT																																															
TKLCConfigData.OCUDR-SOAM-B.sh	5.5 KB	sh	2023-09-29 06:45:38 EDT																																															
TKLCConfigData.OCUDR-DR-NOAMP-A.sh	8 KB	sh	2023-09-30 02:05:06 EDT																																															
TKLCConfigData.OCUDR-DR-NOAMP-B.sh	8 KB	sh	2023-09-30 02:05:07 EDT																																															
<p>3.</p> <input type="checkbox"/>	<p>Active NOAMP VIP: 1) Click on the “Browse...” dialogue button located in the middle of the screen. 2) Select the Drive and directory location of the ISO file for the target release. Select the ISO file and click on the “Open” dialogue button. 3) Click on the “Upload” dialogue button. NOTE 1: <i>It is recommended to access the ISO file for the target release from a local hard drive partition as opposed to a network or flash drive location.</i> NOTE 2: <i>Depending on network conditions, this upload may</i></p>																																																	

Procedure 2: ISO Administration for Upgrades

Step	Procedure	Result
	<p>take an extended period of time (> 60 saccs.).</p> <p>NOTE 3: Alternatively, the ISO file can be manually transferred to the "/var/TKLCC/db/file mgmt" directory of the Active NOAMP server using SFTP.</p> <p>NOTE 4: The ISO in the file management directory must have global read permission or the GUI ISO transfer will fail, with a security log indicating the lack of read permission. If you upload the file using the GUI, the ISO will have global read permission. If you have already transferred the ISO to the NO without global read permission, you can log in as admusr and use "chmod 644 " to give it read permission.</p> <p>Note: When scp files use "scp -p" command.</p>	 <p>The screenshot displays the 'Main Menu: Status & Manage -> Files' interface. At the top, there are tabs for 'OCUDR-NOAMP-A', 'OCUDR-SOAM-A', and 'OCUDR-MP1'. Below the tabs is a file list with columns for 'File Name'. The list includes files such as 'TKLCCConfigData.OCUDR', 'udrInItConfig.sh', 'ugwrap.log', and 'upgrade.log'. A modal dialog box is overlaid on the file list, titled 'File:'. It contains a 'Browse...' button, the filename 'UDR-15.0.0.0.0_115.10.0-x86_64-DIU.iso', a checkbox labeled 'This is a backup file' which is unchecked, and an 'Upload' button. A 'Cancel' button is located at the bottom right of the dialog.</p>
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>		

3.3 Order of Application Upgrade

The following list displays the order to upgrade the Servers (Primary and DR sites):

1. Site 2 NOAMPs (DR Spares)
2. Primary Standby NOAMP
3. Primary Active NOAMP
4. Site 1 SOAMs (Standby)
5. Site 1 SOAMs (Active)
6. Site 2 SOAMs (DR site – Spares)
7. Site 1 MPs (one at a time)
8. Site 2 MPs (DR site – one at a time)

3.4 Upgrade Execution Overview for Virtual Machine Configurations

3.4.1 Primary NOAMP / DR NOAMP Execution Overview

The procedures shown in each table below are the estimated times for upgrading 2 NOAMPs and 2 DR NOAMPs. The primary NOAMPs are upgraded first, followed by the DR NOAMPs.

Procedure Number	Procedure Title	Elapsed Time (Hours: Minutes)	
		This Step	Cumulative
3	<i>Remove Additional GUI Sessions</i>	00:05	00:05
4	<i>Full Database Backup</i>	00:30	00:35
5	<i>Upgrade DR NOAMP NE</i>	01:00	01:35

Table 5 - DR NOAMP Upgrade Procedures for Virtual Machine Configurations

Procedure Number	Procedure Title	Elapsed Time (Hours: Minutes)	
		This Step	Cumulative
6	<i>Upgrade Primary NOAMP NE</i>	01:00	01:00

Table 6 - Primary NOAMP Upgrade Procedures for Virtual Machine Configurations

***NOTE:** Times estimates are based on a small Database.

3.4.2 SOAM Server Upgrade Execution Overview

The procedures shown in the following table are the estimated times for upgrading the two SOAM Servers. SOAMs should be upgraded one site at a time (site 1 followed by site 2).

Procedure Number	Procedure Title	Elapsed Time (Hours: Minutes)	
		This Step	Cumulative
7	<i>Upgrade SOAM NE</i>	00:45	00:45

Table 7 - SOAM Upgrade Procedures for Virtual Machine Configurations

3.4.3 MP Server Upgrade Execution Overview

The procedures shown in the following tables are the estimated times for upgrading two MP Servers. MP Servers should be upgraded one site at a time (site 1 followed by site 2).

Procedure Number	Procedure Title	Elapsed Time (Hours: Minutes)	
		This Step	Cumulative
8	<i>Upgrade MP NE</i>	00:25	00:25

Table 8 – MP Server Upgrade Procedures for Virtual Machine Configurations

3.5 Upgrade Acceptance Overview

Procedure Number	Procedure Title	Elapsed Time (Hours: Minutes)	
		This Step	Cumulative
15	<i>Accept Upgrade</i>	00:20	00:20

Table 9 – Upgrade Acceptance overview

4. VM TO VM UPGRADE FROM UDR-12.11.X TO UDR-15.0

VM to VM upgrade is performed using Dual Image Upgrade (DIU) procedure provided by the TPD. UDR 12.11.x is based on OL6 TPD and UDR 15.0 is based on OL8 TPD. There are restrictions on OL to upgrade directly from OL6 to OL8. Hence DIU procedures utilize 2 hop upgrades with 1st hop from OL6 to OL7 and 2nd hop from OL7 to OL8. For the 1st hop, TPD DIU ISO is used and UDR DIU ISO would be used for 2nd hop. Acceptance of upgrade needs to be done twice once at each hop and reject/rollback can be done at each hop. Reject/rollback at both hops will bring the server back to OL6 TPD i.e UDR 12.11.x

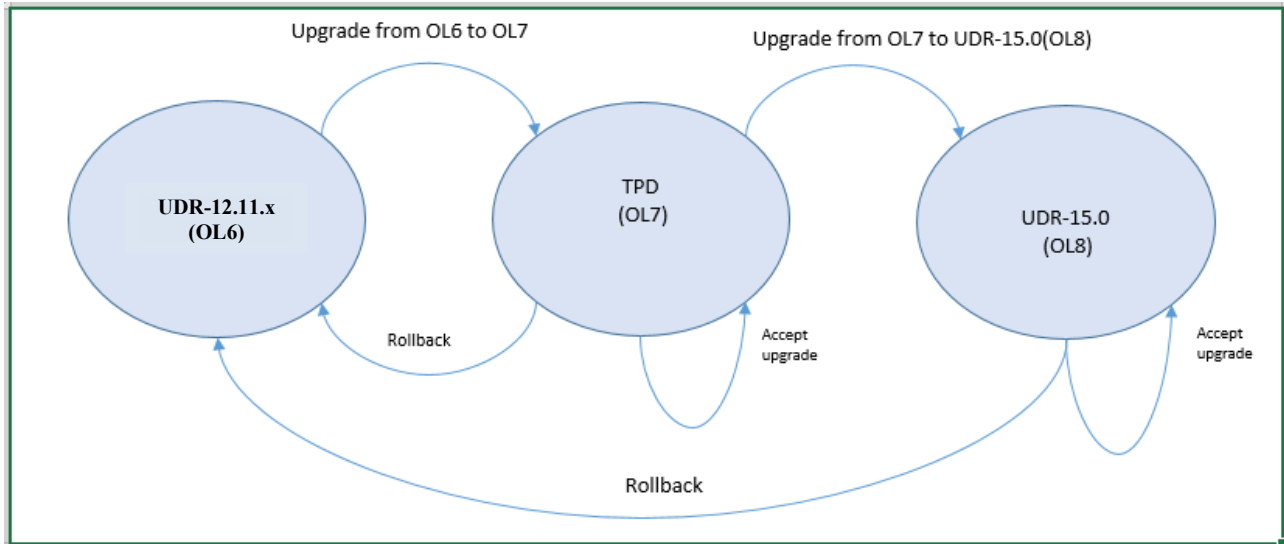


Figure 2: OL6 to OL8 upgrade diagram

4.1 Primary NOAMP / DR NOAMP Upgrade Execution

Open A Service Ticket at My Oracle Support (**Appendix H**) and inform them of your plans to upgrade this system prior to executing this upgrade.

Before upgrade, users must perform the system Health Check **Appendix B**.

This check ensures that the system to be upgraded is in an upgrade-ready state. Performing the system health check determines which alarms are present in the system and if upgrade can proceed with alarms.

****** WARNING ******

If there are servers in the system, which are not in Normal state, these servers should be brought to the Normal or the Application Disabled state before the upgrade process is started.

The sequence of upgrade is such that servers providing support services to other servers will be upgraded first.

****** WARNING ******

Please read the following notes on this procedure:

Procedure completion times shown here are estimates. Times may vary due to differences in database size, user experience, and user preparation.

Where possible, command response outputs are shown as accurately as possible. EXCEPTIONS are as follows:
Session banner information such as time and date.

System-specific configuration information such as hardware locations, IP addresses and hostnames.

ANY information marked with “XXXX” or “YYYY.” Where appropriate, instructions are provided to determine what output should be expected in place of “XXXX or YYYY”

Aesthetic differences unrelated to functionality such as browser attributes: window size, colors, toolbars and button layouts.

After completing each step and at each point where data is recorded from the screen, the technician performing the upgrade must mark the provided Check Box.

Oracle Communications User Data Repository Software Upgrade Procedure

For procedures which are executed multiple times, a mark can be made below the Check Box (in the same column) for each additional iteration of the step executed.
Retention of Captured data is required for as a future support reference this procedure is executed by someone other than Oracle's Consulting Services.

4.1.1 Perform Health Check (Pre-Upgrade)

This procedure is part of Software Upgrade Preparation and is used to determine the health and status of the Oracle Communications User Data Repository network and servers. This may be executed multiple times but must also be executed at least once within the time frame of 24-36 hours prior to the start of a maintenance window. Execute Health Check procedures as specified in **Appendix B**.

4.1.2 Primary NOAMP / DR NOAMP Upgrade

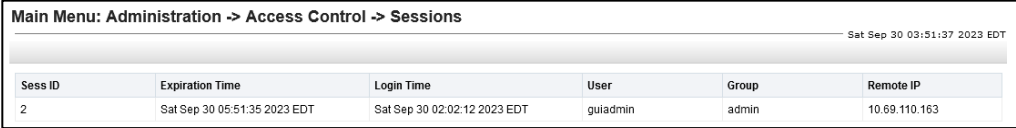
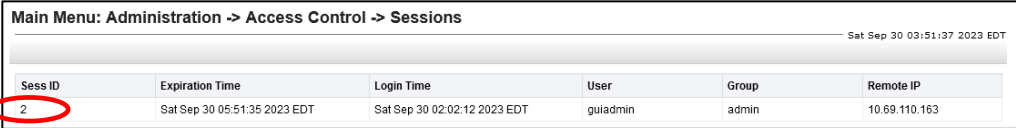
The following procedures detail how to perform upgrades for Primary NOAMP and DR NOAMP Servers.

WARNING: The Database Audit stays disabled throughout the whole upgrade, until all of the SOAM sites are upgraded!

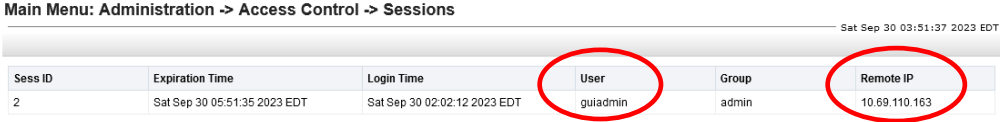
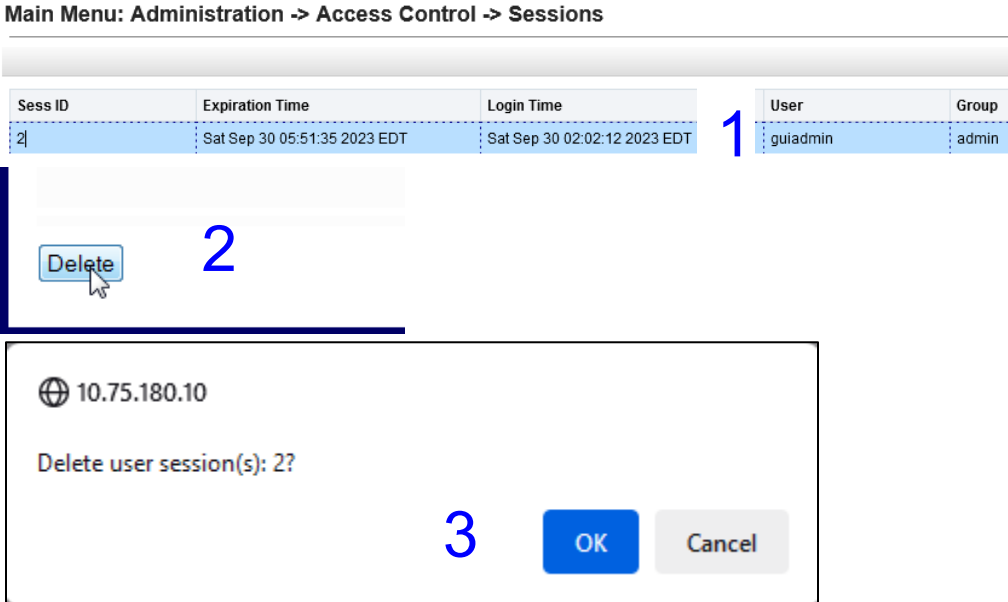
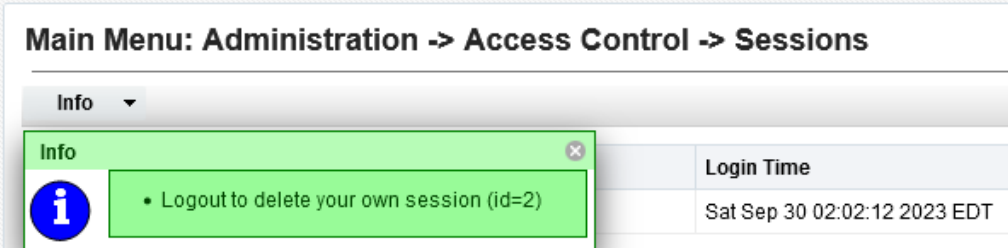
Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

4.1.2.1 Remove Additional GUI Sessions

Procedure 3: Remove Additional GUI Sessions

Step	Procedure	Result												
1. <input type="checkbox"/>	Using the VIP address, access the Primary NOAMP GUI.	Access the Primary NOAMP GUI as specified in Appendix A .												
2. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu →Administration →Access Control→Sessions</p> <p>...as shown on the right.</p>	 <p>Main Menu: Administration -> Access Control -> Sessions Sat Sep 30 03:51:37 2023 EDT</p> <table border="1"> <thead> <tr> <th>Sess ID</th> <th>Expiration Time</th> <th>Login Time</th> <th>User</th> <th>Group</th> <th>Remote IP</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>Sat Sep 30 05:51:35 2023 EDT</td> <td>Sat Sep 30 02:02:12 2023 EDT</td> <td>guiadmin</td> <td>admin</td> <td>10.69.110.163</td> </tr> </tbody> </table>	Sess ID	Expiration Time	Login Time	User	Group	Remote IP	2	Sat Sep 30 05:51:35 2023 EDT	Sat Sep 30 02:02:12 2023 EDT	guiadmin	admin	10.69.110.163
Sess ID	Expiration Time	Login Time	User	Group	Remote IP									
2	Sat Sep 30 05:51:35 2023 EDT	Sat Sep 30 02:02:12 2023 EDT	guiadmin	admin	10.69.110.163									
3. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>In the right panel, the user will be presented with the list of Active GUI sessions connected to the Active NOAMP server.</p>	 <p>Main Menu: Administration -> Access Control -> Sessions Sat Sep 30 03:51:37 2023 EDT</p> <table border="1"> <thead> <tr> <th>Sess ID</th> <th>Expiration Time</th> <th>Login Time</th> <th>User</th> <th>Group</th> <th>Remote IP</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>Sat Sep 30 05:51:35 2023 EDT</td> <td>Sat Sep 30 02:02:12 2023 EDT</td> <td>guiadmin</td> <td>admin</td> <td>10.69.110.163</td> </tr> </tbody> </table>	Sess ID	Expiration Time	Login Time	User	Group	Remote IP	2	Sat Sep 30 05:51:35 2023 EDT	Sat Sep 30 02:02:12 2023 EDT	guiadmin	admin	10.69.110.163
Sess ID	Expiration Time	Login Time	User	Group	Remote IP									
2	Sat Sep 30 05:51:35 2023 EDT	Sat Sep 30 02:02:12 2023 EDT	guiadmin	admin	10.69.110.163									

Procedure 3: Remove Additional GUI Sessions

Step	Procedure	Result												
<p>4.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>The User ID and Remote IP address of each session will be displayed as seen on the right.</p> <p>Every attempt should be made to contact users not engaged in this Upgrade activity and request that they discontinue GUI access until the upgrade activity has completed.</p>	 <p>Main Menu: Administration -> Access Control -> Sessions</p> <table border="1"> <thead> <tr> <th>Sess ID</th> <th>Expiration Time</th> <th>Login Time</th> <th>User</th> <th>Group</th> <th>Remote IP</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>Sat Sep 30 05:51:35 2023 EDT</td> <td>Sat Sep 30 02:02:12 2023 EDT</td> <td>guiadmin</td> <td>admin</td> <td>10.69.110.163</td> </tr> </tbody> </table>	Sess ID	Expiration Time	Login Time	User	Group	Remote IP	2	Sat Sep 30 05:51:35 2023 EDT	Sat Sep 30 02:02:12 2023 EDT	guiadmin	admin	10.69.110.163
Sess ID	Expiration Time	Login Time	User	Group	Remote IP									
2	Sat Sep 30 05:51:35 2023 EDT	Sat Sep 30 02:02:12 2023 EDT	guiadmin	admin	10.69.110.163									
<p>5.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>If unable to identify or contact the session owners, sessions not related to the upgrade activity may be selected and deleted as follows:</p> <ol style="list-style-type: none"> 1) Select the session for deletion with the cursor. 2) In the bottom left of the right panel, click the "Delete" dialogue button. 3) In the pop-up window, click on the "OK" dialogue button. 	 <p>Main Menu: Administration -> Access Control -> Sessions</p> <table border="1"> <thead> <tr> <th>Sess ID</th> <th>Expiration Time</th> <th>Login Time</th> <th>User</th> <th>Group</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>Sat Sep 30 05:51:35 2023 EDT</td> <td>Sat Sep 30 02:02:12 2023 EDT</td> <td>guiadmin</td> <td>admin</td> </tr> </tbody> </table> <p>Delete</p> <p>10.75.180.10</p> <p>Delete user session(s): 2?</p> <p>OK Cancel</p> <p>NOTE: The Session screen prevents users from deleting the session which they are currently connected to. If attempting to do so by accident, a message may be received in the Banner area stating "Logout to delete your own session (id=xx)".</p>	Sess ID	Expiration Time	Login Time	User	Group	2	Sat Sep 30 05:51:35 2023 EDT	Sat Sep 30 02:02:12 2023 EDT	guiadmin	admin		
Sess ID	Expiration Time	Login Time	User	Group										
2	Sat Sep 30 05:51:35 2023 EDT	Sat Sep 30 02:02:12 2023 EDT	guiadmin	admin										
<p>6.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>The user will receive a confirmation message in the Info tab indicating the session ID which was deleted.</p>	 <p>Main Menu: Administration -> Access Control -> Sessions</p> <p>Info</p> <p>Info</p> <p>Logout to delete your own session (id=2)</p> <table border="1"> <thead> <tr> <th>Login Time</th> </tr> </thead> <tbody> <tr> <td>Sat Sep 30 02:02:12 2023 EDT</td> </tr> </tbody> </table>	Login Time	Sat Sep 30 02:02:12 2023 EDT										
Login Time														
Sat Sep 30 02:02:12 2023 EDT														

Oracle Communications User Data Repository Software Upgrade Procedure

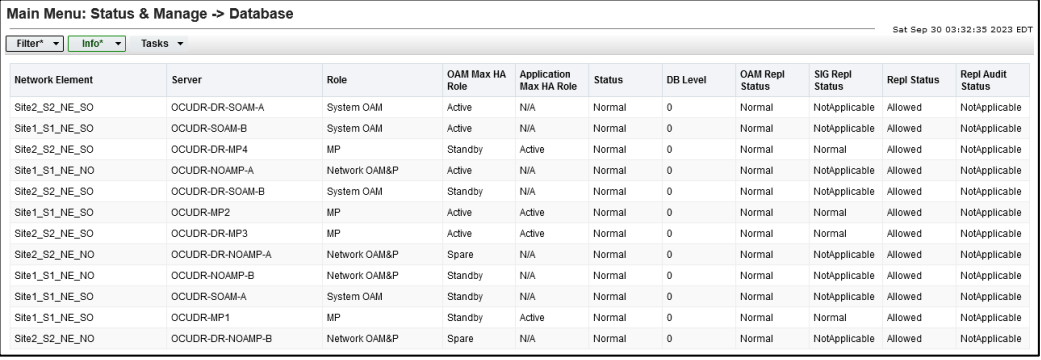
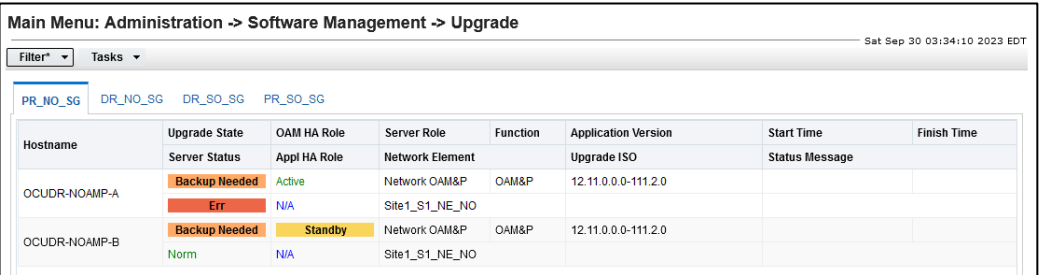
Procedure 3: Remove Additional GUI Sessions

Step	Procedure	Result
7. <input type="checkbox"/>	Active NOAMP VIP: Delete any additional GUI sessions as needed.	Repeat Steps 5-6 of this Procedure for each additional GUI session to be deleted.
THIS PROCEDURE HAS BEEN COMPLETED		

4.1.2.2 Full Database Backup (All Network Elements, All Servers)

This procedure is part of Software Upgrade Preparation and is used to conduct a full backup of the COMCOL run environment on every server, to be used in the event of a backout/rollback of the new software release.

Procedure 4: Full Database Backup

Step	Procedure	Result																																																																																																																																															
1. <input type="checkbox"/>	Using the VIP address, access the Primary NOAMP GUI.	Access the Primary NOAMP GUI as specified in Appendix A .																																																																																																																																															
2. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Status & Manage → Database</p> <p>...as shown on the right.</p>	 <table border="1"> <caption>Main Menu: Status & Manage -> Database</caption> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>OAM Max HA Role</th> <th>Application Max HA Role</th> <th>Status</th> <th>DB Level</th> <th>OAM Repl Status</th> <th>SIG Repl Status</th> <th>Repl Status</th> <th>Repl Audit Status</th> </tr> </thead> <tbody> <tr><td>Site2_S2_NE_SO</td><td>OCUDR-DR-SOAM-A</td><td>System OAM</td><td>Active</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site1_S1_NE_SO</td><td>OCUDR-SOAM-B</td><td>System OAM</td><td>Active</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site2_S2_NE_SO</td><td>OCUDR-DR-MP4</td><td>MP</td><td>Standby</td><td>Active</td><td>Normal</td><td>0</td><td>Normal</td><td>Normal</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site1_S1_NE_NO</td><td>OCUDR-NOAMP-A</td><td>Network OAM&P</td><td>Active</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site2_S2_NE_SO</td><td>OCUDR-DR-SOAM-B</td><td>System OAM</td><td>Standby</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site1_S1_NE_SO</td><td>OCUDR-MP2</td><td>MP</td><td>Active</td><td>Active</td><td>Normal</td><td>0</td><td>Normal</td><td>Normal</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site2_S2_NE_SO</td><td>OCUDR-DR-MP3</td><td>MP</td><td>Active</td><td>Active</td><td>Normal</td><td>0</td><td>Normal</td><td>Normal</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site2_S2_NE_NO</td><td>OCUDR-DR-NOAMP-A</td><td>Network OAM&P</td><td>Spare</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site1_S1_NE_NO</td><td>OCUDR-NOAMP-B</td><td>Network OAM&P</td><td>Standby</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site1_S1_NE_SO</td><td>OCUDR-SOAM-A</td><td>System OAM</td><td>Standby</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site1_S1_NE_SO</td><td>OCUDR-MP1</td><td>MP</td><td>Standby</td><td>Active</td><td>Normal</td><td>0</td><td>Normal</td><td>Normal</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site2_S2_NE_NO</td><td>OCUDR-DR-NOAMP-B</td><td>Network OAM&P</td><td>Spare</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicable</td></tr> </tbody> </table>	Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status	DB Level	OAM Repl Status	SIG Repl Status	Repl Status	Repl Audit Status	Site2_S2_NE_SO	OCUDR-DR-SOAM-A	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-SOAM-B	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site2_S2_NE_SO	OCUDR-DR-MP4	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicable	Site1_S1_NE_NO	OCUDR-NOAMP-A	Network OAM&P	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site2_S2_NE_SO	OCUDR-DR-SOAM-B	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-MP2	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicable	Site2_S2_NE_SO	OCUDR-DR-MP3	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicable	Site2_S2_NE_NO	OCUDR-DR-NOAMP-A	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_NO	OCUDR-NOAMP-B	Network OAM&P	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-SOAM-A	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-MP1	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicable	Site2_S2_NE_NO	OCUDR-DR-NOAMP-B	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable
Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status	DB Level	OAM Repl Status	SIG Repl Status	Repl Status	Repl Audit Status																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-SOAM-A	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_SO	OCUDR-SOAM-B	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-MP4	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_NO	OCUDR-NOAMP-A	Network OAM&P	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-SOAM-B	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_SO	OCUDR-MP2	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicable																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-MP3	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicable																																																																																																																																							
Site2_S2_NE_NO	OCUDR-DR-NOAMP-A	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_NO	OCUDR-NOAMP-B	Network OAM&P	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_SO	OCUDR-SOAM-A	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_SO	OCUDR-MP1	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicable																																																																																																																																							
Site2_S2_NE_NO	OCUDR-DR-NOAMP-B	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
3. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Record the names of all servers.</p>	<p>Using the information provided in Section 3.1.2 (<i>Logins, Passwords and Site Information</i>) record the names of all servers.</p> <p>*The full backup on every server can be done from the NOAMP GUI.</p>																																																																																																																																															
4. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Main Menu → Administration → Software Management → Upgrade</p> <p>...as shown on the right.</p> <p>Backup the COMCOL run environment</p>	 <table border="1"> <caption>Main Menu: Administration -> Software Management -> Upgrade</caption> <thead> <tr> <th>Hostname</th> <th>Upgrade State</th> <th>OAM HA Role</th> <th>Server Role</th> <th>Function</th> <th>Application Version</th> <th>Start Time</th> <th>Finish Time</th> </tr> </thead> <tbody> <tr> <td rowspan="2">OCUDR-NOAMP-A</td> <td>Backup Needed</td> <td>Active</td> <td>Network OAM&P</td> <td>OAM&P</td> <td rowspan="2">12.11.0.0.0-111.2.0</td> <td rowspan="2"></td> <td rowspan="2"></td> </tr> <tr> <td>Err</td> <td>N/A</td> <td>Site1_S1_NE_NO</td> <td></td> </tr> <tr> <td rowspan="2">OCUDR-NOAMP-B</td> <td>Backup Needed</td> <td>Standby</td> <td>Network OAM&P</td> <td>OAM&P</td> <td rowspan="2">12.11.0.0.0-111.2.0</td> <td rowspan="2"></td> <td rowspan="2"></td> </tr> <tr> <td>Norm</td> <td>N/A</td> <td>Site1_S1_NE_NO</td> <td></td> </tr> </tbody> </table>	Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time	OCUDR-NOAMP-A	Backup Needed	Active	Network OAM&P	OAM&P	12.11.0.0.0-111.2.0			Err	N/A	Site1_S1_NE_NO		OCUDR-NOAMP-B	Backup Needed	Standby	Network OAM&P	OAM&P	12.11.0.0.0-111.2.0			Norm	N/A	Site1_S1_NE_NO																																																																																																																
Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time																																																																																																																																										
OCUDR-NOAMP-A	Backup Needed	Active	Network OAM&P	OAM&P	12.11.0.0.0-111.2.0																																																																																																																																												
	Err	N/A	Site1_S1_NE_NO																																																																																																																																														
OCUDR-NOAMP-B	Backup Needed	Standby	Network OAM&P	OAM&P	12.11.0.0.0-111.2.0																																																																																																																																												
	Norm	N/A	Site1_S1_NE_NO																																																																																																																																														

Procedure 4: Full Database Backup

Step	Procedure	Result																																																									
<p>5.</p> <div style="border: 1px solid black; width: 20px; height: 20px; margin-bottom: 5px;"></div> <p>Click “Backup All” button at left bottom of the screen; the full backups will begin.</p> <p>After clicking backup – an additional screen will pop up.</p> <p>Default is to exclude the database parts (If the database parts are included – then the backup will take longer and produce larger backup files in /var/TKLC/db/filemgmt. They are not required for a full backup.</p> <p>Click “OK” to begin the backup.</p>		<div style="border: 1px solid gray; padding: 5px;"> <p>Main Menu: Administration -> Software Management -> Upgrade Sat Sep 30 03:36:25 2023</p> <p>Filter* Tasks</p> <p>PR_NO_SG DR_NO_SG DR_SO_SG PR_SO_SG</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Hostname</th> <th>Upgrade State</th> <th>OAM HA Role</th> <th>Server Role</th> <th>Function</th> <th>Application Version</th> <th>Start Time</th> <th>Finish Time</th> </tr> <tr> <th></th> <th>Server Status</th> <th>Appl HA Role</th> <th>Network Element</th> <th></th> <th>Upgrade ISO</th> <th colspan="2">Status Message</th> </tr> </thead> <tbody> <tr> <td>OCUDR-NOAMP-A</td> <td style="background-color: #f8d7da;">Backup Needed</td> <td>Active</td> <td>Network OAM&P</td> <td>OAM&P</td> <td>12.11.0.0.0-111.2.0</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="background-color: #f8d7da;">Err</td> <td>N/A</td> <td>Site1_S1_NE_NO</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>OCUDR-NOAMP-B</td> <td style="background-color: #fff3cd;">Backup Needed</td> <td>Standby</td> <td>Network OAM&P</td> <td>OAM&P</td> <td>12.11.0.0.0-111.2.0</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="background-color: #fff3cd;">Norm</td> <td>N/A</td> <td>Site1_S1_NE_NO</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p style="text-align: center; margin-top: 10px;"> Backup Backup All Checkup Checkup All Upgrade Server Accept Report Report All </p> <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>Main Menu: Administration -> Software Management -> Upgrade [Backup] Sat Sep 30 03:37:31 2023</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Hostname</th> <th>Action</th> <th>Current application version</th> </tr> </thead> <tbody> <tr> <td>OCUDR-NOAMP-A</td> <td style="background-color: #d3d3d3;">Back up</td> <td>12.11.0.0.0-111.2.0</td> </tr> <tr> <td>OCUDR-NOAMP-B</td> <td style="background-color: #d3d3d3;">Back up</td> <td>12.11.0.0.0-111.2.0</td> </tr> </tbody> </table> <p>Full backup options</p> <p>Database parts exclusion <input checked="" type="radio"/> Exclude <input type="radio"/> Do not exclude</p> <p style="font-size: small;"> Select "Exclude" to perform a full backup of the COMCOL run environment, excluding the database parts specified in the files in /usr/TKLC/appworks/etc/exclude_parts.d/. Select "Do not exclude" to perform a full backup of the COMCOL run environment without excluding any database parts. This will take longer and produce larger backup files in /var/TKLC/db/filemgmt. </p> <p style="text-align: left; margin-top: 5px;"> Ok Cancel </p> </div> </div>	Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time		Server Status	Appl HA Role	Network Element		Upgrade ISO	Status Message		OCUDR-NOAMP-A	Backup Needed	Active	Network OAM&P	OAM&P	12.11.0.0.0-111.2.0				Err	N/A	Site1_S1_NE_NO					OCUDR-NOAMP-B	Backup Needed	Standby	Network OAM&P	OAM&P	12.11.0.0.0-111.2.0				Norm	N/A	Site1_S1_NE_NO					Hostname	Action	Current application version	OCUDR-NOAMP-A	Back up	12.11.0.0.0-111.2.0	OCUDR-NOAMP-B	Back up	12.11.0.0.0-111.2.0
Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time																																																				
	Server Status	Appl HA Role	Network Element		Upgrade ISO	Status Message																																																					
OCUDR-NOAMP-A	Backup Needed	Active	Network OAM&P	OAM&P	12.11.0.0.0-111.2.0																																																						
	Err	N/A	Site1_S1_NE_NO																																																								
OCUDR-NOAMP-B	Backup Needed	Standby	Network OAM&P	OAM&P	12.11.0.0.0-111.2.0																																																						
	Norm	N/A	Site1_S1_NE_NO																																																								
Hostname	Action	Current application version																																																									
OCUDR-NOAMP-A	Back up	12.11.0.0.0-111.2.0																																																									
OCUDR-NOAMP-B	Back up	12.11.0.0.0-111.2.0																																																									

Procedure 4: Full Database Backup

Step	Procedure	Result																																																																																		
<p>6.</p> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 5px 0;"></div>	<p>Active NOAMP VIP:</p> <p>The “Server Status” box indicates “Backup in Progress”</p> <p>The progress of the full backups can be viewed in the pulldown Tasks box, as well as from the Status & Manage->Tasks->Active Tasks screen.</p> <p>As each full backup completes, its task will update to indicate its success or failure. When all full backup tasks finish successfully, this procedure is complete.</p>	<div style="border: 1px solid black; padding: 5px;"> <p>Main Menu: Administration -> Software Management -> Upgrade Sat Sep 30 03:40:12 2023 EDT</p> <p>Filter* Tasks</p> <p>PR_NO_SG DR_NO_SG DR_SO_SG PR_SO_SG</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Hostname</th> <th>Upgrade State</th> <th>OAM HA Role</th> <th>Server Role</th> <th>Function</th> <th>Application Version</th> <th>Start Time</th> <th>Finish Time</th> </tr> <tr> <th></th> <th>Server Status</th> <th>Appl HA Role</th> <th>Network Element</th> <th></th> <th>Upgrade ISO</th> <th colspan="2">Status Message</th> </tr> </thead> <tbody> <tr> <td>OCUDR-NOAMP-A</td> <td style="background-color: yellow;">Backup In Progress</td> <td>Active</td> <td>Network OAM&P</td> <td>OAM&P</td> <td>12.11.0.0-111.2.0</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="background-color: red;">Err</td> <td>N/A</td> <td>Site1_S1_NE_NO</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>OCUDR-NOAMP-B</td> <td style="background-color: yellow;">Backup In Progress</td> <td>Standby</td> <td>Network OAM&P</td> <td>OAM&P</td> <td>12.11.0.0-111.2.0</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Norm</td> <td>N/A</td> <td>Site1_S1_NE_NO</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p>Tasks</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>ID</th> <th>Hostname</th> <th>Name</th> <th>Task State</th> <th>Details</th> <th>Progress</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>OCUDR-NOAMP-A</td> <td>Pre-upgrade full backup</td> <td>completed</td> <td>Full backup on OCUDR-NOAMP-A</td> <td style="text-align: center;">100%</td> </tr> <tr> <td>0</td> <td>OCUDR-NOAMP-B</td> <td>Pre-upgrade full backup</td> <td>completed</td> <td>Full backup on OCUDR-NOAMP-B</td> <td style="text-align: center;">100%</td> </tr> </tbody> </table> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p>Main Menu: Status & Manage -> Tasks -> Active Tasks Sat Sep 30 03:48:17 2023 EDT</p> <p>Filter*</p> <p>OCUDR-NOAMP-A OCUDR-NOAMP-B OCUDR-MP1 OCUDR-MP2 OCUDR-SOAM-A OCUDR-SOAM-B OCUDR-DR-NOAMP-A OCUDR-DR-NOAMP-B OCUDR-DR</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>ID</th> <th>Name</th> <th>Status</th> <th>Start Time</th> <th>Update Time</th> <th>Result</th> <th>Result Details</th> <th>Progress</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Pre-upgrade full backup</td> <td>completed</td> <td>2023-09-30 03:40:07 EDT</td> <td>2023-09-30 03:40:23 EDT</td> <td>0</td> <td>Full backup on OCUDR-NOAMP-A</td> <td style="text-align: center;">100%</td> </tr> </tbody> </table> </div>	Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time		Server Status	Appl HA Role	Network Element		Upgrade ISO	Status Message		OCUDR-NOAMP-A	Backup In Progress	Active	Network OAM&P	OAM&P	12.11.0.0-111.2.0				Err	N/A	Site1_S1_NE_NO					OCUDR-NOAMP-B	Backup In Progress	Standby	Network OAM&P	OAM&P	12.11.0.0-111.2.0				Norm	N/A	Site1_S1_NE_NO					ID	Hostname	Name	Task State	Details	Progress	0	OCUDR-NOAMP-A	Pre-upgrade full backup	completed	Full backup on OCUDR-NOAMP-A	100%	0	OCUDR-NOAMP-B	Pre-upgrade full backup	completed	Full backup on OCUDR-NOAMP-B	100%	ID	Name	Status	Start Time	Update Time	Result	Result Details	Progress	0	Pre-upgrade full backup	completed	2023-09-30 03:40:07 EDT	2023-09-30 03:40:23 EDT	0	Full backup on OCUDR-NOAMP-A	100%
Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time																																																																													
	Server Status	Appl HA Role	Network Element		Upgrade ISO	Status Message																																																																														
OCUDR-NOAMP-A	Backup In Progress	Active	Network OAM&P	OAM&P	12.11.0.0-111.2.0																																																																															
	Err	N/A	Site1_S1_NE_NO																																																																																	
OCUDR-NOAMP-B	Backup In Progress	Standby	Network OAM&P	OAM&P	12.11.0.0-111.2.0																																																																															
	Norm	N/A	Site1_S1_NE_NO																																																																																	
ID	Hostname	Name	Task State	Details	Progress																																																																															
0	OCUDR-NOAMP-A	Pre-upgrade full backup	completed	Full backup on OCUDR-NOAMP-A	100%																																																																															
0	OCUDR-NOAMP-B	Pre-upgrade full backup	completed	Full backup on OCUDR-NOAMP-B	100%																																																																															
ID	Name	Status	Start Time	Update Time	Result	Result Details	Progress																																																																													
0	Pre-upgrade full backup	completed	2023-09-30 03:40:07 EDT	2023-09-30 03:40:23 EDT	0	Full backup on OCUDR-NOAMP-A	100%																																																																													
<p>7.</p> <div style="background-color: #cccccc; width: 20px; height: 20px; margin: 5px 0;"></div>	<p>Active NOAMP VIP:</p> <p>Main Menu →Administration →Software Management →Upgrade</p> <p>Click the Tasks dropdown.</p>	<div style="border: 1px solid black; padding: 5px;"> <p>Main Menu: Status & Manage -> Tasks -> Active Tasks Sat Sep 30 03:48:17 2023 EDT</p> <p>Filter*</p> <p>OCUDR-NOAMP-A OCUDR-NOAMP-B OCUDR-MP1 OCUDR-MP2 OCUDR-SOAM-A OCUDR-SOAM-B OCUDR-DR-NOAMP-A OCUDR-DR-NOAMP-B OCUDR-DR</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>ID</th> <th>Name</th> <th>Status</th> <th>Start Time</th> <th>Update Time</th> <th>Result</th> <th>Result Details</th> <th>Progress</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Pre-upgrade full backup</td> <td>completed</td> <td>2023-09-30 03:40:07 EDT</td> <td>2023-09-30 03:40:23 EDT</td> <td>0</td> <td>Full backup on OCUDR-NOAMP-A</td> <td style="text-align: center;">100%</td> </tr> </tbody> </table> </div> <p>When complete, Progress should display 100%.</p>	ID	Name	Status	Start Time	Update Time	Result	Result Details	Progress	0	Pre-upgrade full backup	completed	2023-09-30 03:40:07 EDT	2023-09-30 03:40:23 EDT	0	Full backup on OCUDR-NOAMP-A	100%																																																																		
ID	Name	Status	Start Time	Update Time	Result	Result Details	Progress																																																																													
0	Pre-upgrade full backup	completed	2023-09-30 03:40:07 EDT	2023-09-30 03:40:23 EDT	0	Full backup on OCUDR-NOAMP-A	100%																																																																													
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>																																																																																				

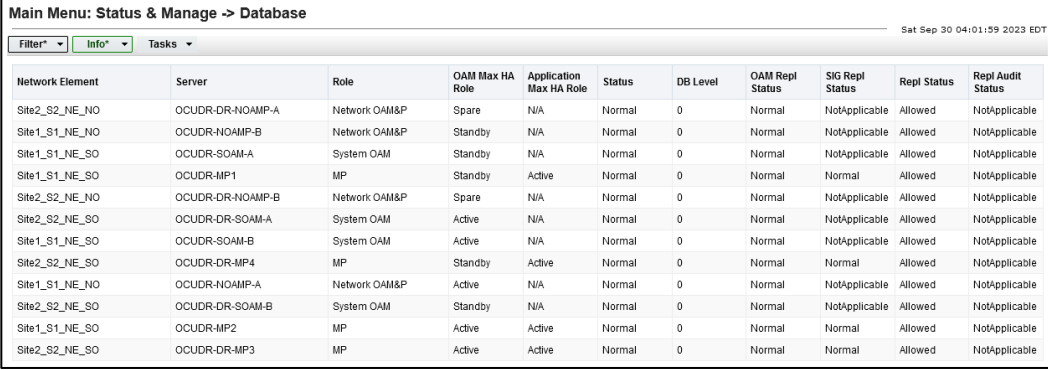
Oracle Communications User Data Repository Software Upgrade Procedure

4.1.2.3 Upgrade DR NOAMP NE

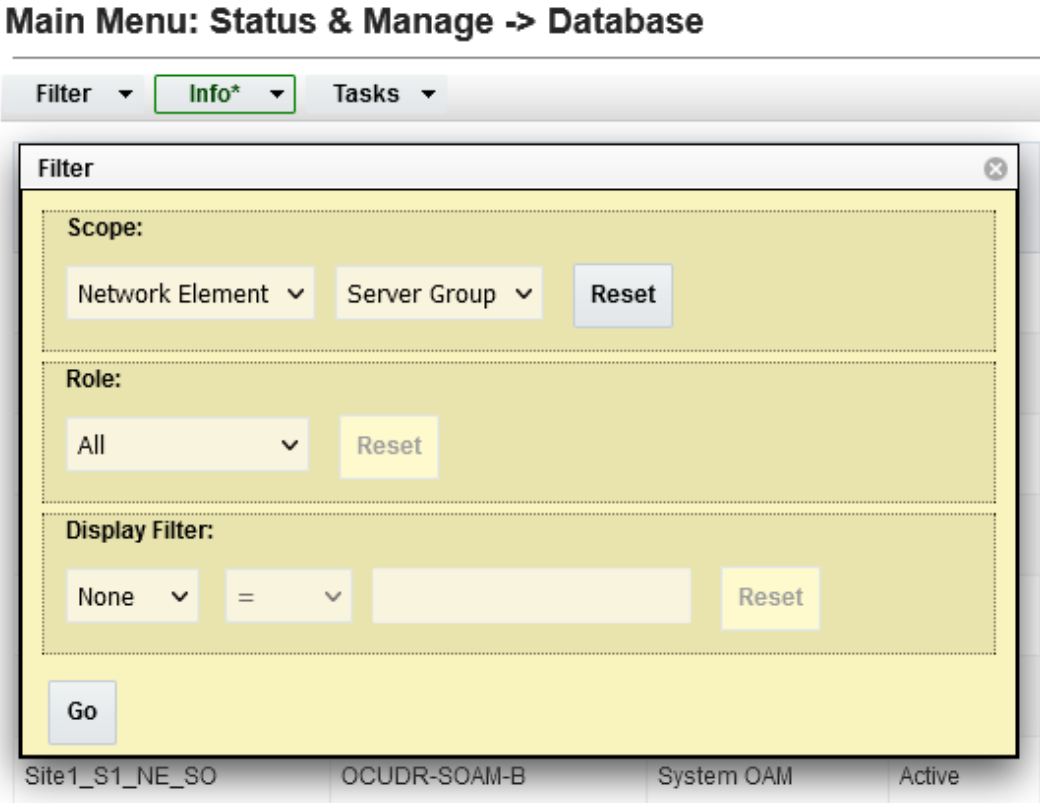
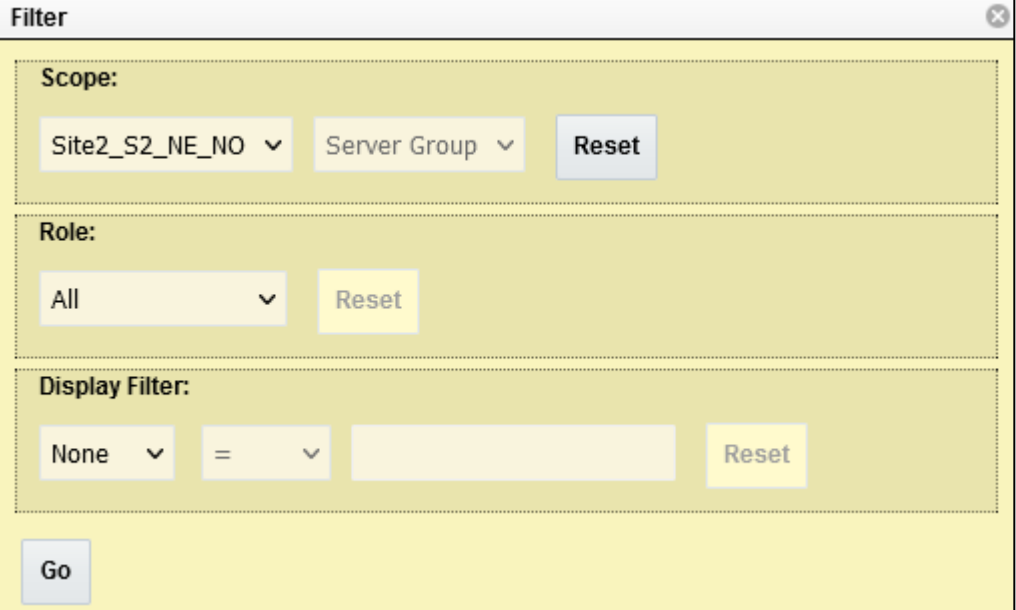
The following procedures give details on how to perform major upgrades for DR NOAMP server to various possible upgrade paths.

Note: Ensure you are on latest patch prior to upgrading from Release 12.11.x to 15.0

Procedure 5: Upgrade DR NOAMP NE


Step	Procedure	Result																																																																																																																																															
1. <input type="checkbox"/>	Using the VIP address, access the Primary NOAMP GUI.	Access the Primary NOAMP GUI as specified in Appendix A .																																																																																																																																															
2. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Status & Manage → Database</p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>OAM Max HA Role</th> <th>Application Max HA Role</th> <th>Status</th> <th>DB Level</th> <th>OAM Repl Status</th> <th>SIG Repl Status</th> <th>Repl Status</th> <th>Repl Audit Status</th> </tr> </thead> <tbody> <tr> <td>Site2_S2_NE_NO</td> <td>OCUDR-DR-NOAMP-A</td> <td>Network OAM&P</td> <td>Spare</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site1_S1_NE_NO</td> <td>OCUDR-NOAMP-B</td> <td>Network OAM&P</td> <td>Standby</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site1_S1_NE_SO</td> <td>OCUDR-SOAM-A</td> <td>System OAM</td> <td>Standby</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site1_S1_NE_SO</td> <td>OCUDR-MP1</td> <td>MP</td> <td>Standby</td> <td>Active</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>Normal</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site2_S2_NE_NO</td> <td>OCUDR-DR-NOAMP-B</td> <td>Network OAM&P</td> <td>Spare</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site2_S2_NE_SO</td> <td>OCUDR-DR-SOAM-A</td> <td>System OAM</td> <td>Active</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site1_S1_NE_SO</td> <td>OCUDR-SOAM-B</td> <td>System OAM</td> <td>Active</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site2_S2_NE_SO</td> <td>OCUDR-DR-MP4</td> <td>MP</td> <td>Standby</td> <td>Active</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>Normal</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site1_S1_NE_NO</td> <td>OCUDR-NOAMP-A</td> <td>Network OAM&P</td> <td>Active</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site2_S2_NE_SO</td> <td>OCUDR-DR-SOAM-B</td> <td>System OAM</td> <td>Standby</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site1_S1_NE_SO</td> <td>OCUDR-MP2</td> <td>MP</td> <td>Active</td> <td>Active</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>Normal</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site2_S2_NE_SO</td> <td>OCUDR-DR-MP3</td> <td>MP</td> <td>Active</td> <td>Active</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>Normal</td> <td>Allowed</td> <td>NotApplicable</td> </tr> </tbody> </table>	Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status	DB Level	OAM Repl Status	SIG Repl Status	Repl Status	Repl Audit Status	Site2_S2_NE_NO	OCUDR-DR-NOAMP-A	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_NO	OCUDR-NOAMP-B	Network OAM&P	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-SOAM-A	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-MP1	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicable	Site2_S2_NE_NO	OCUDR-DR-NOAMP-B	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site2_S2_NE_SO	OCUDR-DR-SOAM-A	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-SOAM-B	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site2_S2_NE_SO	OCUDR-DR-MP4	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicable	Site1_S1_NE_NO	OCUDR-NOAMP-A	Network OAM&P	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site2_S2_NE_SO	OCUDR-DR-SOAM-B	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-MP2	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicable	Site2_S2_NE_SO	OCUDR-DR-MP3	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicable
Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status	DB Level	OAM Repl Status	SIG Repl Status	Repl Status	Repl Audit Status																																																																																																																																							
Site2_S2_NE_NO	OCUDR-DR-NOAMP-A	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_NO	OCUDR-NOAMP-B	Network OAM&P	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_SO	OCUDR-SOAM-A	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_SO	OCUDR-MP1	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicable																																																																																																																																							
Site2_S2_NE_NO	OCUDR-DR-NOAMP-B	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-SOAM-A	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_SO	OCUDR-SOAM-B	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-MP4	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_NO	OCUDR-NOAMP-A	Network OAM&P	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-SOAM-B	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_SO	OCUDR-MP2	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicable																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-MP3	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicable																																																																																																																																							
3. <input type="checkbox"/>	Record the name of the DR NOAMP Network Element in the space provided to the right.	<p>Using the information provided in Section 3.1.2 (<i>Logins, Passwords and Site Information</i>) record the name of the DRNOAMP Network Element in the space provided below:</p> <p>DR NOAMP Network Element: _____</p>																																																																																																																																															

Procedure 5: Upgrade DR NOAMP NE

Step	Procedure	Result
<p>4.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>From the “Network Element” filter pull-down, select the NE name for the DR NOAMP.</p>	 <p>Main Menu: Status & Manage -> Database</p> <p>Filter ▾ Info* ▾ Tasks ▾</p> <p>Filter [Close]</p> <p>Scope:</p> <p>Network Element ▾ Server Group ▾ Reset</p> <p>Role:</p> <p>All ▾ Reset</p> <p>Display Filter:</p> <p>None ▾ = ▾ [Empty Field] Reset</p> <p>Go</p> <p>Site1_S1_NE_SO OCUDR-SOAM-B System OAM Active</p>
<p>5.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>Click on the “GO” dialogue button located on the left bottom of the filter bar.</p>	 <p>Filter [Close]</p> <p>Scope:</p> <p>Site2_S2_NE_NO ▾ Server Group ▾ Reset</p> <p>Role:</p> <p>All ▾ Reset</p> <p>Display Filter:</p> <p>None ▾ = ▾ [Empty Field] Reset</p> <p>Go</p>

Oracle Communications User Data Repository Software Upgrade Procedure

Procedure 5: Upgrade DR NOAMP NE

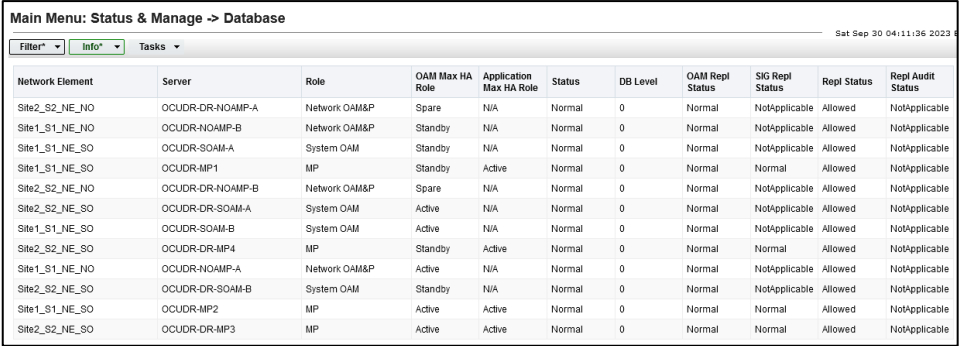
Step	Procedure	Result																																	
6. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>The user should be presented with the list of servers associated with DR NOAMP Network Element.</p>	<p>Main Menu: Status & Manage -> Database (Filtered)</p> <p>Filter Info* Tasks</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>OAM Max HA Role</th> <th>Application Max HA Role</th> <th>Status</th> <th>DB Level</th> <th>OAM Repl Status</th> <th>SIG Repl Status</th> <th>Repl Status</th> <th>Repl Audit Status</th> </tr> </thead> <tbody> <tr> <td>Site2_S2_NE_NO</td> <td>OCUDR-DR-NOAMP-A</td> <td>Network OAM&P</td> <td>Spare</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site2_S2_NE_NO</td> <td>OCUDR-DR-NOAMP-B</td> <td>Network OAM&P</td> <td>Spare</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> </tbody> </table> <p>Identify each “Server” and its associated “Role” and “HA Role”.</p>	Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status	DB Level	OAM Repl Status	SIG Repl Status	Repl Status	Repl Audit Status	Site2_S2_NE_NO	OCUDR-DR-NOAMP-A	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site2_S2_NE_NO	OCUDR-DR-NOAMP-B	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable
Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status	DB Level	OAM Repl Status	SIG Repl Status	Repl Status	Repl Audit Status																									
Site2_S2_NE_NO	OCUDR-DR-NOAMP-A	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																									
Site2_S2_NE_NO	OCUDR-DR-NOAMP-B	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																									
7. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Record the “Server” names appropriately in the space provided to the right.</p>	<p>Identify the DR NOAMP “Server” names and record them in the space provided below:</p> <p>Spare NOAMP Server: _____</p> <p>Spare NOAMP Server: _____</p>																																	
<p> NOTE: For Step 8 of this Procedure, select one spare DR NOAMP.</p> <p>*** Verify the Databases are in sync using Appendix E before upgrading each spare server.</p>																																			
8. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Upgrade Server for the first Spare DR NOAMP Server.</p>	<p>Upgrade Server for the first Spare DR NOAMP Server(identified in Step 7 of this Procedure) as specified in Appendix C.1 Upgrade Server</p>																																	
9. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Upgrade Server for the second Spare DR NOAMP Server.</p>	<p>Upgrade Server for the second Spare DR NOAMP Server(identified in Step 7 of this Procedure) as specified in Appendix C.1 Upgrade Server</p>																																	
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>																																			

4.1.2.4 Upgrade Primary NOAMP NE

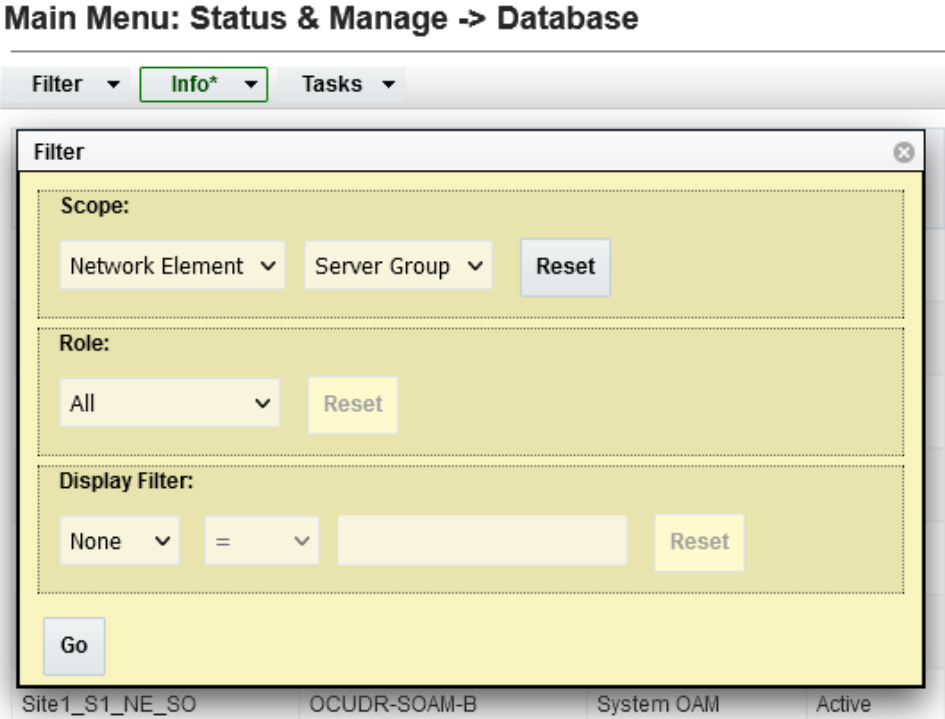
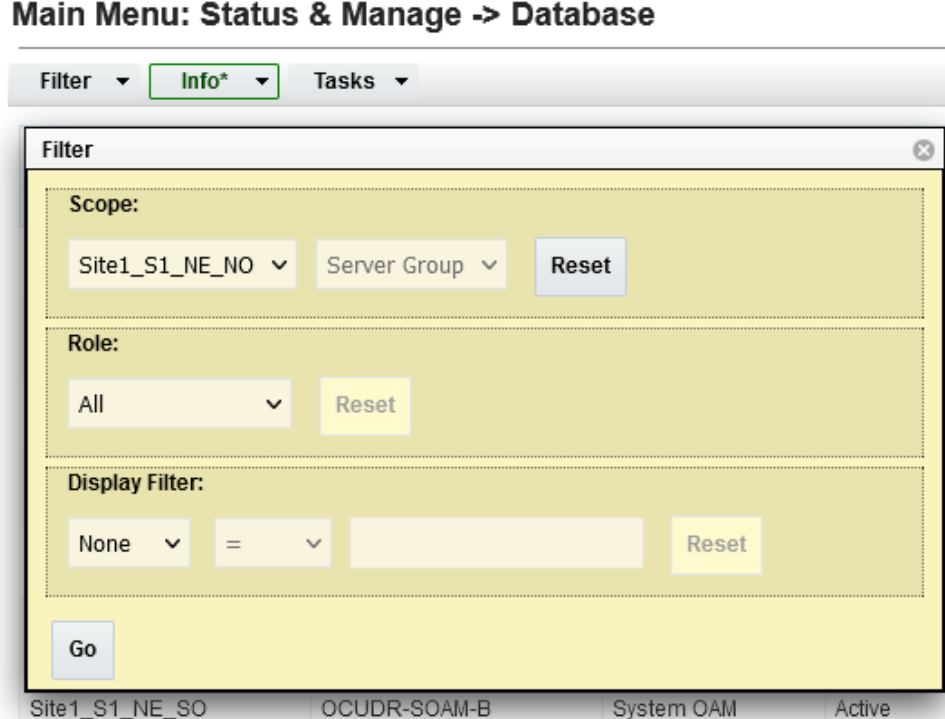
The following procedures detail how to perform major upgrades for Primary NOAMP server to various possible upgrade paths.

Note: Ensure you are on latest patch prior to upgrading from Release 12.11.x to 15.0.



Procedure 6: Upgrade Primary NOAMP NE

Step	Procedure	Result																																																																																																																																															
1. <input type="checkbox"/>	Using the VIP address, access the Primary NOAMP GUI .	Access the Primary NOAMP GUI as specified in Appendix A .																																																																																																																																															
2. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Status & Manage → Database</p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>OAM Max HA Role</th> <th>Application Max HA Role</th> <th>Status</th> <th>DB Level</th> <th>OAM Repl Status</th> <th>SIG Repl Status</th> <th>Repl Status</th> <th>Repl Audit Status</th> </tr> </thead> <tbody> <tr> <td>Site2_S2_NE_NO</td> <td>OCUDR-DR-NOAMP-A</td> <td>Network OAM&P</td> <td>Spare</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site1_S1_NE_NO</td> <td>OCUDR-NOAMP-B</td> <td>Network OAM&P</td> <td>Standby</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site1_S1_NE_SO</td> <td>OCUDR-SOAM-A</td> <td>System OAM</td> <td>Standby</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site1_S1_NE_SO</td> <td>OCUDR-MP1</td> <td>MP</td> <td>Standby</td> <td>Active</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>Normal</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site2_S2_NE_NO</td> <td>OCUDR-DR-NOAMP-B</td> <td>Network OAM&P</td> <td>Spare</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site2_S2_NE_SO</td> <td>OCUDR-DR-SOAM-A</td> <td>System OAM</td> <td>Active</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site1_S1_NE_SO</td> <td>OCUDR-SOAM-B</td> <td>System OAM</td> <td>Active</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site2_S2_NE_SO</td> <td>OCUDR-DR-MP4</td> <td>MP</td> <td>Standby</td> <td>Active</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>Normal</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site1_S1_NE_NO</td> <td>OCUDR-NOAMP-A</td> <td>Network OAM&P</td> <td>Active</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site2_S2_NE_SO</td> <td>OCUDR-DR-SOAM-B</td> <td>System OAM</td> <td>Standby</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site1_S1_NE_SO</td> <td>OCUDR-MP2</td> <td>MP</td> <td>Active</td> <td>Active</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>Normal</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site2_S2_NE_SO</td> <td>OCUDR-DR-MP3</td> <td>MP</td> <td>Active</td> <td>Active</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>Normal</td> <td>Allowed</td> <td>NotApplicable</td> </tr> </tbody> </table>	Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status	DB Level	OAM Repl Status	SIG Repl Status	Repl Status	Repl Audit Status	Site2_S2_NE_NO	OCUDR-DR-NOAMP-A	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_NO	OCUDR-NOAMP-B	Network OAM&P	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-SOAM-A	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-MP1	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicable	Site2_S2_NE_NO	OCUDR-DR-NOAMP-B	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site2_S2_NE_SO	OCUDR-DR-SOAM-A	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-SOAM-B	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site2_S2_NE_SO	OCUDR-DR-MP4	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicable	Site1_S1_NE_NO	OCUDR-NOAMP-A	Network OAM&P	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site2_S2_NE_SO	OCUDR-DR-SOAM-B	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-MP2	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicable	Site2_S2_NE_SO	OCUDR-DR-MP3	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicable
Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status	DB Level	OAM Repl Status	SIG Repl Status	Repl Status	Repl Audit Status																																																																																																																																							
Site2_S2_NE_NO	OCUDR-DR-NOAMP-A	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_NO	OCUDR-NOAMP-B	Network OAM&P	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_SO	OCUDR-SOAM-A	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_SO	OCUDR-MP1	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicable																																																																																																																																							
Site2_S2_NE_NO	OCUDR-DR-NOAMP-B	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-SOAM-A	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_SO	OCUDR-SOAM-B	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-MP4	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_NO	OCUDR-NOAMP-A	Network OAM&P	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-SOAM-B	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_SO	OCUDR-MP2	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicable																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-MP3	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicable																																																																																																																																							
3. <input type="checkbox"/>	Record the name of the Primary NOAMP Network Element in the space provided to the right.	<p>Using the information provided in Section 3.1.2 (Logins, Passwords and Site Information) record the name of the Primary NOAMP Network Element in the space provided below:</p> <p>Primary NOAMP Network Element: _____</p>																																																																																																																																															

Procedure 6: Upgrade Primary NOAMP NE

Step	Procedure	Result
<p>4.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>From the “Network Element” filter pull-down, select the Network Element name for the Primary NOAMP.</p>	
<p>5.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>Click on the “GO” dialogue button located on the right end of the filter bar.</p>	

Procedure 6: Upgrade Primary NOAMP NE

Step	Procedure	Result																								
6. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>The user should be presented with the list of servers associated with the Primary NOAMP Network Element.</p> <p>Identify each “Server” and its associated “Role” and “HA Role”.</p>	<p>Main Menu: Status & Manage -> Database (Filtered)</p> <p>Filter* Info* Tasks</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>OAM Max HA Role</th> <th>Application Max HA Role</th> <th>Status</th> <th>DB Level</th> <th>OAM Repl Status</th> </tr> </thead> <tbody> <tr> <td>Site1_S1_NE_NO</td> <td>OCUDR-NOAMP-A</td> <td>Network OAM&P</td> <td>Active</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> </tr> <tr> <td>Site1_S1_NE_NO</td> <td>OCUDR-NOAMP-B</td> <td>Network OAM&P</td> <td>Standby</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> </tr> </tbody> </table>	Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status	DB Level	OAM Repl Status	Site1_S1_NE_NO	OCUDR-NOAMP-A	Network OAM&P	Active	N/A	Normal	0	Normal	Site1_S1_NE_NO	OCUDR-NOAMP-B	Network OAM&P	Standby	N/A	Normal	0	Normal
Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status	DB Level	OAM Repl Status																			
Site1_S1_NE_NO	OCUDR-NOAMP-A	Network OAM&P	Active	N/A	Normal	0	Normal																			
Site1_S1_NE_NO	OCUDR-NOAMP-B	Network OAM&P	Standby	N/A	Normal	0	Normal																			
7. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Record the “Server” names appropriately in the space provided to the right.</p>	<p>Identify the Primary NOAMP “Server” names and record them in the space provided below:</p> <p>Standby NOAMP: _____</p> <p>Active NOAMP: _____</p>																								
8.	<p>Active NOAMP Server Executing workarounds for known Bugs</p>	<p>Refer to the OCUDR 12.11.x Release Notes document for Known Customer Bugs, evaluate for applicability and execute the workarounds as mentioned. Note: If applicable then use workaround else skip the step.</p>																								
 <p>NOTE: Step 9 is for the STANDBY NOAMP ONLY.</p>																										
9. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Upgrade Server for the Standby NOAMP Server.</p>	<p>Upgrade Server for the Standby NOAMP Server (identified in Step 7 of this Procedure) as specified in Appendix C.1 Upgrade Server</p>																								
 <p>!! WARNING !! STEP 9 MUST BE COMPLETED BEFORE CONTINUING ON TO STEP 10.</p> <p>*** Verify the Databases are in sync using Appendix F before upgrading the Active Server</p>																										
10. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Upgrade Server for the Active NOAMP Server.</p>	<p>Upgrade Server for the Active NOAMP Server (identified in Step 7 of this Procedure) as specified in Appendix C.1 Upgrade Server.</p>																								
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>																										

4.1.3 Perform Health Check (Post Primary NOAMP / DR NOAMP Upgrade)



This procedure is part of Software Upgrade Preparation and is used to determine the health and status of the Oracle Communications User Data Repository network and servers.
Execute Health Check procedures as specified in **Appendix B**.

4.2 SOAM site Upgrade Execution

Open A Service Ticket at My Oracle Support ([Appendix I](#)) and inform them of your plans to upgrade this system prior to executing this upgrade.

Before upgrade, users must perform the system Health Check **Appendix B**.

This check ensures that the system to be upgraded is in an upgrade-ready state. Performing the system health check determines which alarms are present in the system and if upgrade can proceed with alarms.

*** WARNING ***

If there are servers in the system, which are not in Normal state, these servers should be brought to the Normal or the Application Disabled state before the upgrade process is started.

The sequence of upgrade is such that servers providing support services to other servers will be upgraded first.

*** WARNING ***

Please read the following notes on this procedure:

Procedure completion times shown here are estimates. Times may vary due to differences in database size, user experience, and user preparation.

Where possible, command response outputs are shown as accurately as possible. EXCEPTIONS are as follows:

Session banner information such as time and date.

System-specific configuration information such as hardware locations, IP addresses and hostnames.

ANY information marked with “XXXX” or “YYYY.” Where appropriate, instructions are provided to determine what output should be expected in place of “XXXX or YYYY”

Aesthetic differences unrelated to functionality such as browser attributes: window size, colors, toolbars and button layouts.

After completing each step and at each point where data is recorded from the screen, the technician performing the upgrade must mark the provided Check Box.

For procedures which are executed multiple times, a mark can be made below the Check Box (in the same column) for each additional iteration of the step executed.

Retention of Captured data is required for as a future support reference this procedure is executed by someone other than Oracle’s Consulting Services.

4.2.1 Perform Health Check (Pre-Upgrade)



This procedure is part of Software Upgrade Preparation and is used to determine the health and status of the Oracle Communications User Data Repository network and servers. This may be executed multiple times but must also be executed at least once within the time frame of 24-36 hours prior to the start of a maintenance window.

Execute Health Check procedures as specified in **Appendix B**.

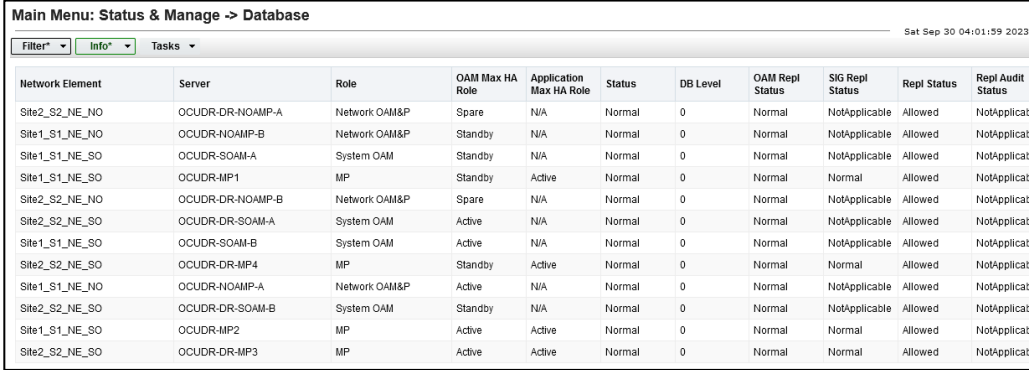
4.2.2 SOAM Upgrade

The following procedure details how to upgrade Oracle Communications User Data Repository SOAMs.

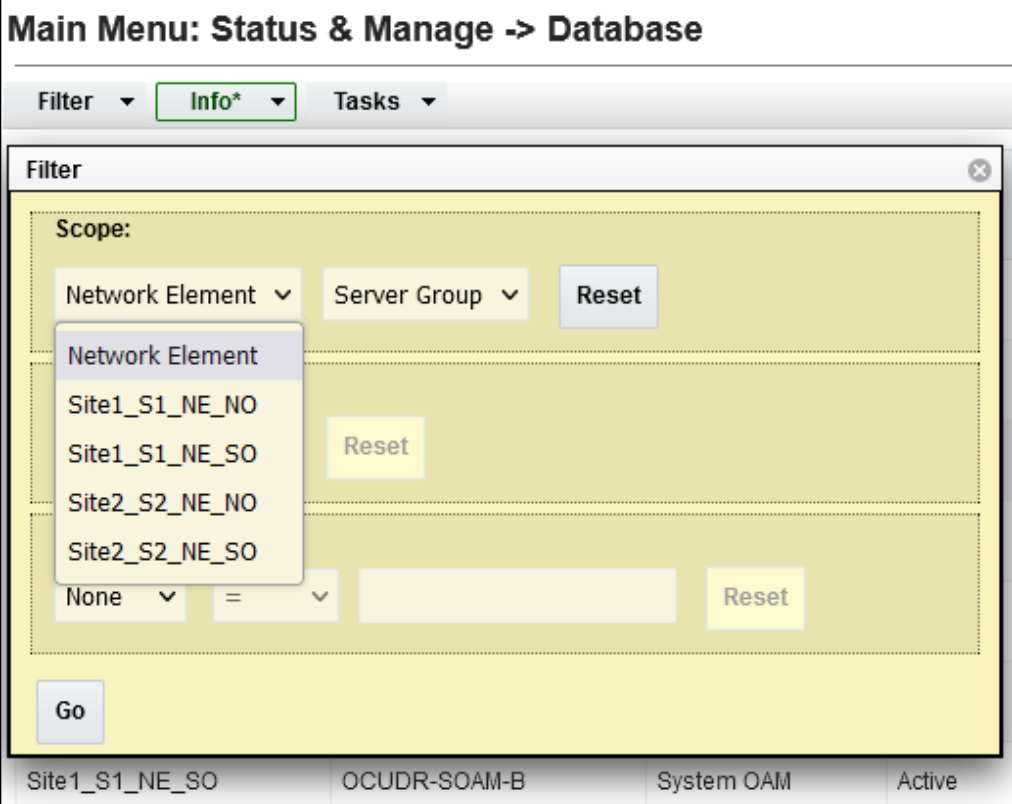
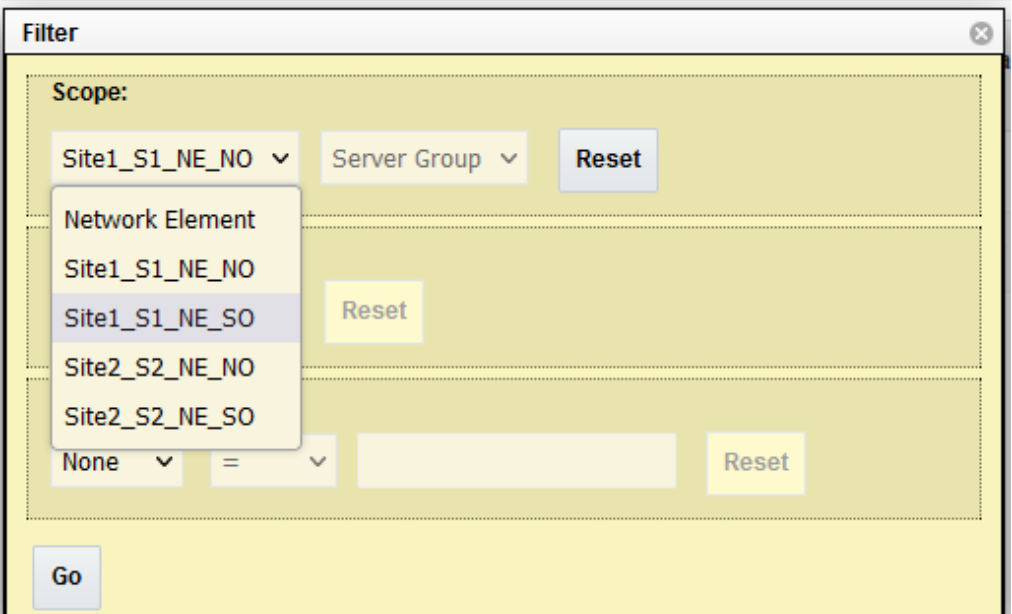
Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

4.2.2.1 Upgrade SOAM NE


Procedure 7: Upgrade SOAM NE

Step	Procedure	Result																																																																																																																																															
1. <input type="checkbox"/>	Using the VIP address, access the Primary NOAMP GUI.	Access the Primary NOAMP GUI as specified in Appendix A .																																																																																																																																															
2. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Status & Manage → Database</p> <p>...as shown on the right.</p>	 <table border="1" style="font-size: small;"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>OAM Max HA Role</th> <th>Application Max HA Role</th> <th>Status</th> <th>DB Level</th> <th>OAM Repl Status</th> <th>SIG Repl Status</th> <th>Repl Status</th> <th>Repl Audit Status</th> </tr> </thead> <tbody> <tr><td>Site2_S2_NE_NO</td><td>OCUDR-DR-NOAMP-A</td><td>Network OAM&P</td><td>Spare</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicat</td></tr> <tr><td>Site1_S1_NE_NO</td><td>OCUDR-NOAMP-B</td><td>Network OAM&P</td><td>Standby</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicat</td></tr> <tr><td>Site1_S1_NE_SO</td><td>OCUDR-SOAM-A</td><td>System OAM</td><td>Standby</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicat</td></tr> <tr><td>Site1_S1_NE_SO</td><td>OCUDR-MP1</td><td>MP</td><td>Standby</td><td>Active</td><td>Normal</td><td>0</td><td>Normal</td><td>Normal</td><td>Allowed</td><td>NotApplicat</td></tr> <tr><td>Site2_S2_NE_NO</td><td>OCUDR-DR-NOAMP-B</td><td>Network OAM&P</td><td>Spare</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicat</td></tr> <tr><td>Site2_S2_NE_SO</td><td>OCUDR-DR-SOAM-A</td><td>System OAM</td><td>Active</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicat</td></tr> <tr><td>Site1_S1_NE_SO</td><td>OCUDR-SOAM-B</td><td>System OAM</td><td>Active</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicat</td></tr> <tr><td>Site2_S2_NE_SO</td><td>OCUDR-DR-MP4</td><td>MP</td><td>Standby</td><td>Active</td><td>Normal</td><td>0</td><td>Normal</td><td>Normal</td><td>Allowed</td><td>NotApplicat</td></tr> <tr><td>Site1_S1_NE_NO</td><td>OCUDR-NOAMP-A</td><td>Network OAM&P</td><td>Active</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicat</td></tr> <tr><td>Site2_S2_NE_SO</td><td>OCUDR-DR-SOAM-B</td><td>System OAM</td><td>Standby</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicat</td></tr> <tr><td>Site1_S1_NE_SO</td><td>OCUDR-MP2</td><td>MP</td><td>Active</td><td>Active</td><td>Normal</td><td>0</td><td>Normal</td><td>Normal</td><td>Allowed</td><td>NotApplicat</td></tr> <tr><td>Site2_S2_NE_SO</td><td>OCUDR-DR-MP3</td><td>MP</td><td>Active</td><td>Active</td><td>Normal</td><td>0</td><td>Normal</td><td>Normal</td><td>Allowed</td><td>NotApplicat</td></tr> </tbody> </table>	Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status	DB Level	OAM Repl Status	SIG Repl Status	Repl Status	Repl Audit Status	Site2_S2_NE_NO	OCUDR-DR-NOAMP-A	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicat	Site1_S1_NE_NO	OCUDR-NOAMP-B	Network OAM&P	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicat	Site1_S1_NE_SO	OCUDR-SOAM-A	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicat	Site1_S1_NE_SO	OCUDR-MP1	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicat	Site2_S2_NE_NO	OCUDR-DR-NOAMP-B	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicat	Site2_S2_NE_SO	OCUDR-DR-SOAM-A	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicat	Site1_S1_NE_SO	OCUDR-SOAM-B	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicat	Site2_S2_NE_SO	OCUDR-DR-MP4	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicat	Site1_S1_NE_NO	OCUDR-NOAMP-A	Network OAM&P	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicat	Site2_S2_NE_SO	OCUDR-DR-SOAM-B	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicat	Site1_S1_NE_SO	OCUDR-MP2	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicat	Site2_S2_NE_SO	OCUDR-DR-MP3	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicat
Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status	DB Level	OAM Repl Status	SIG Repl Status	Repl Status	Repl Audit Status																																																																																																																																							
Site2_S2_NE_NO	OCUDR-DR-NOAMP-A	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicat																																																																																																																																							
Site1_S1_NE_NO	OCUDR-NOAMP-B	Network OAM&P	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicat																																																																																																																																							
Site1_S1_NE_SO	OCUDR-SOAM-A	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicat																																																																																																																																							
Site1_S1_NE_SO	OCUDR-MP1	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicat																																																																																																																																							
Site2_S2_NE_NO	OCUDR-DR-NOAMP-B	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicat																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-SOAM-A	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicat																																																																																																																																							
Site1_S1_NE_SO	OCUDR-SOAM-B	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicat																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-MP4	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicat																																																																																																																																							
Site1_S1_NE_NO	OCUDR-NOAMP-A	Network OAM&P	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicat																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-SOAM-B	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicat																																																																																																																																							
Site1_S1_NE_SO	OCUDR-MP2	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicat																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-MP3	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicat																																																																																																																																							
3. <input type="checkbox"/>	Record the name of the SOAM NE in the space provided to the right.	<p>Using the information provided in Section 3.1.2 (<i>Logins, Passwords and Site Information</i>) record the name of the SOAM Network Element in the space provided below:</p> <p>SOAM Network Element: _____</p>																																																																																																																																															

Procedure 7: Upgrade SOAM NE

Step	Procedure	Result
<p>4.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>From the “Network Element” filter pull-down, select the name for the SOAM NE.</p>	 <p>Main Menu: Status & Manage -> Database</p> <p>Filter Info* Tasks</p> <p>Filter</p> <p>Scope:</p> <p>Network Element Server Group Reset</p> <p>Network Element</p> <p>Site1_S1_NE_NO</p> <p>Site1_S1_NE_SO</p> <p>Site2_S2_NE_NO</p> <p>Site2_S2_NE_SO</p> <p>None =</p> <p>Reset</p> <p>Go</p> <p>Site1_S1_NE_SO OCU DR-SOAM-B System OAM Active</p>
<p>5.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>Click on the “GO” dialogue button located on the left bottom of the filter bar.</p>	 <p>Filter</p> <p>Scope:</p> <p>Site1_S1_NE_NO Server Group Reset</p> <p>Network Element</p> <p>Site1_S1_NE_NO</p> <p>Site1_S1_NE_SO</p> <p>Site2_S2_NE_NO</p> <p>Site2_S2_NE_SO</p> <p>None =</p> <p>Reset</p> <p>Go</p>

Procedure 7: Upgrade SOAM NE

Step	Procedure	Result																																																							
6. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>The user should be presented with the list of servers associated with the SOAM NE.</p>	<p>Main Menu: Status & Manage -> Database (Filtered) Sat Sep</p> <p>Filter* Info* Tasks</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>OAM Max HA Role</th> <th>Application Max HA Role</th> <th>Status</th> <th>DB Level</th> <th>OAM Repl Status</th> <th>SIG Repl Status</th> <th>Repl Status</th> <th>Repl Audit Status</th> </tr> </thead> <tbody> <tr> <td>Site1_S1_NE_SO</td> <td>OCUDR-SOAM-A</td> <td>System OAM</td> <td>Standby</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site1_S1_NE_SO</td> <td>OCUDR-SOAM-B</td> <td>System OAM</td> <td>Active</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site1_S1_NE_SO</td> <td>OCUDR-MP2</td> <td>MP</td> <td>Active</td> <td>Active</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>Normal</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site1_S1_NE_SO</td> <td>OCUDR-MP1</td> <td>MP</td> <td>Standby</td> <td>Active</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>Normal</td> <td>Allowed</td> <td>NotApplicable</td> </tr> </tbody> </table>	Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status	DB Level	OAM Repl Status	SIG Repl Status	Repl Status	Repl Audit Status	Site1_S1_NE_SO	OCUDR-SOAM-A	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-SOAM-B	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-MP2	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-MP1	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicable
Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status	DB Level	OAM Repl Status	SIG Repl Status	Repl Status	Repl Audit Status																																															
Site1_S1_NE_SO	OCUDR-SOAM-A	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																															
Site1_S1_NE_SO	OCUDR-SOAM-B	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																															
Site1_S1_NE_SO	OCUDR-MP2	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicable																																															
Site1_S1_NE_SO	OCUDR-MP1	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicable																																															
7. <input type="checkbox"/>	<p>Using the list of servers associated with the SOAM NE shown in the above Step...</p> <p>Record the Server names of the SOAMs associated with the SOAM Network Element.</p>	<p>Identify the SOAM "Server" names and record them in the space provided below:</p> <p>Standby SOAM: _____</p> <p>Active SOAM: _____</p>																																																							
8. <input type="checkbox"/>	<p>Active NOAMP VIP:</p>	<p>Inspect KPI reports to verify traffic is at the expected condition. (There is no congestion and KPIs are consistent).</p> <p>Performance indicators are available on the Active NOAMP under Status & Manage → KPIs</p>																																																							
9. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Upgrade Server for the Standby SOAM Server.</p>	<p>Upgrade Server for the Standby SOAM Server (identified in Step 9 of this Procedure) as specified in Appendix C.1 Upgrade Server</p>																																																							
 <p>!! WARNING !! STEP 9 MUST BE COMPLETED BEFORE CONTINUING ON TO STEP 10.</p> <p>*** Verify the Databases are in sync using Appendix F before preparing the upgrade</p>																																																									
10. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Upgrade Server for the Active SOAM Server.</p>	<p>Upgrade Server for the Active SOAM Server (identified in Step 7 of this Procedure) as specified in Appendix C.1 Upgrade Server</p>																																																							
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>																																																									

Oracle Communications User Data Repository Software Upgrade Procedure

4.2.3 MP Upgrade

The following procedure details how to upgrade Oracle Communications User Data Repository MPs.

4.2.3.1 Upgrade MP NE

Procedure 8: Upgrade MP NE

Step	Procedure	Result																																																																																																																																															
1. <input type="checkbox"/>	Using the VIP address, access the Primary NOAMP GUI.	Access the Primary NOAMP GUI as specified in Appendix A .																																																																																																																																															
2. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Status & Manage → Database</p> <p>...as shown on the right.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>OAM Max HA Role</th> <th>Application Max HA Role</th> <th>Status</th> <th>DB Level</th> <th>OAM Repl Status</th> <th>SG Repl Status</th> <th>Repl Status</th> <th>Rep Sta</th> </tr> </thead> <tbody> <tr><td>Site2_S2_NE_NO</td><td>OCUDR-DR-NOAMP-A</td><td>Network OAM&P</td><td>Spare</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>Not</td></tr> <tr><td>Site1_S1_NE_NO</td><td>OCUDR-NOAMP-B</td><td>Network OAM&P</td><td>Standby</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>Not</td></tr> <tr><td>Site1_S1_NE_SO</td><td>OCUDR-SOAM-A</td><td>System OAM</td><td>Standby</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>Not</td></tr> <tr><td>Site1_S1_NE_SO</td><td>OCUDR-MP1</td><td>MP</td><td>Standby</td><td>Active</td><td>Normal</td><td>0</td><td>Normal</td><td>Normal</td><td>Allowed</td><td>Not</td></tr> <tr><td>Site2_S2_NE_NO</td><td>OCUDR-DR-NOAMP-B</td><td>Network OAM&P</td><td>Spare</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>Not</td></tr> <tr><td>Site2_S2_NE_SO</td><td>OCUDR-DR-SOAM-A</td><td>System OAM</td><td>Active</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>Not</td></tr> <tr><td>Site1_S1_NE_SO</td><td>OCUDR-SOAM-B</td><td>System OAM</td><td>Active</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>Not</td></tr> <tr><td>Site2_S2_NE_NO</td><td>OCUDR-DR-MP4</td><td>MP</td><td>Standby</td><td>Active</td><td>Normal</td><td>0</td><td>Normal</td><td>Normal</td><td>Allowed</td><td>Not</td></tr> <tr><td>Site1_S1_NE_NO</td><td>OCUDR-NOAMP-A</td><td>Network OAM&P</td><td>Active</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>Not</td></tr> <tr><td>Site2_S2_NE_SO</td><td>OCUDR-DR-SOAM-B</td><td>System OAM</td><td>Standby</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>Not</td></tr> <tr><td>Site1_S1_NE_SO</td><td>OCUDR-MP2</td><td>MP</td><td>Active</td><td>Active</td><td>Normal</td><td>0</td><td>Normal</td><td>Normal</td><td>Allowed</td><td>Not</td></tr> <tr><td>Site2_S2_NE_SO</td><td>OCUDR-DR-MP3</td><td>MP</td><td>Active</td><td>Active</td><td>Normal</td><td>0</td><td>Normal</td><td>Normal</td><td>Allowed</td><td>Not</td></tr> </tbody> </table>	Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status	DB Level	OAM Repl Status	SG Repl Status	Repl Status	Rep Sta	Site2_S2_NE_NO	OCUDR-DR-NOAMP-A	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	Not	Site1_S1_NE_NO	OCUDR-NOAMP-B	Network OAM&P	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	Not	Site1_S1_NE_SO	OCUDR-SOAM-A	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	Not	Site1_S1_NE_SO	OCUDR-MP1	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	Not	Site2_S2_NE_NO	OCUDR-DR-NOAMP-B	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	Not	Site2_S2_NE_SO	OCUDR-DR-SOAM-A	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	Not	Site1_S1_NE_SO	OCUDR-SOAM-B	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	Not	Site2_S2_NE_NO	OCUDR-DR-MP4	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	Not	Site1_S1_NE_NO	OCUDR-NOAMP-A	Network OAM&P	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	Not	Site2_S2_NE_SO	OCUDR-DR-SOAM-B	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	Not	Site1_S1_NE_SO	OCUDR-MP2	MP	Active	Active	Normal	0	Normal	Normal	Allowed	Not	Site2_S2_NE_SO	OCUDR-DR-MP3	MP	Active	Active	Normal	0	Normal	Normal	Allowed	Not
Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status	DB Level	OAM Repl Status	SG Repl Status	Repl Status	Rep Sta																																																																																																																																							
Site2_S2_NE_NO	OCUDR-DR-NOAMP-A	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	Not																																																																																																																																							
Site1_S1_NE_NO	OCUDR-NOAMP-B	Network OAM&P	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	Not																																																																																																																																							
Site1_S1_NE_SO	OCUDR-SOAM-A	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	Not																																																																																																																																							
Site1_S1_NE_SO	OCUDR-MP1	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	Not																																																																																																																																							
Site2_S2_NE_NO	OCUDR-DR-NOAMP-B	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	Not																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-SOAM-A	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	Not																																																																																																																																							
Site1_S1_NE_SO	OCUDR-SOAM-B	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	Not																																																																																																																																							
Site2_S2_NE_NO	OCUDR-DR-MP4	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	Not																																																																																																																																							
Site1_S1_NE_NO	OCUDR-NOAMP-A	Network OAM&P	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	Not																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-SOAM-B	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	Not																																																																																																																																							
Site1_S1_NE_SO	OCUDR-MP2	MP	Active	Active	Normal	0	Normal	Normal	Allowed	Not																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-MP3	MP	Active	Active	Normal	0	Normal	Normal	Allowed	Not																																																																																																																																							
3. <input type="checkbox"/>	Record the name of the SOAM NE in the space provided to the right.	<p>Using the information provided in Section 3.1.2 (<i>Logins, Passwords and Site Information</i>) record the name of the SOAM Network Element in the space provided below:</p> <p>SOAM Network Element: _____</p>																																																																																																																																															

Procedure 8: Upgrade MP NE

Step	Procedure	Result
<p>4.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>From the “Network Element” filter pull-down, select the name for the SOAMNE.</p>	
<p>5.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>Click on the “GO” dialogue button located on the left bottom of the filter bar.</p>	

Procedure 8: Upgrade MP NE

Step	Procedure	Result																																																							
6. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>The user should be presented with the list of MP servers associated with the SOAM NE.</p>	<p>Main Menu: Status & Manage -> Database (Filtered)</p> <p>Filter* Info* Tasks</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>OAM Max HA Role</th> <th>Application Max HA Role</th> <th>Status</th> <th>DB Level</th> <th>OAM Repl Status</th> <th>SIG Repl Status</th> <th>Repl Status</th> <th>Repl Audit Status</th> </tr> </thead> <tbody> <tr> <td>Site1_S1_NE_SO</td> <td>OCUDR-SOAM-A</td> <td>System OAM</td> <td>Standby</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site1_S1_NE_SO</td> <td>OCUDR-SOAM-B</td> <td>System OAM</td> <td>Active</td> <td>N/A</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>NotApplicable</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site1_S1_NE_SO</td> <td>OCUDR-MP2</td> <td>MP</td> <td>Active</td> <td>Active</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>Normal</td> <td>Allowed</td> <td>NotApplicable</td> </tr> <tr> <td>Site1_S1_NE_SO</td> <td>OCUDR-MP1</td> <td>MP</td> <td>Standby</td> <td>Active</td> <td>Normal</td> <td>0</td> <td>Normal</td> <td>Normal</td> <td>Allowed</td> <td>NotApplicable</td> </tr> </tbody> </table>	Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status	DB Level	OAM Repl Status	SIG Repl Status	Repl Status	Repl Audit Status	Site1_S1_NE_SO	OCUDR-SOAM-A	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-SOAM-B	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-MP2	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-MP1	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicable
Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status	DB Level	OAM Repl Status	SIG Repl Status	Repl Status	Repl Audit Status																																															
Site1_S1_NE_SO	OCUDR-SOAM-A	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																															
Site1_S1_NE_SO	OCUDR-SOAM-B	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																															
Site1_S1_NE_SO	OCUDR-MP2	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicable																																															
Site1_S1_NE_SO	OCUDR-MP1	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicable																																															
7. <input type="checkbox"/>	<p>Using the list of servers associated with the SOAM NE shown in the above Step...</p> <p>Record the Server names of the MPs associated with the SOAM Network Element.</p>	<p>Identify the MP "Server" names and record them in the space provided below:</p> <p>MP1: _____ MP3: _____</p> <p>MP2: _____ MP4: _____</p>																																																							
8. <input type="checkbox"/>	<p>Upgrade MP Servers</p>	<p>In a multi-active MP cluster, all the MPs are Active; there are no Standby MPs. The effect on the Diameter network traffic must be considered since any MP being upgraded will not be handling live traffic. Oracle Communications User Data Repository shall support upgrades while the Provisioning and Signaling traffic is running at 20% of the rated TPS.</p>																																																							
9. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Upgrade server for the first MP server to be upgraded (start with the MP from the standby SOAM group)</p>	<p>Upgrade Server for the MP Servers (identified in Step 7 of this Procedure) as specified in Appendix C.1 Upgrade Server</p> <p>Note – After selecting the “upgrade server” button, the connections for that MP will automatically be taken down and traffic will be diverted to the active MP.</p>																																																							

Procedure 8: Upgrade MP NE

Step	Procedure	Result
10. <input type="checkbox"/>	<p>For low capacity Configurations: Record the server name of the MP that was upgraded from the standby SOAM group. Repeat steps 9 -11 for the MP server at the active SOAM group.</p> <p>For Normal Capacity C-Class Configuration, Record the Server names of the 2 MPs that were upgraded from the standby SOAM Group. Repeat steps 10-11 for the MPs.</p>	<p>“Check off” the associated Check Box as Steps 9- 10 are completed for each MP.</p> <p><input type="checkbox"/> MP1: _____</p> <p><input type="checkbox"/> MP2: _____</p> <p><input type="checkbox"/> MP3: _____</p> <p><input type="checkbox"/> MP4: _____</p>
THIS PROCEDURE HAS BEEN COMPLETED		


4.2.4 Perform Health Check (Post SOAM Upgrade)

<input type="checkbox"/>	This procedure is part of Software Upgrade Preparation and is used to determine the health and status of the Oracle Communications User Data Repository network and servers. Execute Health Check procedures as specified in Appendix B .
--------------------------	--

4.3 Accept/Backout upgrade of VM to VM upgrade

Prerequisite: Make sure section 4.1 and 4.2 are completed.

Please use [Appendix E](#) to accept the upgrade.



NOTE: Once the upgrade is accepted for a server, that server will not be allowed to backout to previous release from which the upgrade was done

Please use chapter 7 - **Recovery Procedures** for backout

5. BARE METAL MIGRATION FROM UDR-12.11.X TO UDR-15.0

5.1 Bare Metal to Virtual Machine Migration Without Split

Use this procedure when the subscriber DB size on the existing BM deployment can be accommodated on the supported VM profiles on UDR 15.0. For details on subscriber DB size supported on different VM profiles, refer to Appendix G in Cloud Installation and Configuration Guide.

Note: There would be no rollback procedure since a new set of VMs are created and added to the existing deployments. For rollback, the BM deployments can be made Active.

This procedure is used to migrate the BM setup to VM based setup where DB will be synced from BM site to VM site and then we follow the dual image upgrade procedure to perform upgrade on VM based site to 15.0 UDR from UDR-12.11.x. Once VM site is upgraded to 15.0, thereafter we failover the BM site. Here we will be using new IPs.

Prerequisite: Take full database back up using Procedure 4: Full Database Backup

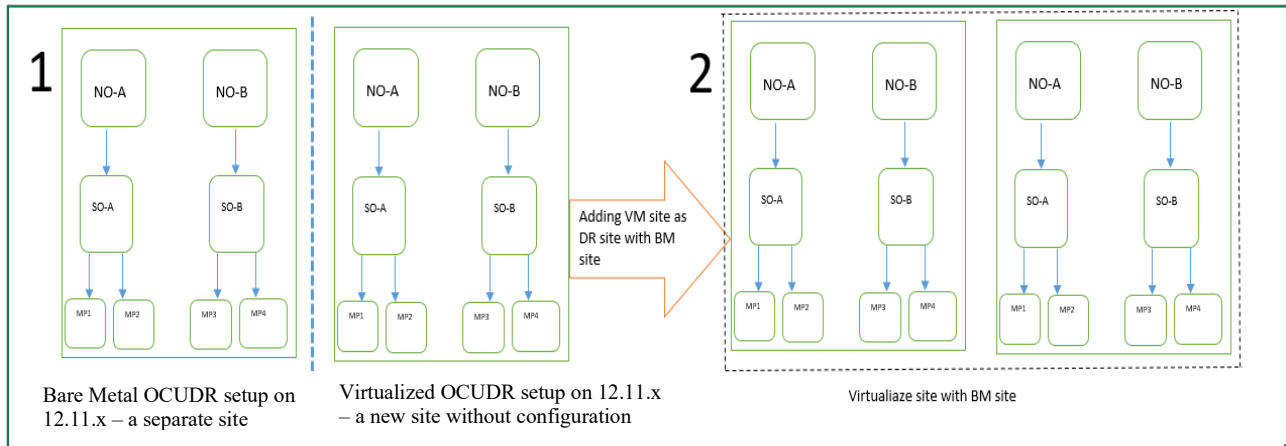


Figure 3: Baremetal site and VM site association

Oracle Communications User Data Repository Software Upgrade Procedure

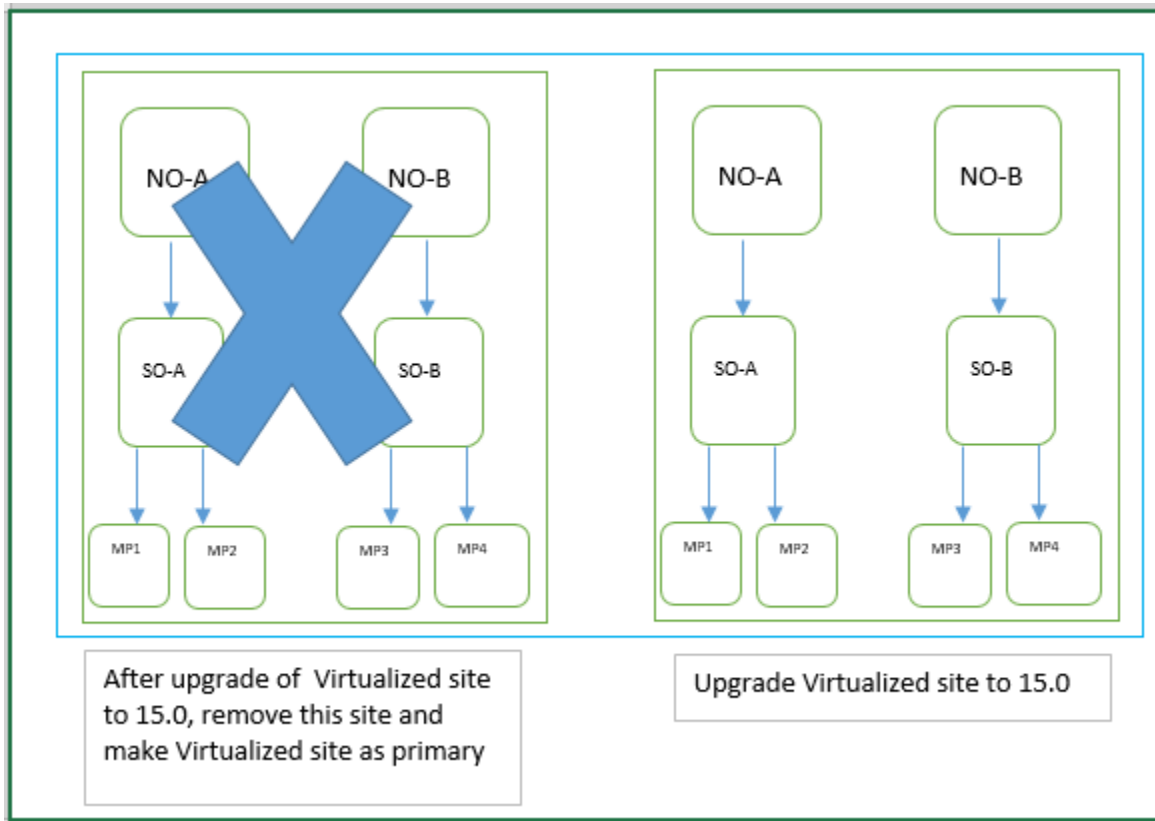


Figure 4: Separation of BM site from VM site after upgrade to UDR-15.0


Procedure 9: Migration procedure from BM to VM

Step	Procedure	Result
<p>Note: There would be no rollback procedure since a new set of VMs are created and added to the existing deployments. For rollback, the BM deployments can be made Active.</p>		
1.	Choose the VM profile which can accommodate the DB from the Appendix G of Cloud Installation & Configuration Guide	Choose the profile for NOAMP, SOAM and MP before creating VM for them
2.	Create VM guest in same number as we have nodes in BM using 'cloud installation & configuration' guide	Create the VM guests using the Section 4.0 Cloud Creation with UDR-12.11.x
3.	Login to Active NOAMP GUI using Appendix A on BM	Logged in Active NOAMP GUI

Oracle Communications User Data Repository Software Upgrade Procedure

Step	Procedure	Result									
<p>Note: There would be no rollback procedure since a new set of VMs are created and added to the existing deployments. For rollback, the BM deployments can be made Active.</p>											
4.	Add VM guest as spare site to BM site using Cloud Installation and Configuration Guide of UDR-12.11.x	<p>We will have two sites BM site (existing site) and VM site as spare site. Use below section of Cloud installation & Configuration guide to add VM site with BM site</p> <p>5.2 Create Configuration for Remaining Servers</p> <p>5.3 Apply Configuration to Remaining Servers</p> <p>5.4 Configure XSI Networks (All SOAM Sites)</p> <p>6.0 OAM PAIRING</p> <p>7.0 APPLICATION CONFIGURATION</p> <p>Note: Use Active NOAMP GUI of BM for configuration</p>									
5.	Make VM site as active site and BM site as spare site	<p>Step-1 Go to Main Menu: Status & Manage -> HA and change the "Max Allowed HA Role" role to spare of both NOAMP nodes of BM site as below:</p> <div style="border: 1px solid black; padding: 5px;"> <p>Main Menu: Status & Manage -> HA [Edit]</p> <p>Info* ▾</p> <p>Modifying HA attributes</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Max Allowed HA Role</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>UDRPV01-S1-NOAMP-A</td> <td>Spare ▾</td> <td>The maximum desired HA Role for UDRPV01-S1-NOAMP-A</td> </tr> <tr> <td>UDRPV01-S1-NOAMP-B</td> <td>Spare ▾</td> <td>The maximum desired HA Role for UDRPV01-S1-NOAMP-B</td> </tr> </tbody> </table> </div>	Hostname	Max Allowed HA Role	Description	UDRPV01-S1-NOAMP-A	Spare ▾	The maximum desired HA Role for UDRPV01-S1-NOAMP-A	UDRPV01-S1-NOAMP-B	Spare ▾	The maximum desired HA Role for UDRPV01-S1-NOAMP-B
Hostname	Max Allowed HA Role	Description									
UDRPV01-S1-NOAMP-A	Spare ▾	The maximum desired HA Role for UDRPV01-S1-NOAMP-A									
UDRPV01-S1-NOAMP-B	Spare ▾	The maximum desired HA Role for UDRPV01-S1-NOAMP-B									
6.	Configure the Sh connection to OCPM from all MPs of VM site	<p>Verify that all MPs of VM site start receiving SH traffic. Go to Main Menu: Status & Manage -> KPIs and verify all requests are successful</p>									
7.	Perform the Dual Image Upgrade on VM site using 4.1 and 4.2	Upgrade all server of VM site using the section of 4.1 and 4.2									

Oracle Communications User Data Repository Software Upgrade Procedure

Step	Procedure	Result
<p>Note: There would be no rollback procedure since a new set of VMs are created and added to the existing deployments. For rollback, the BM deployments can be made Active.</p>		
8.	<p>After successful DIU of VM site, remove BM site from VM site</p>	<ol style="list-style-type: none"> 1- First remove Sh connection to all MPs of BM site <ul style="list-style-type: none"> • Login to Active SOAM GUI using Appendix-A • Go to Main Menu: Diameter -> Maintenance -> Connections and disable the connection using 'Disable' button • Go to Main Menu: Diameter -> Configuration -> Connections and delete the connections using 'Delete' button • Go to Main Menu: Diameter -> Configuration -> Peer Nodes and delete the peer node using 'Delete' button • Go to Main Menu: Diameter -> Configuration -> Local Nodes and delete the local nodes using 'Delete' button <p>Note: Only delete the connections, peer nodes and local nodes of BM site only.</p> 2- Remove all MPs from its server group <ul style="list-style-type: none"> • Login to Active NOAMP GUI using Appendix A • Go to Main Menu: Status & Manage -> HA and make "Max Allowed HA role to OSS' • Go to Main Menu: Configuration -> Server Groups and remove from MP server group using 'Edit' button and then delete the server group too 3- Delete the MP server from server screen of active NOAMP GUI [VM site] <ul style="list-style-type: none"> • Go to Main Menu: Configuration -> Server and delete all MP servers using 'Delete' button 4- After MP, remove SOAM nodes of BM site from its Server Group <ul style="list-style-type: none"> • Use step-2 5- Delete the SOAM server from server screen of active NOAMP GUI [VM site] <ul style="list-style-type: none"> • Use step-3 6- At last, remove NOAMP nodes of BM from its server group <ul style="list-style-type: none"> • Use step-2 7- Delete NOAMP server from server screen of active NOAMP GUI [VM site] <ul style="list-style-type: none"> • Use step-3 8- Finally delete the NE files of BM site from Active NOAMP of VM site Go to Main Menu: Configuration -> Networking -> Networks, click on  symbol to delete the files
9.	<p>After successful removal of BM site from VM site</p>	<p>All subscribers are migrated here in VM site.</p>
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>		

5.2 Bare Metal to Virtual Machine Migration with Export/Import split procedures

Use this procedure when the subscriber DB size on the existing BM deployment is greater than the supported capacities on VM profiles. For details on subscriber DB size supported on different VM profiles, refer to Appendix G in Cloud Installation and Configuration Guide.

This procedure is used to migrate the BM setup to VM based setup where Subscribers will be imported in two or more VM based setup installed in UDR-15.0 using EXPORT/IMPORT tools provided by UDR.

Note: There would be no rollback procedure since a new set of VMs are created and added to the existing deployments. For rollback, the BM deployments can be made Active.

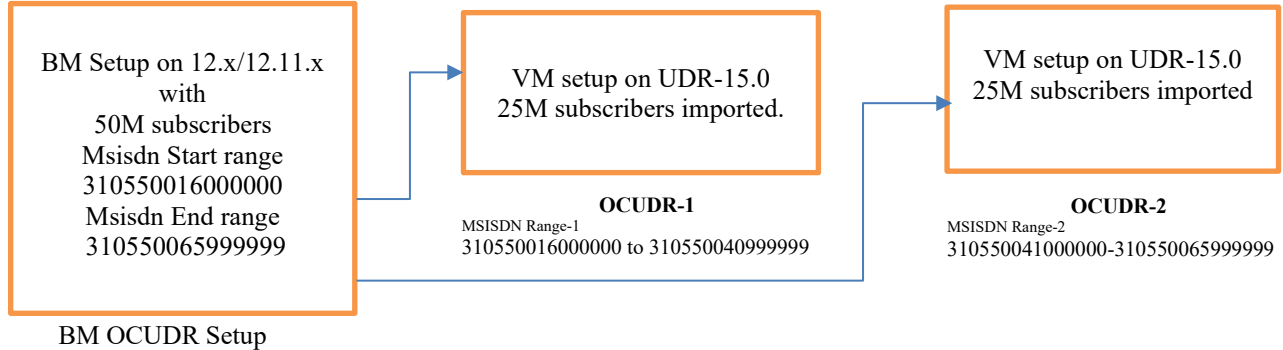


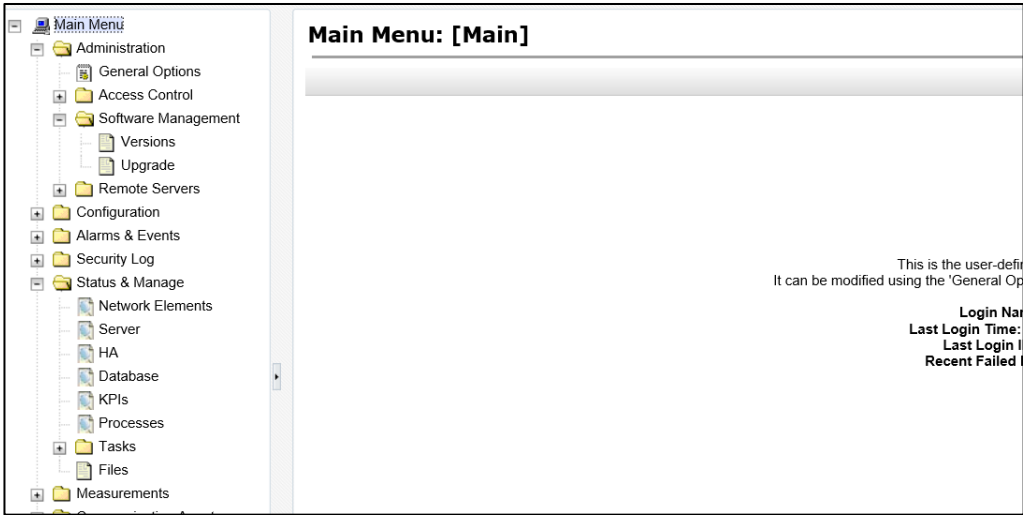
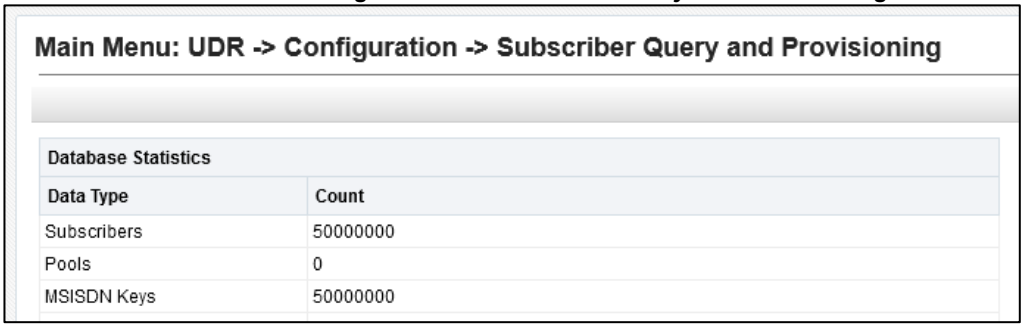
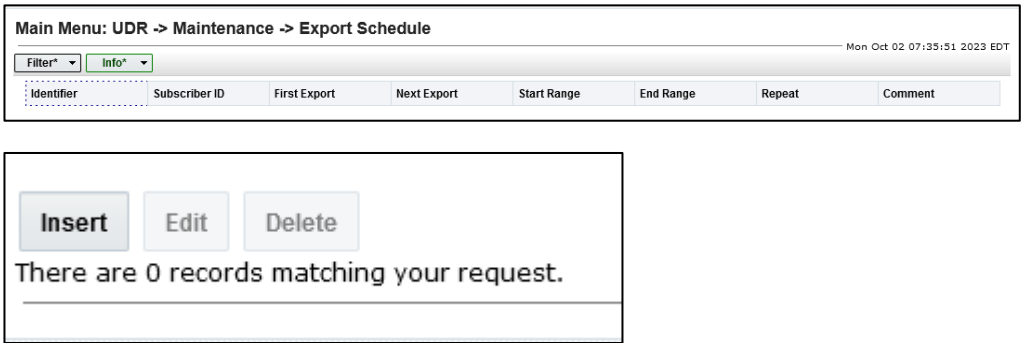
Figure 5: Subscriber Migration to Cloud OCUDR from Bare metal OCUDR

Prerequisite: Take full database back up using Procedure 4: Full Database Backup

Procedure 10: Migration procedure from BM to VM using Export/Import tool

Step	Procedure	Result
Note: There would be no rollback procedure since a new set of VMs are created and added to the existing deployments. For rollback, the BM deployments can be made Active.		
1.	Refer the Appendix G of Cloud Install Guide for VM profile	Choose the NOAMP, SOAM and MP profiles for VM creation
2.	Create VM setup	Create a new setup vm based and configure them with UDR-15.0 using cloud installation and configuration guide of UDR-15.0 <i>CloudInstallationAndConfigurationGuide-UDR-15.0.docx</i> , section 4.0 for creating guest and sections-5.0,6.0 and 7.0 to configure the setup

Oracle Communications User Data Repository Software Upgrade Procedure

Step	Procedure	Result																
<p>Note: There would be no rollback procedure since a new set of VMs are created and added to the existing deployments. For rollback, the BM deployments can be made Active.</p>																		
<p>3.</p>	<p>Login to BM active NOAMP using Appendix-A</p>	 <p>This is the user-defin... It can be modified using the 'General Op...</p> <p>Login Nat... Last Login Time: ... Last Login I... Recent Failed...</p> <table border="1"> <thead> <tr> <th>Data Type</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>Subscribers</td> <td>50000000</td> </tr> <tr> <td>Pools</td> <td>0</td> </tr> <tr> <td>MSISDN Keys</td> <td>50000000</td> </tr> </tbody> </table>	Data Type	Count	Subscribers	50000000	Pools	0	MSISDN Keys	50000000								
Data Type	Count																	
Subscribers	50000000																	
Pools	0																	
MSISDN Keys	50000000																	
<p>4.</p>	<p>Verify the count of subscribers at Bare Metal (source setup)</p>	<p>Go to Main Menu: UDR -> Configuration -> Subscriber Query and Provisioning</p>  <p>Main Menu: UDR -> Configuration -> Subscriber Query and Provisioning</p> <table border="1"> <thead> <tr> <th>Data Type</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>Subscribers</td> <td>50000000</td> </tr> <tr> <td>Pools</td> <td>0</td> </tr> <tr> <td>MSISDN Keys</td> <td>50000000</td> </tr> </tbody> </table>	Data Type	Count	Subscribers	50000000	Pools	0	MSISDN Keys	50000000								
Data Type	Count																	
Subscribers	50000000																	
Pools	0																	
MSISDN Keys	50000000																	
<p>5.</p>	<p>Initiate Export Schedule task from BM Active NOAMP GUI in range manner.</p>	<p>Go to Main Menu: UDR -> Maintenance -> Export Schedule</p>  <p>Main Menu: UDR -> Maintenance -> Export Schedule</p> <p>Mon Oct 02 07:35:51 2023 EDT</p> <table border="1"> <thead> <tr> <th>Identifier</th> <th>Subscriber ID</th> <th>First Export</th> <th>Next Export</th> <th>Start Range</th> <th>End Range</th> <th>Repeat</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td colspan="8">There are 0 records matching your request.</td> </tr> </tbody> </table> <p>All .xml files will be exported on Active NOAMP console at /var/TKLC/dv/filemgmt/provexport/</p> <p>Example: BM setup has 50M subscribers, and we will split 50M into two ranges and export them. Each exml file will have 25M subscribers. First 25M ixml file we use to import on OCUDR-1 target setup and second 25M ixml we use for OCUDR-2 target server.</p>	Identifier	Subscriber ID	First Export	Next Export	Start Range	End Range	Repeat	Comment	There are 0 records matching your request.							
Identifier	Subscriber ID	First Export	Next Export	Start Range	End Range	Repeat	Comment											
There are 0 records matching your request.																		

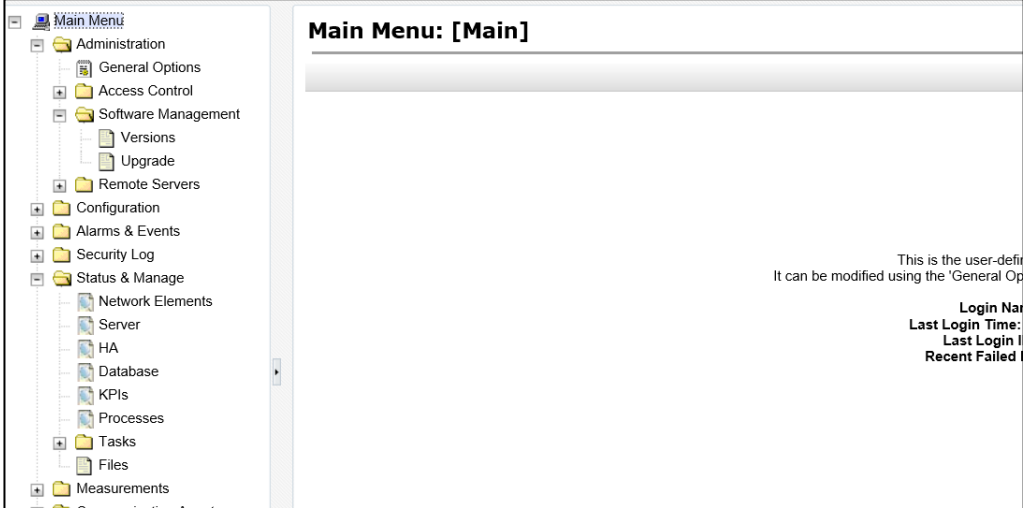
Oracle Communications User Data Repository Software Upgrade Procedure

Step	Procedure	Result																																																
		<p>Note: There would be no rollback procedure since a new set of VMs are created and added to the existing deployments. For rollback, the BM deployments can be made Active.</p>																																																
<p>6.</p>	<p>Click 'Insert button' and fill data then initiate Export schedule task by pressing 'Ok' button</p>	<div> <p>Main Menu: UDR -> Maintenance -> Export Schedule -> [Insert] Mon Oct 02 07:41:05 2023 EDT</p> <p>Error ▾</p> <table border="1"> <thead> <tr> <th>Field</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Identifier *</td> <td>Range1</td> <td>Identifying string for this scheduled export. [Default = n/a; Range = 4-12 characters. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.] [A value is required.]</td> </tr> <tr> <td>Subscriber ID *</td> <td>MSISDN ▾</td> <td>Type of Subscriber ID based on which subscriber records are exported. [A value is required.]</td> </tr> <tr> <td>Date</td> <td>October ▾ 02 ▾ 2023 ▾</td> <td>The initial date on which this export should run.</td> </tr> <tr> <td>Time</td> <td>07 ▾ 50 ▾</td> <td>The initial time at which this export should run.</td> </tr> <tr> <td>Start Range</td> <td>310550016000000 *</td> <td>Start of range of data to be included in this export. [Range = 8-15 digits.]</td> </tr> <tr> <td>End Range</td> <td>310550040999999 *</td> <td>End of range of data to be included in this export. [Range = 8-15 digits.] Note: A maximum of 30 million subscribers will be exported, irrespective of the End Range value.</td> </tr> <tr> <td>Repeat</td> <td><input checked="" type="radio"/> none <input type="radio"/> daily <input type="radio"/> weekly <input type="radio"/> monthly</td> <td>How often this export should be repeated.</td> </tr> <tr> <td>Comment</td> <td>25Msubscribers</td> <td>Optional text that may be used to describe the purpose of this export. [Range = 0-255 characters.]</td> </tr> </tbody> </table> <p>Ok Cancel</p> </div> <div> <p>Main Menu: UDR -> Maintenance -> Export Schedule Mon Oct 02 07:47</p> <p>Filter* ▾</p> <table border="1"> <thead> <tr> <th>Identifier</th> <th>Subscriber ID</th> <th>First Export</th> <th>Next Export</th> <th>Start Range</th> <th>End Range</th> <th>Repeat</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td>Range1</td> <td>MSISDN</td> <td>2023-10-02 07:50:00</td> <td>-</td> <td>310550016000000</td> <td>310550040999999</td> <td>none</td> <td>25Msubscribers</td> </tr> </tbody> </table> </div>	Field	Value	Description	Identifier *	Range1	Identifying string for this scheduled export. [Default = n/a; Range = 4-12 characters. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.] [A value is required.]	Subscriber ID *	MSISDN ▾	Type of Subscriber ID based on which subscriber records are exported. [A value is required.]	Date	October ▾ 02 ▾ 2023 ▾	The initial date on which this export should run.	Time	07 ▾ 50 ▾	The initial time at which this export should run.	Start Range	310550016000000 *	Start of range of data to be included in this export. [Range = 8-15 digits.]	End Range	310550040999999 *	End of range of data to be included in this export. [Range = 8-15 digits.] Note: A maximum of 30 million subscribers will be exported, irrespective of the End Range value.	Repeat	<input checked="" type="radio"/> none <input type="radio"/> daily <input type="radio"/> weekly <input type="radio"/> monthly	How often this export should be repeated.	Comment	25Msubscribers	Optional text that may be used to describe the purpose of this export. [Range = 0-255 characters.]	Identifier	Subscriber ID	First Export	Next Export	Start Range	End Range	Repeat	Comment	Range1	MSISDN	2023-10-02 07:50:00	-	310550016000000	310550040999999	none	25Msubscribers					
Field	Value	Description																																																
Identifier *	Range1	Identifying string for this scheduled export. [Default = n/a; Range = 4-12 characters. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.] [A value is required.]																																																
Subscriber ID *	MSISDN ▾	Type of Subscriber ID based on which subscriber records are exported. [A value is required.]																																																
Date	October ▾ 02 ▾ 2023 ▾	The initial date on which this export should run.																																																
Time	07 ▾ 50 ▾	The initial time at which this export should run.																																																
Start Range	310550016000000 *	Start of range of data to be included in this export. [Range = 8-15 digits.]																																																
End Range	310550040999999 *	End of range of data to be included in this export. [Range = 8-15 digits.] Note: A maximum of 30 million subscribers will be exported, irrespective of the End Range value.																																																
Repeat	<input checked="" type="radio"/> none <input type="radio"/> daily <input type="radio"/> weekly <input type="radio"/> monthly	How often this export should be repeated.																																																
Comment	25Msubscribers	Optional text that may be used to describe the purpose of this export. [Range = 0-255 characters.]																																																
Identifier	Subscriber ID	First Export	Next Export	Start Range	End Range	Repeat	Comment																																											
Range1	MSISDN	2023-10-02 07:50:00	-	310550016000000	310550040999999	none	25Msubscribers																																											
<p>7.</p>	<p>Check the status on Main Menu: UDR -> Maintenance -> Export Status</p>	<div> <p>Main Menu: UDR -> Maintenance -> Export Status M</p> <p>Filter* ▾</p> <table border="1"> <thead> <tr> <th>Export File</th> <th>Time Queued</th> <th>Time Started</th> <th>Time Completed</th> <th>Subscriber Count</th> <th>Pool Count</th> <th>Status</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td>export_Range1.MSISDN.2...</td> <td>2023-10-02 07:50:15</td> <td>2023-10-02 07:50:15</td> <td>-</td> <td>2464092</td> <td>0</td> <td>In Progress</td> <td>25Msubscribers</td> </tr> </tbody> </table> </div> <div> <p>Main Menu: UDR -> Maintenance -> Export Status Mon Oct 02 08:13:40</p> <p>Filter* ▾</p> <table border="1"> <thead> <tr> <th>Export File</th> <th>Time Queued</th> <th>Time Started</th> <th>Time Completed</th> <th>Subscriber Count</th> <th>Pool Count</th> <th>Status</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td>export_Range1.MSISDN.2...</td> <td>2023-10-02 07:50:15</td> <td>2023-10-02 07:50:15</td> <td>2023-10-02 08:11:10</td> <td>25000000</td> <td>0</td> <td>Transferring</td> <td>25Msubscribers</td> </tr> </tbody> </table> </div> <div> <p>Main Menu: UDR -> Maintenance -> Export Status Mon Oct 02 08:15:51</p> <p>Filter* ▾</p> <table border="1"> <thead> <tr> <th>Export File</th> <th>Time Queued</th> <th>Time Started</th> <th>Time Completed</th> <th>Subscriber Count</th> <th>Pool Count</th> <th>Status</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td>export_Range1.MSISDN.2...</td> <td>2023-10-02 07:50:15</td> <td>2023-10-02 07:50:15</td> <td>2023-10-02 08:15:12</td> <td>25000000</td> <td>0</td> <td>Completed</td> <td>25Msubscribers</td> </tr> </tbody> </table> </div>	Export File	Time Queued	Time Started	Time Completed	Subscriber Count	Pool Count	Status	Comment	export_Range1.MSISDN.2...	2023-10-02 07:50:15	2023-10-02 07:50:15	-	2464092	0	In Progress	25Msubscribers	Export File	Time Queued	Time Started	Time Completed	Subscriber Count	Pool Count	Status	Comment	export_Range1.MSISDN.2...	2023-10-02 07:50:15	2023-10-02 07:50:15	2023-10-02 08:11:10	25000000	0	Transferring	25Msubscribers	Export File	Time Queued	Time Started	Time Completed	Subscriber Count	Pool Count	Status	Comment	export_Range1.MSISDN.2...	2023-10-02 07:50:15	2023-10-02 07:50:15	2023-10-02 08:15:12	25000000	0	Completed	25Msubscribers
Export File	Time Queued	Time Started	Time Completed	Subscriber Count	Pool Count	Status	Comment																																											
export_Range1.MSISDN.2...	2023-10-02 07:50:15	2023-10-02 07:50:15	-	2464092	0	In Progress	25Msubscribers																																											
Export File	Time Queued	Time Started	Time Completed	Subscriber Count	Pool Count	Status	Comment																																											
export_Range1.MSISDN.2...	2023-10-02 07:50:15	2023-10-02 07:50:15	2023-10-02 08:11:10	25000000	0	Transferring	25Msubscribers																																											
Export File	Time Queued	Time Started	Time Completed	Subscriber Count	Pool Count	Status	Comment																																											
export_Range1.MSISDN.2...	2023-10-02 07:50:15	2023-10-02 07:50:15	2023-10-02 08:15:12	25000000	0	Completed	25Msubscribers																																											

Oracle Communications User Data Repository Software Upgrade Procedure

Step	Procedure	Result																																																																								
<p>Note: There would be no rollback procedure since a new set of VMs are created and added to the existing deployments. For rollback, the BM deployments can be made Active.</p>																																																																										
8.	Repeat step-3 to step-5 for 2 nd range export	<div style="border: 1px solid black; padding: 5px;"> <p>Main Menu: UDR -> Maintenance -> Export Schedule Mon Oct 02 08:01:55 2023 EDT</p> <p>Filter*</p> <table border="1"> <thead> <tr> <th>Identifier</th> <th>Subscriber ID</th> <th>First Export</th> <th>Next Export</th> <th>Start Range</th> <th>End Range</th> <th>Repeat</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td>Range1</td> <td>MSISDN</td> <td>2023-10-02 07:50:00</td> <td>2023-10-02 07:50:00</td> <td>310550016000000</td> <td>310550040999999</td> <td>none</td> <td>25Msubscribers</td> </tr> <tr> <td>Range2</td> <td>MSISDN</td> <td>2023-10-02 08:05:00</td> <td>-</td> <td>310550041000000</td> <td>310550065999999</td> <td>none</td> <td>25Msubscribers</td> </tr> </tbody> </table> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p>Main Menu: UDR -> Maintenance -> Export Status Mon Oct 02 08:15:51 2023 EDT</p> <p>Filter*</p> <table border="1"> <thead> <tr> <th>Export File</th> <th>Time Queued</th> <th>Time Started</th> <th>Time Completed</th> <th>Subscriber Count</th> <th>Pool Count</th> <th>Status</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td>export_Range1.MSISDN.202310020750.xml</td> <td>2023-10-02 07:50:15</td> <td>2023-10-02 07:50:15</td> <td>2023-10-02 08:15:12</td> <td>25000000</td> <td>0</td> <td>Completed</td> <td>25Msubscribers</td> </tr> <tr> <td>export_Range2.MSISDN.202310020805.xml</td> <td>2023-10-02 08:15:13</td> <td>2023-10-02 08:15:13</td> <td>-</td> <td>0</td> <td>0</td> <td>Initializing</td> <td>25Msubscribers</td> </tr> </tbody> </table> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p>Main Menu: UDR -> Maintenance -> Export Status Mon Oct 02 08:21:29 2023 EDT</p> <p>Filter*</p> <table border="1"> <thead> <tr> <th>Export File</th> <th>Time Queued</th> <th>Time Started</th> <th>Time Completed</th> <th>Subscriber Count</th> <th>Pool Count</th> <th>Status</th> <th>Comment</th> </tr> </thead> <tbody> <tr> <td>export_Range1.MSISDN.202310020750.xml</td> <td>2023-10-02 07:50:15</td> <td>2023-10-02 07:50:15</td> <td>2023-10-02 08:15:12</td> <td>25000000</td> <td>0</td> <td>Completed</td> <td>25Msubscribers</td> </tr> <tr> <td>export_Range2.MSISDN.202310020805.xml</td> <td>2023-10-02 08:15:13</td> <td>2023-10-02 08:15:13</td> <td>2023-10-02 08:25:07</td> <td>25000000</td> <td>0</td> <td>Completed</td> <td>25Msubscribers</td> </tr> </tbody> </table> </div>	Identifier	Subscriber ID	First Export	Next Export	Start Range	End Range	Repeat	Comment	Range1	MSISDN	2023-10-02 07:50:00	2023-10-02 07:50:00	310550016000000	310550040999999	none	25Msubscribers	Range2	MSISDN	2023-10-02 08:05:00	-	310550041000000	310550065999999	none	25Msubscribers	Export File	Time Queued	Time Started	Time Completed	Subscriber Count	Pool Count	Status	Comment	export_Range1.MSISDN.202310020750.xml	2023-10-02 07:50:15	2023-10-02 07:50:15	2023-10-02 08:15:12	25000000	0	Completed	25Msubscribers	export_Range2.MSISDN.202310020805.xml	2023-10-02 08:15:13	2023-10-02 08:15:13	-	0	0	Initializing	25Msubscribers	Export File	Time Queued	Time Started	Time Completed	Subscriber Count	Pool Count	Status	Comment	export_Range1.MSISDN.202310020750.xml	2023-10-02 07:50:15	2023-10-02 07:50:15	2023-10-02 08:15:12	25000000	0	Completed	25Msubscribers	export_Range2.MSISDN.202310020805.xml	2023-10-02 08:15:13	2023-10-02 08:15:13	2023-10-02 08:25:07	25000000	0	Completed	25Msubscribers
Identifier	Subscriber ID	First Export	Next Export	Start Range	End Range	Repeat	Comment																																																																			
Range1	MSISDN	2023-10-02 07:50:00	2023-10-02 07:50:00	310550016000000	310550040999999	none	25Msubscribers																																																																			
Range2	MSISDN	2023-10-02 08:05:00	-	310550041000000	310550065999999	none	25Msubscribers																																																																			
Export File	Time Queued	Time Started	Time Completed	Subscriber Count	Pool Count	Status	Comment																																																																			
export_Range1.MSISDN.202310020750.xml	2023-10-02 07:50:15	2023-10-02 07:50:15	2023-10-02 08:15:12	25000000	0	Completed	25Msubscribers																																																																			
export_Range2.MSISDN.202310020805.xml	2023-10-02 08:15:13	2023-10-02 08:15:13	-	0	0	Initializing	25Msubscribers																																																																			
Export File	Time Queued	Time Started	Time Completed	Subscriber Count	Pool Count	Status	Comment																																																																			
export_Range1.MSISDN.202310020750.xml	2023-10-02 07:50:15	2023-10-02 07:50:15	2023-10-02 08:15:12	25000000	0	Completed	25Msubscribers																																																																			
export_Range2.MSISDN.202310020805.xml	2023-10-02 08:15:13	2023-10-02 08:15:13	2023-10-02 08:25:07	25000000	0	Completed	25Msubscribers																																																																			
9.	<p>Login to Active NOAMP console of BM(Source)</p> <p>Server XMI IP (SSH):</p> <p>SSH to server and login as root user</p>	<p>Use your SSH client to connect to the server (ex. ssh, putty):</p> <p>ssh<server address></p> <p>login as: admusr</p> <p>password: <enter password></p> <p>Switch to root su -</p> <p>password: <enter password></p>																																																																								
10.	List out the exported files at provexport directory on Active NOAMP console	<pre>[root@UDRPV01-S1-NOAMP-A provexport]# ls -ltrh total 108G -export_Range1.MSISDN.202310020750.xml -export_Range2.MSISDN.202310020815.xml [root@UDRPV01-S1-NOAMP-A provexport]#</pre>																																																																								
11.	Create the directories on filemgmt area to place the ixml files	<pre># mkdir /var/TKLC/db/filemgmt/OCUDR-Range-1 # mkdir /var/TKLC/db/filemgmt/OCUDR-Range-2 # chmod 777 OCUDR-Range-1 OCUDR-Range-2</pre>																																																																								

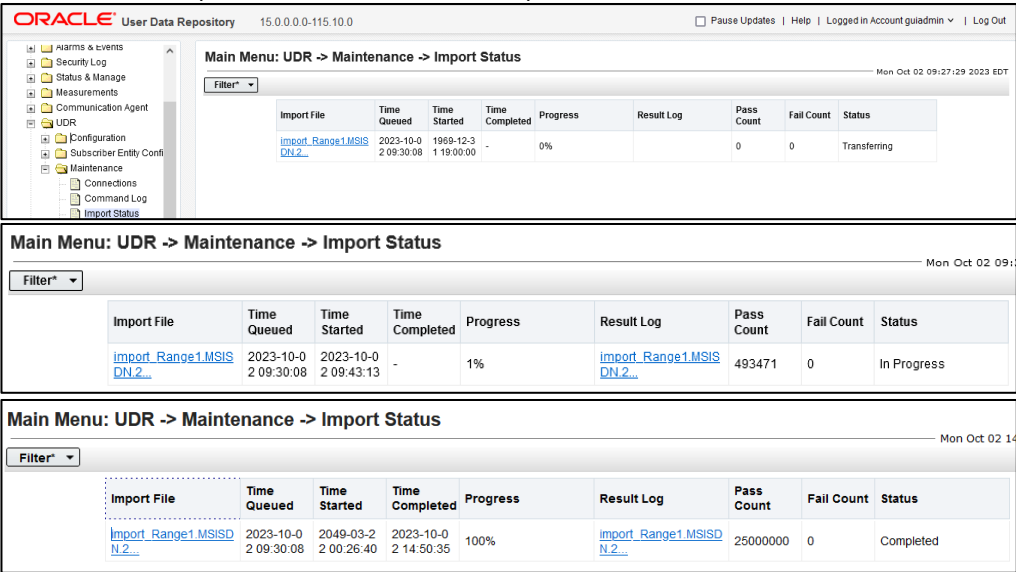
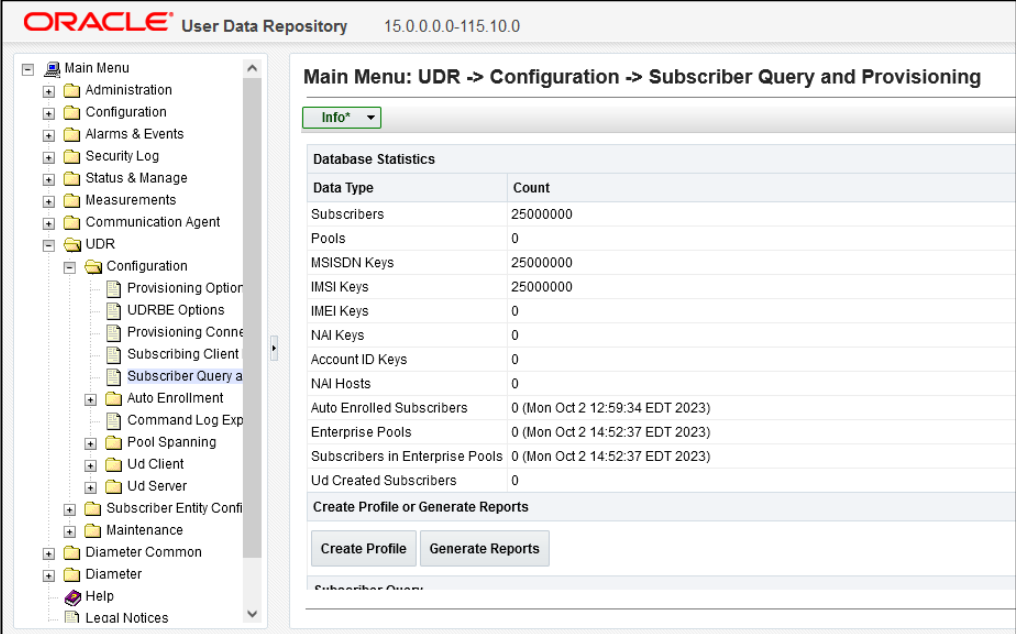
Oracle Communications User Data Repository Software Upgrade Procedure

Step	Procedure	Result
<p>Note: There would be no rollback procedure since a new set of VMs are created and added to the existing deployments. For rollback, the BM deployments can be made Active.</p>		
12.	<p>Use the xmlconverter tool to convert the exml files to the ixml files</p>	<pre># /usr/TKLC/udr/bin/xmlconverter /var/TKLC/db/filemgmt/<export file> /var/TKLC/db/filemgmt/<import file> create</pre> <p>Example:</p> <pre>[root@UDRPV01-S1-NOAMP-A filemgmt]# /usr/TKLC/udr/bin/xmlconverter /var/TKLC/db/filemgmt/provexport/export_Range1.MSISDN.202310020750.exml /var/TKLC/db/filemgmt/OCUDR-Range-1/import_Range1.MSISDN.202310020750.ixml create</pre> <p>Completed (25000004 of 25000004)</p> <pre>[root@UDRPV01-S1-NOAMP-A filemgmt]# /usr/TKLC/udr/bin/xmlconverter /var/TKLC/db/filemgmt/provexport/export_Range2.MSISDN.202310020815.exml /var/TKLC/db/filemgmt/OCUDR-Range-2/import_Range2.MSISDN.202310020815.ixml create</pre> <p>Completed (25000004 of 25000004)</p> <pre>[root@UDRPV01-S1-NOAMP-A filemgmt]#</pre>
13.	<p>Provide full permission to converted .ixml files</p>	<pre>[root@UDRPV01-S1-NOAMP-A filemgmt]# ls OCUDR-Range-1 import_Range1.MSISDN.202310020750.ixml</pre> <pre>[root@UDRPV01-S1-NOAMP-A filemgmt]# ls OCUDR-Range-2 import_Range2.MSISDN.202310020815.ixml</pre> <pre>[root@UDRPV01-S1-NOAMP-A filemgmt]#</pre>
14.	<p>Login to target OCUDR active NOAMP using Appendix-A</p>	 <p>The screenshot shows a web-based interface titled 'Main Menu'. On the left is a navigation tree with the following structure:</p> <ul style="list-style-type: none"> Main Menu <ul style="list-style-type: none"> Administration <ul style="list-style-type: none"> General Options Access Control Software Management <ul style="list-style-type: none"> Versions Upgrade Remote Servers Configuration Alarms & Events Security Log Status & Manage <ul style="list-style-type: none"> Network Elements Server HA Database KPIs Processes Tasks Files Measurements <p>The main content area on the right shows 'Main Menu: [Main]' and some text: 'This is the user-defi... It can be modified using the 'General Op...'. There are also fields for 'Login Name', 'Last Login Time', 'Last Login IP', and 'Recent Failed I...'.</p>

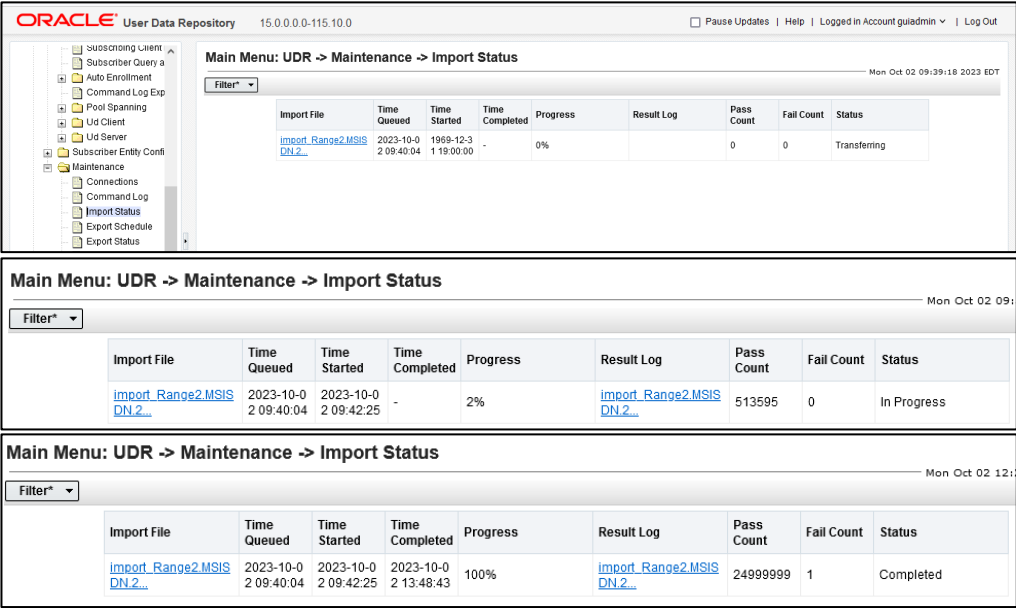
Oracle Communications User Data Repository Software Upgrade Procedure

Step	Procedure	Result																								
<p>Note: There would be no rollback procedure since a new set of VMs are created and added to the existing deployments. For rollback, the BM deployments can be made Active.</p>																										
<p>15.</p>	<p>Configure the remote import on target OCUDR active NOAMP GUI and perform the key exchange.</p>	<p>Go to Main Menu: UDR -> Configuration -> Provisioning Options , provide the path of source server where we keep the .ixml files and perform the ‘key exchange’ and enable the ‘Remote Import Enabled’ field.</p> <div style="border: 1px solid black; padding: 5px;"> <p>Main Menu: UDR -> Configuration -> Provisioning Options</p> <table border="1"> <tr> <td>Local Export Directory</td> <td>/var/TKLC/db/filegmt/provexport</td> <td>The local directory for export files.</td> </tr> <tr> <td>Remote Export Directory</td> <td></td> <td>The directory for remote export files.</td> </tr> <tr> <td>Maximum Number of Exported Subscribers</td> <td>30000000</td> <td>Maximum number of subscribers to be exported.</td> </tr> <tr> <td>Export Status Lifetime</td> <td>7</td> <td>The number of days for which export status is valid.</td> </tr> <tr> <td>Remote Import Enabled</td> <td><input checked="" type="checkbox"/></td> <td>Whether remote import is enabled.</td> </tr> <tr> <td>Local Import Directory</td> <td>/var/TKLC/db/filegmt/provimport</td> <td>The local directory for import files.</td> </tr> <tr> <td>Remote Import Directory</td> <td>/var/TKLC/db/filegmt/OCUDR-Range-1</td> <td>The directory for remote import files.</td> </tr> <tr> <td>Import Status Lifetime</td> <td>7</td> <td>The number of days for which import status is valid.</td> </tr> </table> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>IP Address: 10.75.179.18 Username: admusr</p> <div style="border: 1px solid gray; padding: 5px; width: fit-content; margin: 5px auto;"> <p>SSH Key Exchange</p> <p>Password: ●●●●●●●●</p> <p>OK Cancel</p> </div> <p>Apply Cancel</p> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Main Menu: UDR -> Configuration -> Provisioning Options</p> <p>Info</p> <div style="border: 1px solid green; background-color: #e0ffe0; padding: 5px; margin-bottom: 5px;"> <p>Info</p> <p>• Update Successful</p> </div> <p>Maximum Provisioning Backend Response Timeout 7</p> </div>	Local Export Directory	/var/TKLC/db/filegmt/provexport	The local directory for export files.	Remote Export Directory		The directory for remote export files.	Maximum Number of Exported Subscribers	30000000	Maximum number of subscribers to be exported.	Export Status Lifetime	7	The number of days for which export status is valid.	Remote Import Enabled	<input checked="" type="checkbox"/>	Whether remote import is enabled.	Local Import Directory	/var/TKLC/db/filegmt/provimport	The local directory for import files.	Remote Import Directory	/var/TKLC/db/filegmt/OCUDR-Range-1	The directory for remote import files.	Import Status Lifetime	7	The number of days for which import status is valid.
Local Export Directory	/var/TKLC/db/filegmt/provexport	The local directory for export files.																								
Remote Export Directory		The directory for remote export files.																								
Maximum Number of Exported Subscribers	30000000	Maximum number of subscribers to be exported.																								
Export Status Lifetime	7	The number of days for which export status is valid.																								
Remote Import Enabled	<input checked="" type="checkbox"/>	Whether remote import is enabled.																								
Local Import Directory	/var/TKLC/db/filegmt/provimport	The local directory for import files.																								
Remote Import Directory	/var/TKLC/db/filegmt/OCUDR-Range-1	The directory for remote import files.																								
Import Status Lifetime	7	The number of days for which import status is valid.																								

Oracle Communications User Data Repository Software Upgrade Procedure

Step	Procedure	Result																										
<p>Note: There would be no rollback procedure since a new set of VMs are created and added to the existing deployments. For rollback, the BM deployments can be made Active.</p>																												
<p>16.</p>	<p>On Active GUI of OCUDR-1 target server, check the status of import task</p>	<p>All subscriber is imported on each VM based setup.</p>  <p>The screenshots show the 'Main Menu: UDR -> Maintenance -> Import Status' page. The first screenshot shows a table with one entry: 'import_Range1.MSISDN.2...' with 0% progress and 'Transferring' status. The second screenshot shows the same entry with 1% progress and 'In Progress' status. The third screenshot shows the entry with 100% progress and 'Completed' status.</p>																										
<p>17.</p>	<p>Verify the subscriber count on target setup</p>	<p>Go to Main Menu: UDR -> Configuration -> Subscriber Query and Provisioning on target OCUDR-1 NOAMP GUI.</p>  <p>The screenshot shows the 'Main Menu: UDR -> Configuration -> Subscriber Query and Provisioning' page. The 'Database Statistics' table is visible:</p> <table border="1"> <thead> <tr> <th>Data Type</th> <th>Count</th> </tr> </thead> <tbody> <tr> <td>Subscribers</td> <td>25000000</td> </tr> <tr> <td>Pools</td> <td>0</td> </tr> <tr> <td>MSISDN Keys</td> <td>25000000</td> </tr> <tr> <td>IMSI Keys</td> <td>25000000</td> </tr> <tr> <td>IMEI Keys</td> <td>0</td> </tr> <tr> <td>NAI Keys</td> <td>0</td> </tr> <tr> <td>Account ID Keys</td> <td>0</td> </tr> <tr> <td>NAI Hosts</td> <td>0</td> </tr> <tr> <td>Auto Enrolled Subscribers</td> <td>0 (Mon Oct 2 12:59:34 EDT 2023)</td> </tr> <tr> <td>Enterprise Pools</td> <td>0 (Mon Oct 2 14:52:37 EDT 2023)</td> </tr> <tr> <td>Subscribers in Enterprise Pools</td> <td>0 (Mon Oct 2 14:52:37 EDT 2023)</td> </tr> <tr> <td>Ud Created Subscribers</td> <td>0</td> </tr> </tbody> </table>	Data Type	Count	Subscribers	25000000	Pools	0	MSISDN Keys	25000000	IMSI Keys	25000000	IMEI Keys	0	NAI Keys	0	Account ID Keys	0	NAI Hosts	0	Auto Enrolled Subscribers	0 (Mon Oct 2 12:59:34 EDT 2023)	Enterprise Pools	0 (Mon Oct 2 14:52:37 EDT 2023)	Subscribers in Enterprise Pools	0 (Mon Oct 2 14:52:37 EDT 2023)	Ud Created Subscribers	0
Data Type	Count																											
Subscribers	25000000																											
Pools	0																											
MSISDN Keys	25000000																											
IMSI Keys	25000000																											
IMEI Keys	0																											
NAI Keys	0																											
Account ID Keys	0																											
NAI Hosts	0																											
Auto Enrolled Subscribers	0 (Mon Oct 2 12:59:34 EDT 2023)																											
Enterprise Pools	0 (Mon Oct 2 14:52:37 EDT 2023)																											
Subscribers in Enterprise Pools	0 (Mon Oct 2 14:52:37 EDT 2023)																											
Ud Created Subscribers	0																											

Oracle Communications User Data Repository Software Upgrade Procedure

Step	Procedure	Result																																				
<p>Note: There would be no rollback procedure since a new set of VMs are created and added to the existing deployments. For rollback, the BM deployments can be made Active.</p>																																						
<p>18.</p>	<p>And repeat the step from 12 – 15 for OCUDR-2 setup</p>	 <p>The screenshots show the 'Import Status' page in the Oracle User Data Repository. The page title is 'Main Menu: UDR -> Maintenance -> Import Status'. The table below summarizes the data shown in the screenshots:</p> <table border="1"> <thead> <tr> <th>Import File</th> <th>Time Queued</th> <th>Time Started</th> <th>Time Completed</th> <th>Progress</th> <th>Result Log</th> <th>Pass Count</th> <th>Fail Count</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>import_Range2.MSIS DN 2...</td> <td>2023-10-02 09:40:04</td> <td>2023-10-02 09:42:25</td> <td>-</td> <td>0%</td> <td>import_Range2.MSIS DN 2...</td> <td>0</td> <td>0</td> <td>Transferring</td> </tr> <tr> <td>import_Range2.MSIS DN 2...</td> <td>2023-10-02 09:40:04</td> <td>2023-10-02 09:42:25</td> <td>-</td> <td>2%</td> <td>import_Range2.MSIS DN 2...</td> <td>513595</td> <td>0</td> <td>In Progress</td> </tr> <tr> <td>import_Range2.MSIS DN 2...</td> <td>2023-10-02 09:40:04</td> <td>2023-10-02 09:42:25</td> <td>2023-10-02 13:48:43</td> <td>100%</td> <td>import_Range2.MSIS DN 2...</td> <td>24999999</td> <td>1</td> <td>Completed</td> </tr> </tbody> </table>	Import File	Time Queued	Time Started	Time Completed	Progress	Result Log	Pass Count	Fail Count	Status	import_Range2.MSIS DN 2...	2023-10-02 09:40:04	2023-10-02 09:42:25	-	0%	import_Range2.MSIS DN 2...	0	0	Transferring	import_Range2.MSIS DN 2...	2023-10-02 09:40:04	2023-10-02 09:42:25	-	2%	import_Range2.MSIS DN 2...	513595	0	In Progress	import_Range2.MSIS DN 2...	2023-10-02 09:40:04	2023-10-02 09:42:25	2023-10-02 13:48:43	100%	import_Range2.MSIS DN 2...	24999999	1	Completed
Import File	Time Queued	Time Started	Time Completed	Progress	Result Log	Pass Count	Fail Count	Status																														
import_Range2.MSIS DN 2...	2023-10-02 09:40:04	2023-10-02 09:42:25	-	0%	import_Range2.MSIS DN 2...	0	0	Transferring																														
import_Range2.MSIS DN 2...	2023-10-02 09:40:04	2023-10-02 09:42:25	-	2%	import_Range2.MSIS DN 2...	513595	0	In Progress																														
import_Range2.MSIS DN 2...	2023-10-02 09:40:04	2023-10-02 09:42:25	2023-10-02 13:48:43	100%	import_Range2.MSIS DN 2...	24999999	1	Completed																														
<p>19.</p>	<p>Start traffic to newly created VM based setup</p>	<p>All BM (source setup) subscribers are moved to VM based setup (target servers) and can start the SH request from OCPM.</p>																																				
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>																																						

6. SINGLE SERVER UPGRADE

A 1-RMS server configuration is used for customer lab setup and for virtualization demonstration only. This configuration does not support HA and is not intended for production network. This One Server Lab RMS shall support the ability to perform and upgrade which allows all configuration data and database records to be carried forward to the next release.

6.1 Upgrading a Single Server

The following procedure below is ONLY for upgrading a one server Lab RMS.

Procedure 11: Upgrade Single Server

Step	Procedure	Result
1.	Resize the disk of server	Use Appendix H to resize the disk of a server before initiating upgrade
2. <input type="checkbox"/>	Identify NOAMP IP Address	Identify IP Address of the Single NOAMP Server to be upgraded.
3. <input type="checkbox"/>	Server XMI IP (SSH): SSH to server and login as root user	Use your SSH client to connect to the server (ex. ssh, putty): <code>ssh<server address></code> login as: <code>admusr</code> password: <code><enter password></code> Switch to root <code>su -</code> password: <code><enter password></code>
4.	Copy and mount TPD 7.4 based ISO to the UDR server which is to be upgraded	<pre># cp /var/TKLC/db/filemgmt/TPD.install-8.0.0.0.0_90.13.0-OracleLinux7.4-x86_64-DIU.iso /var/TKLC/upgrade/ # chmod 777 /var/TKLC/upgrade/TPD.install-8.0.0.0.0_90.13.0-OracleLinux7.4-x86_64-DIU.iso # sudo mount /var/TKLC/upgrade/TPD.install-8.0.0.0.0_90.13.0-OracleLinux7.4-x86_64-DIU.iso /mnt/upgrade -o loop</pre> Note: Please download DIU ISO from mos and upload to server at filemgmt area using ISO Administration and then copy to path: /var/TKLC/upgrade on server to upgrade.
5. <input type="checkbox"/>	Make a directory, copy UDR DIU ISO and mount it	<pre># mkdir /var/TKLC/ol8_diu</pre> Note: copy application DIU iso in filemgmt location as iso is >9 GB <pre># mount /var/TKLC/db/filemgmt/UDR-15.0.0.0.0_115.10.0-x86_64-DIU.iso/var/TKLC/ol8_diu -o loop</pre>

Oracle Communications User Data Repository Software Upgrade Procedure

Procedure 11: Upgrade Single Server

Step	Procedure	Result
6.	Install and then apply upgrade of TPD 7.4 first	<pre># alarmMgr --clear 32509;alarmMgr --clear 32500 # /mnt/upgrade/upgrade/diUpgrade --install --ignoreDevCheck - debug Output: Migrating 152 directories Migrating 845 files Migrating 1 symlinks Image install complete ##### # INSTALL COMPLETE # ##### Transitioning from 'Installing Upgrade' to 'Ready to Apply Upgrade' [root@OCUDR-DR-NOAMP-A filemgmt]# █ # alarmMgr --clear 32509;alarmMgr --clear 32500 # /var/TKLC/backout/diUpgrade --apply --ignoreDevCheck -debug Output: [root@OCUDR-DR-NOAMP-A filemgmt]# /var/TKLC/backout/diUpgrade --apply --ignoreDevCheck -debug Resuming from state STATE_READY_TO_APPLY Transitioning from 'Ready to Apply Upgrade' to 'Applying Upgrade' ##### # APPLY INITIATED # ##### APPLY START TIME: Sat Sep 30 07:11:24 2023 EDT (11:11:24 UTC) Validating image pre-apply /mnt/upgrade/images/plat_root.gz /mnt/upgrade/images/plat_usr.gz /mnt/upgrade/images/plat_var.gz /mnt/upgrade/images/plat_var_tklc.gz Migrating 1 symlinks Enabling service upgrade... Converting from MBR to GPT Updating bootloader... Add md uuid to grub... Unmounting images... Performing reboot... Inhibiting upgrade services... Allowing upgrade services... [root@OCUDR-DR-NOAMP-A filemgmt]# login as: admusr admusr@10.75.180.18's password: Last login: Sat Sep 30 06:44:19 2023 from 10.69.110.163 OCUDR VM from OVA file ===== This system has been upgraded but the upgrade has not yet been accepted or rejected. Please accept or reject the upgrade soon. ===== [admusr@ocudr-dr-noamp-a ~]\$ █</pre> <p>Note: Server reboots after 'apply upgrade' finishes.</p>

Oracle Communications User Data Repository Software Upgrade Procedure

Procedure 11: Upgrade Single Server

Step	Procedure	Result
7.	Accept upgrade of TPD 7.4	<p>Note: Before accepting, please make sure 'Upgrade Applied' state is shown, use below command to show the status: # /var/TKLC/backout/diUpgrade --status</p> <p>Output:</p> <pre>[root@ocudr-dr-noamp-a admusr]# /var/TKLC/backout/diUpgrade --status State: Upgrade Applied Status Messages: - Performing early checks - Downloading upgrade data - Verifying image - Performing image pre-install - Configuring images - Identifying resources - Reserving image storage - Installing image - Performing image post-install - Verifying configuration sanity - Image install complete - Validating image pre-apply - Performing image pre-apply - Applying image - Performing configuration export - Performing image post-apply - Image Apply Complete [root@ocudr-dr-noamp-a admusr]#</pre> <p>Note: If we don't need to proceed further upgrade then we can reject the upgrade at this stage ,using below step # /var/TKLC/backout/diUpgrade -reject Skip the above step if we want to continue upgrade # /var/TKLC/backout/diUpgrade --accept</p> <p>Output:</p> <pre>[root@ocudr-dr-noamp-a admusr]# /var/TKLC/backout/diUpgrade --accept Resuming from state STATE_UPGRADE_APPLIED Transitioning from 'Upgrade Applied' to 'Accepting Upgrade' Enabling service rebootcheck... ##### # ACCEPT INITIATED # ##### ACCEPT START TIME: Sat Sep 30 07:21:23 2023 EDT (11:21:23 UTC) Validating image pre-accept Performing image post-accept Running postAccept() for DIUpgrade::Policy::P20TPD upgrade policy... Running postAccept() for DIUpgrade::Policy::P36APPpworks upgrade policy... Running postAccept() for DIUpgrade::Policy::P38APPawpcommon upgrade policy... Running postAccept() for DIUpgrade::Policy::P39APPdpi upgrade policy... Running postAccept() for DIUpgrade::Policy::P42APPcomagent upgrade policy... Running postAccept() for DIUpgrade::Policy::P43APPocl upgrade policy... Running postAccept() for DIUpgrade::Policy::P50APPudr upgrade policy... Creating alarm script: /tmp/vu3svF51Jl ##### # ACCEPT COMPLETE # ##### Check is rebootcheck is enabled ... Disabling service rebootcheck... Transitioning from 'Accepting Upgrade' to 'No Upgrade Available' Inhibiting upgrade services... Allowing upgrade services... Cleaning backout directory. [root@ocudr-dr-noamp-a admusr]#</pre>

Oracle Communications User Data Repository Software Upgrade Procedure

Procedure 11: Upgrade Single Server

Step	Procedure	Result
8.	Update fstab and re-create filemgmt directory	<pre># vim /etc/fstab Add below line at bottom /dev/vgroot/filemgmt /var/TKLC/db/filemgmt ext4 defaults 1 2 # mkdir -p /var/TKLC/db/filemgmt # mount -a</pre>

Procedure 11: Upgrade Single Server

Step	Procedure	Result
9.	Mount UDR DIU iso and first install and then upgrade	<pre># mount /var/TKLC/db/filemgmt/UDR-15.0.0.0.0_115.10.0-x86_64-DIU.iso /mnt/upgrade -o loop</pre> <pre># alarmMgr --clear 32509;alarmMgr --clear 32500</pre> <pre># /mnt/upgrade/upgrade/diUpgrade --install --ignoreDevCheck -debug</pre> <p>Output:</p> <pre>Migrating 76 directories Migrating 372 files Migrating 1 symlinks Image install complete ##### # INSTALL COMPLETE # ##### Transitioning from 'Installing Upgrade' to 'Ready to Apply Upgrade' [root@ocudr-dr-noamp-a admusr]#</pre> <pre># alarmMgr --clear 32509;alarmMgr --clear 32500</pre> <pre># /var/TKLC/backout/diUpgrade --apply --ignoreDevCheck -debug</pre> <p>Output:</p> <pre>[root@OCUDR-DR-NOAMP-A admusr]# /var/TKLC/backout/diUpgrade --status State: Upgrade Applied Status Messages: - Performing early checks - Downloading upgrade data - Verifying image - Performing image pre-install - Configuring images - Identifying resources - Reserving image storage - Installing image - Performing image post-install - Verifying configuration sanity - Image install complete - Validating image pre-apply - Performing image pre-apply - Applying image - Performing configuration export - Performing image post-apply - Image Apply Complete [root@OCUDR-DR-NOAMP-A admusr]#</pre> <p>NOTE:1: After reboot, upgrade post apply takes time so keep checking status on console. NOTE:2: During the upgrade you might see the following expected alarms. Not all servers have all alarms:</p> <ul style="list-style-type: none"> Alarm ID = 31101(DB Replication to a slave DB has failed) Alarm ID = 31106(DB Merging to a parent Merge Node has failed) Alarm ID = 31107(DB Merging from a child source Node has failed) Alarm ID = 31114 (DB Replication of configuration data via ...) Alarm ID = 13071 No northbound Provisioning Connections) Alarm ID = 10073 (Server Group Max Allowed HA Role Warning) Alarm ID = 10075 (Application processes have been manually stopped) Alarm ID = 32515 (Server HA Failover Inhibited) Alarm ID = 31283 (HA Highly available server failed to receive) Alarm ID = 31226 (The High Availability Status is degraded)

Oracle Communications User Data Repository Software Upgrade Procedure

Procedure 11: Upgrade Single Server

Step	Procedure	Result
10. <input type="checkbox"/>	Accept the upgrade	Accept upgrade as specified in Procedure 12: Accept Upgrade.
11. <input type="checkbox"/>	Identify SOAM IP Address	Identify IP Address of the Single SOAM Server to be upgraded.
12. <input type="checkbox"/>	Upgrade SOAM Server	Repeat steps 2 through 9 for the SOAM Server
13. <input type="checkbox"/>	Identify MP IP Address	Identify IP Address of the Single MP Server to be upgraded.
14. <input type="checkbox"/>	Upgrade MP Server	Repeat Steps 2 through 9 for the MP Server
THIS PROCEDURE HAS BEEN COMPLETED		

7. RECOVERY PROCEDURES

Upgrade procedure recovery issues should be directed to the My Oracle Support ([Appendix I](#)). Persons performing the upgrade should be familiar with these documents.

Recovery procedures are covered under the Disaster Recovery Guide. Execute this section only if there is a problem and it is desired to revert back to the pre-upgrade version of the software.



!! WARNING !!

Do not attempt to perform these backout procedures without first contacting the My Oracle Support. Refer to [Appendix I](#).



!! WARNING !!

Backout procedures will cause traffic loss!



NOTES:

These recovery procedures are provided for the Backout of an Upgrade ONLY! (i.e., for the Backout from a failed target release to the previously installed release).

Backout of an initial installation is not supported!

7.1 Order of Backout

The following list displays the order to backout the Servers (Primary and DR sites):

1. Site 1 MPs
2. Site 2 MPs (DR site)
3. Site 1 SOAMs (Active/Standby)
4. Site 2 SOAMs (DR site)
5. DR NOAMPs (Spares)
6. Primary Standby NOAMP
7. Primary Active NOAMP

7.2 Backout Setup

Identify IP addresses of all servers that need to be backed out.

1. Select **Administration → Software Management → Upgrade**
2. Based on the “Application Version” Column, identify all the hostnames that need to be backed out.
3. Select **Configuration → Servers**
4. Identify the IMI IP addresses of all the hostnames identified in step 2.
These are required to access the server when performing the backout.

The reason to execute a backout has a direct impact on any additional backout preparation that must be done. The Backout procedure will cause traffic loss.

NOTE: Verify that the two backup archive files created using the procedure in 4.1.2.2 Full Database Backup (All Network Elements, All Servers) are present on every server that is to be backed-out.

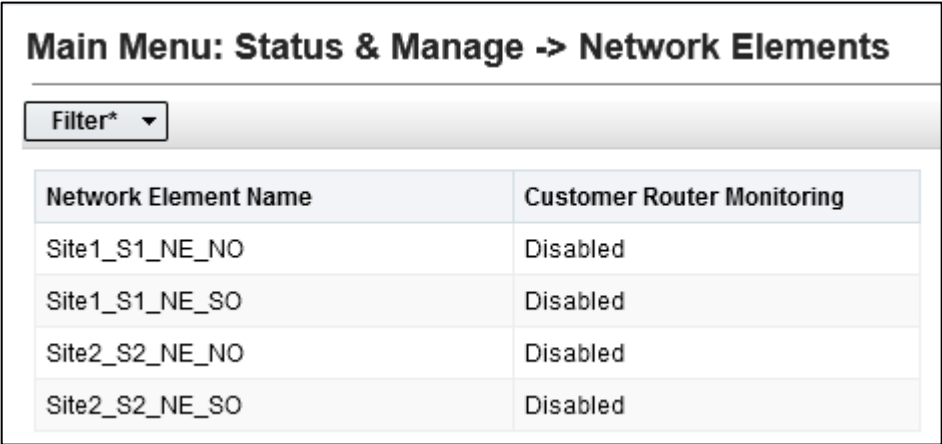
These archive files are located in the `/var/TKLC/db/filemgmt` directory and have different filenames than other database backup files.

The filenames will have the format:

- Backup.<application>.<server>.FullDBParts.<role>.<date_time>.UPG.tar.bz2
- Backup.<application>.<server>.FullRunEnv.<role>.<date_time>.UPG.tar.bz2

7.3 Backout of SOAM / MP

Procedure 12: Backout of SOAM / MP

Step	Procedure	Result										
1. <input type="checkbox"/>	Using the VIP address, access the Primary NOAMP GUI.	Access the Primary NOAMP GUI as specified in Appendix A .										
2. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Status & Manage → Network Elements</p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Network Element Name</th> <th>Customer Router Monitoring</th> </tr> </thead> <tbody> <tr> <td>Site1_S1_NE_NO</td> <td>Disabled</td> </tr> <tr> <td>Site1_S1_NE_SO</td> <td>Disabled</td> </tr> <tr> <td>Site2_S2_NE_NO</td> <td>Disabled</td> </tr> <tr> <td>Site2_S2_NE_SO</td> <td>Disabled</td> </tr> </tbody> </table>	Network Element Name	Customer Router Monitoring	Site1_S1_NE_NO	Disabled	Site1_S1_NE_SO	Disabled	Site2_S2_NE_NO	Disabled	Site2_S2_NE_SO	Disabled
Network Element Name	Customer Router Monitoring											
Site1_S1_NE_NO	Disabled											
Site1_S1_NE_SO	Disabled											
Site2_S2_NE_NO	Disabled											
Site2_S2_NE_SO	Disabled											
3. <input type="checkbox"/>	Record the name of the SOAM Network Element to be downgraded (backed out)	Record the name of the SOAM Network Element which will be “ backed out ” SOAM Network Element: _____										

Procedure 12: Backout of SOAM / MP

Step	Procedure	Result																																																																																											
4. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Status & Manage → Server</p> <p>...as shown on the right.</p>	<p>Main Menu: Status & Manage -> Server</p> <p>Filter* ▾</p> <table border="1"> <thead> <tr> <th>Server Hostname</th> <th>Network Element</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>OCUDR-DR-MP3</td> <td>Site2_S2_NE_SO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-DR-MP4</td> <td>Site2_S2_NE_SO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-DR-NOAMP-A</td> <td>Site2_S2_NE_NO</td> <td>Enabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-DR-NOAMP-B</td> <td>Site2_S2_NE_NO</td> <td>Enabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-DR-SOAM-A</td> <td>Site2_S2_NE_SO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-DR-SOAM-B</td> <td>Site2_S2_NE_SO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-MP1</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-MP2</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-NOAMP-A</td> <td>Site1_S1_NE_NO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-NOAMP-B</td> <td>Site1_S1_NE_NO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-SOAM-A</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-SOAM-B</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> </tbody> </table>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	OCUDR-DR-MP3	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-DR-MP4	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-DR-NOAMP-A	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm	OCUDR-DR-NOAMP-B	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm	OCUDR-DR-SOAM-A	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-DR-SOAM-B	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-MP1	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-MP2	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-NOAMP-A	Site1_S1_NE_NO	Enabled	Err	Norm	Norm	Norm	OCUDR-NOAMP-B	Site1_S1_NE_NO	Enabled	Norm	Norm	Norm	Norm	OCUDR-SOAM-A	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-SOAM-B	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																																																																																							
OCUDR-DR-MP3	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-DR-MP4	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-DR-NOAMP-A	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm																																																																																							
OCUDR-DR-NOAMP-B	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm																																																																																							
OCUDR-DR-SOAM-A	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-DR-SOAM-B	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-MP1	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-MP2	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-NOAMP-A	Site1_S1_NE_NO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-NOAMP-B	Site1_S1_NE_NO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-SOAM-A	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-SOAM-B	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
5. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>1) From the Status & Manage → Server filter pull-down, select the name for the SOAM NE.</p> <p>2) Click on the “GO” dialogue button located on the right end of the filter bar</p>	<p>Filter</p> <p>Scope:</p> <p>Site1_S1_NE_SO ▾ Server Group ▾ Reset</p> <p>Display Filter:</p> <p>None ▾ = ▾ Reset</p> <p>Go</p>																																																																																											
6. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>The user should be presented with the list of servers associated with the SOAM NE.</p> <p>Identify each “Server Hostname” and its associated “Reporting Status” and “Appl State”.</p>	<p>Main Menu: Status & Manage -> Server (Filtered)</p> <p>Filter ▾</p> <table border="1"> <thead> <tr> <th>Server Hostname</th> <th>Network Element</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>OCUDR-MP1</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-MP2</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-SOAM-A</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-SOAM-B</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> </tbody> </table>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	OCUDR-MP1	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-MP2	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-SOAM-A	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-SOAM-B	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																								
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																																																																																							
OCUDR-MP1	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-MP2	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-SOAM-A	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-SOAM-B	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							

Procedure 12: Backout of SOAM / MP

Step	Procedure	Result
<p>7.</p> <input type="checkbox"/>	<p>Using the list of servers associated with the SOAM NE shown in the above Step...</p> <p>Record the Server names of the MPs associated with the SOAM NE.</p>	<p>Identify the SOAM "Server" names and record them in the space provided below:</p> <p>Standby SOAM: _____</p> <p>Active SOAM: _____</p> <p>MP1: _____ MP3: _____</p> <p>MP2: _____ MP4: _____</p>
<p>8.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Referencing the list of servers recorded in Step7, execute Appendix D for the MP1 Server.</p>	<p>Backout the target release for the MP1 Server as specified in Appendix D (<i>Backout of a Server</i>).</p>
<p>9.</p> <input type="checkbox"/>	<p>1) Record the Server names of the MPs associated with the SOAM NE.</p> <p>2) Beginning with MP2, execute Appendix D for each MP Server associated with SOAM NE</p> <p>3)"Check off" each Check Box as Appendix D is completed for the MP Server listed to its right.</p>	<p>Record the Server name of each MP to be "Backed Out" in the space provided below: "Check off" the associated Check Box as Appendix D is completed for each MP.</p> <p><input type="checkbox"/> MP1: _____ <input type="checkbox"/> MP3: _____</p> <p><input type="checkbox"/> MP2: _____ <input type="checkbox"/> MP4: _____</p>
<p>10.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Execute Appendix D for the Standby SOAM Server.</p>	<p>Backout the target release for the Standby SOAM Server as specified in Appendix D (<i>Backout of a Server</i>).</p>
<p>11.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Execute Appendix D for the Active SOAM Server.</p>	<p>Backout the target release for the Active SOAM Server as specified in Appendix D (<i>Backout of a Server</i>).</p>

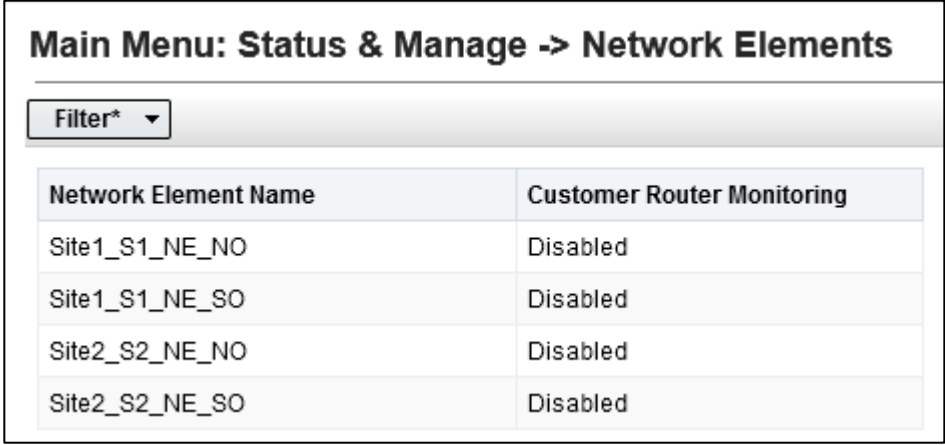
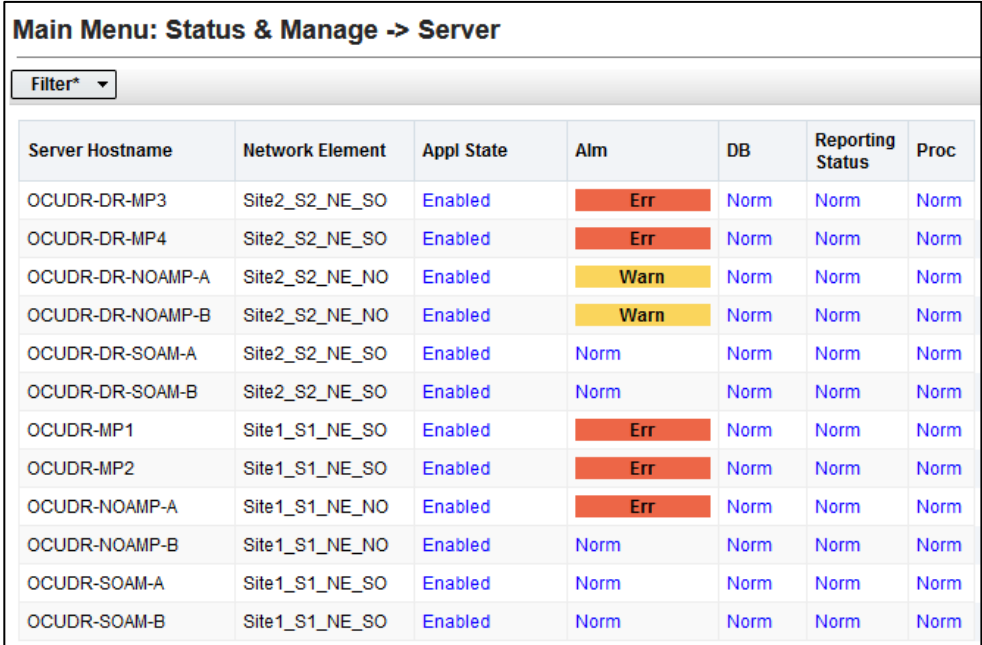
Oracle Communications User Data Repository Software Upgrade Procedure

Procedure 12: Backout of SOAM / MP

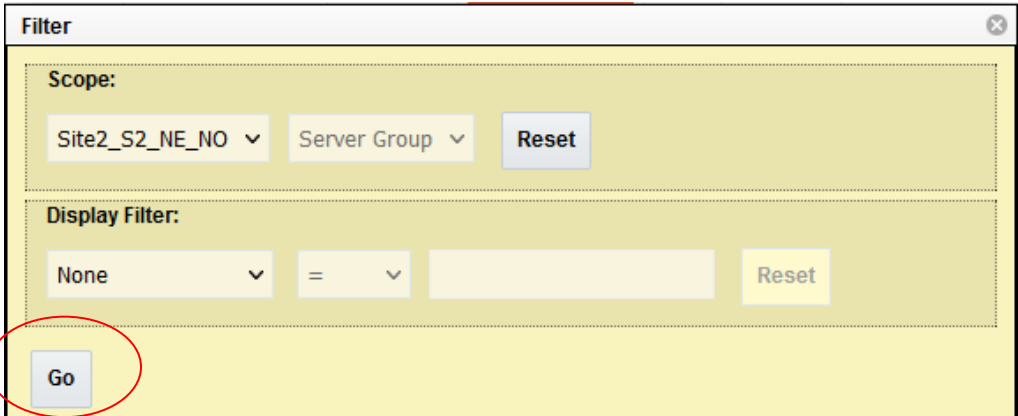
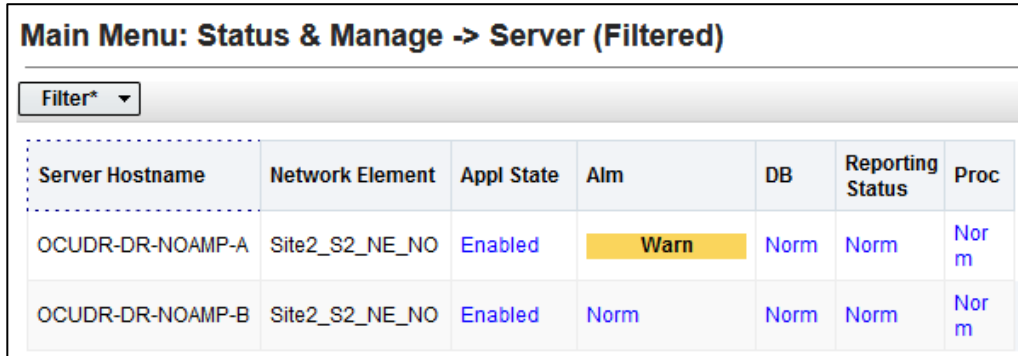
Step	Procedure	Result
12. <input type="checkbox"/>	Active NOAMP VIP: Execute Health Check at this time only if no other servers require back Out. Otherwise, proceed with the next Backout.	Execute Health Check procedures (Post Backout) as specified in Appendix B , if backout procedures have been completed for all required servers.
THIS PROCEDURE HAS BEEN COMPLETED		

7.4 Backout of DR NOAMP NE

Procedure 13: Backout of DR NOAMP NE

Step	Procedure	Result																																																																																											
1. <input type="checkbox"/>	Using the VIP address, access the Primary NOAMP GUI.	Access the Primary NOAMP GUI as specified in Appendix A .																																																																																											
2. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Status & Manage → Network Elements</p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Network Element Name</th> <th>Customer Router Monitoring</th> </tr> </thead> <tbody> <tr> <td>Site1_S1_NE_NO</td> <td>Disabled</td> </tr> <tr> <td>Site1_S1_NE_SO</td> <td>Disabled</td> </tr> <tr> <td>Site2_S2_NE_NO</td> <td>Disabled</td> </tr> <tr> <td>Site2_S2_NE_SO</td> <td>Disabled</td> </tr> </tbody> </table>	Network Element Name	Customer Router Monitoring	Site1_S1_NE_NO	Disabled	Site1_S1_NE_SO	Disabled	Site2_S2_NE_NO	Disabled	Site2_S2_NE_SO	Disabled																																																																																	
Network Element Name	Customer Router Monitoring																																																																																												
Site1_S1_NE_NO	Disabled																																																																																												
Site1_S1_NE_SO	Disabled																																																																																												
Site2_S2_NE_NO	Disabled																																																																																												
Site2_S2_NE_SO	Disabled																																																																																												
3. <input type="checkbox"/>	Record the name of the DR NOAMP NE to be downgraded (backed out) in the space provided to the right.	<p>Record the name of the DR NOAMP NE which will be “Backed out”.</p> <p>DR NOAMP NE: _____</p>																																																																																											
4. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Status & Manage → Server</p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Server Hostname</th> <th>Network Element</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>OCUDR-DR-MP3</td> <td>Site2_S2_NE_SO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-DR-MP4</td> <td>Site2_S2_NE_SO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-DR-NOAMP-A</td> <td>Site2_S2_NE_NO</td> <td>Enabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-DR-NOAMP-B</td> <td>Site2_S2_NE_NO</td> <td>Enabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-DR-SOAM-A</td> <td>Site2_S2_NE_SO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-DR-SOAM-B</td> <td>Site2_S2_NE_SO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-MP1</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-MP2</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-NOAMP-A</td> <td>Site1_S1_NE_NO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-NOAMP-B</td> <td>Site1_S1_NE_NO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-SOAM-A</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-SOAM-B</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> </tbody> </table>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	OCUDR-DR-MP3	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-DR-MP4	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-DR-NOAMP-A	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm	OCUDR-DR-NOAMP-B	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm	OCUDR-DR-SOAM-A	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-DR-SOAM-B	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-MP1	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-MP2	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-NOAMP-A	Site1_S1_NE_NO	Enabled	Err	Norm	Norm	Norm	OCUDR-NOAMP-B	Site1_S1_NE_NO	Enabled	Norm	Norm	Norm	Norm	OCUDR-SOAM-A	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-SOAM-B	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																																																																																							
OCUDR-DR-MP3	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-DR-MP4	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-DR-NOAMP-A	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm																																																																																							
OCUDR-DR-NOAMP-B	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm																																																																																							
OCUDR-DR-SOAM-A	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-DR-SOAM-B	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-MP1	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-MP2	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-NOAMP-A	Site1_S1_NE_NO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-NOAMP-B	Site1_S1_NE_NO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-SOAM-A	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-SOAM-B	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							

Procedure 13: Backout of DR NOAMP NE

Step	Procedure	Result																					
5. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>1) From the Status & Manage → Server filter pull-down, select the name for the DR NOAMP NE.</p> <p>2) Click on the “GO” dialogue button located on the right end of the filter bar</p>																						
6. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>The user should be presented with the list of servers associated with the DR NOAMP NE.</p> <p>Identify each “Server Hostname” and its associated “Reporting Status” and “Appl State”.</p>	 <table border="1"> <thead> <tr> <th>Server Hostname</th> <th>Network Element</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>OCUDR-DR-NOAMP-A</td> <td>Site2_S2_NE_NO</td> <td>Enabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-DR-NOAMP-B</td> <td>Site2_S2_NE_NO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> </tbody> </table>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	OCUDR-DR-NOAMP-A	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm	OCUDR-DR-NOAMP-B	Site2_S2_NE_NO	Enabled	Norm	Norm	Norm	Norm
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																	
OCUDR-DR-NOAMP-A	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm																	
OCUDR-DR-NOAMP-B	Site2_S2_NE_NO	Enabled	Norm	Norm	Norm	Norm																	
7. <input type="checkbox"/>	<p>Using the list of servers associated with the DR NOAMP NE shown in the above Step, record the Server names associated with the DR NOAMP NE.</p>	<p>Identify the DR NOAMP “Server” names and record them in the space provided below:</p> <p>Standby DR NOAMP: _____</p> <p>Active DR NOAMP: _____</p>																					
8. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Execute Appendix D for the first Spare - DR NOAMP Server</p>	<p>Backout the target release for the Spare DR NOAMP Server as specified in Appendix D (<i>Backout of a Single Server</i>).</p>																					
9. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Execute Appendix D for the second Spare - DR NOAMP Server.</p>	<p>Backout the target release for the Spare DR NOAMP Server as specified in Appendix D (<i>Backout of a Single Server</i>).</p>																					

Oracle Communications User Data Repository Software Upgrade Procedure

Procedure 13: Backout of DR NOAMP NE

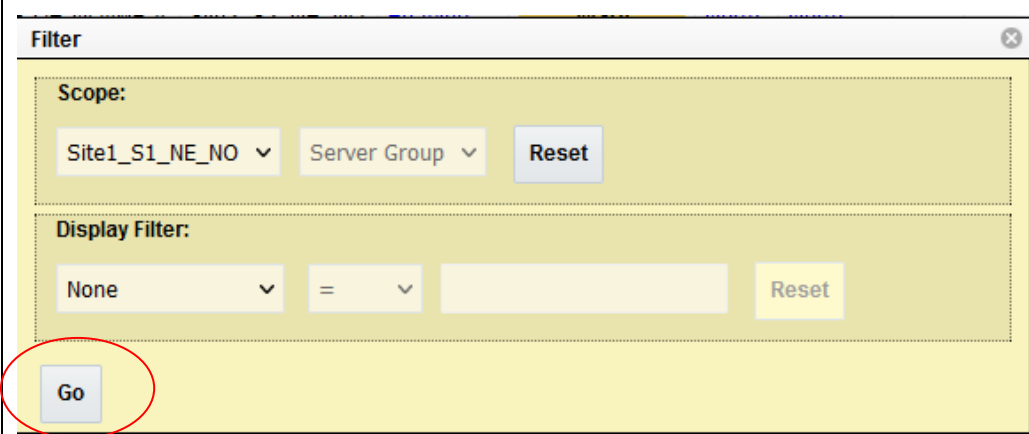
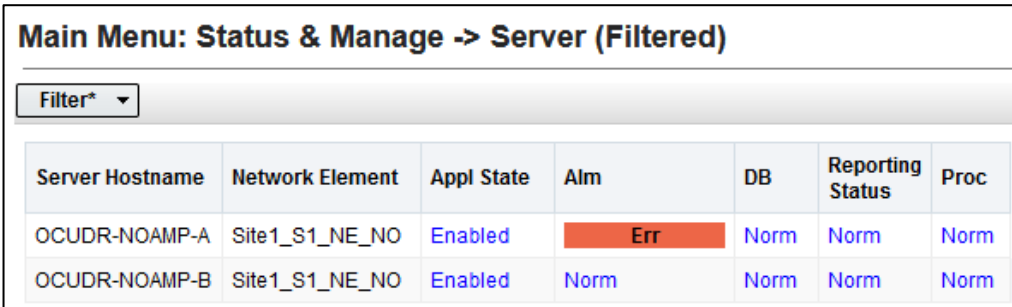
Step	Procedure	Result
10. <input type="checkbox"/>	Active NOAMP VIP: Execute Health Check at this time only if no other servers require back Out. Otherwise, proceed with the next Backout	Execute Health Check procedures (Post Backout) as specified in Appendix B , if Backout procedures have been completed for all required servers.
THIS PROCEDURE HAS BEEN COMPLETED		

7.5 Backout of Primary NOAMP NE

Procedure 14: Backout of Primary NOAMP NE

Step	Procedure	Result																																																																																											
1. <input type="checkbox"/>	Using the VIP address, access the Primary NOAMP GUI.	Access the Primary NOAMP GUI as specified in Appendix A .																																																																																											
2. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Status & Manage → Network Elements</p> <p>...as shown on the right.</p>	<div style="border: 1px solid black; padding: 10px;"> <p>Main Menu: Status & Manage -> Network Elements</p> <p>Filter* ▼</p> <table border="1"> <thead> <tr> <th>Network Element Name</th> <th>Customer Router Monitoring</th> </tr> </thead> <tbody> <tr> <td>Site1_S1_NE_NO</td> <td>Disabled</td> </tr> <tr> <td>Site1_S1_NE_SO</td> <td>Disabled</td> </tr> <tr> <td>Site2_S2_NE_NO</td> <td>Disabled</td> </tr> <tr> <td>Site2_S2_NE_SO</td> <td>Disabled</td> </tr> </tbody> </table> </div>	Network Element Name	Customer Router Monitoring	Site1_S1_NE_NO	Disabled	Site1_S1_NE_SO	Disabled	Site2_S2_NE_NO	Disabled	Site2_S2_NE_SO	Disabled																																																																																	
Network Element Name	Customer Router Monitoring																																																																																												
Site1_S1_NE_NO	Disabled																																																																																												
Site1_S1_NE_SO	Disabled																																																																																												
Site2_S2_NE_NO	Disabled																																																																																												
Site2_S2_NE_SO	Disabled																																																																																												
3. <input type="checkbox"/>	Record the name of the NOAMP NE to be downgraded (Backed out) in the space provided to the right.	<p>Record the name of the Primary NOAMP NE which will be “Backed out”.</p> <p>Primary NOAMP NE: _____</p>																																																																																											
4. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Status & Manage → Server</p> <p>...as shown on the right.</p>	<div style="border: 1px solid black; padding: 10px;"> <p>Main Menu: Status & Manage -> Server</p> <p>Filter* ▼</p> <table border="1"> <thead> <tr> <th>Server Hostname</th> <th>Network Element</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>OCUDR-DR-MP3</td> <td>Site2_S2_NE_SO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-DR-MP4</td> <td>Site2_S2_NE_SO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-DR-NOAMP-A</td> <td>Site2_S2_NE_NO</td> <td>Enabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-DR-NOAMP-B</td> <td>Site2_S2_NE_NO</td> <td>Enabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-DR-SOAM-A</td> <td>Site2_S2_NE_SO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-DR-SOAM-B</td> <td>Site2_S2_NE_SO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-MP1</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-MP2</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-NOAMP-A</td> <td>Site1_S1_NE_NO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-NOAMP-B</td> <td>Site1_S1_NE_NO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-SOAM-A</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-SOAM-B</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> </tbody> </table> </div>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	OCUDR-DR-MP3	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-DR-MP4	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-DR-NOAMP-A	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm	OCUDR-DR-NOAMP-B	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm	OCUDR-DR-SOAM-A	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-DR-SOAM-B	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-MP1	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-MP2	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-NOAMP-A	Site1_S1_NE_NO	Enabled	Err	Norm	Norm	Norm	OCUDR-NOAMP-B	Site1_S1_NE_NO	Enabled	Norm	Norm	Norm	Norm	OCUDR-SOAM-A	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-SOAM-B	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																																																																																							
OCUDR-DR-MP3	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-DR-MP4	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-DR-NOAMP-A	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm																																																																																							
OCUDR-DR-NOAMP-B	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm																																																																																							
OCUDR-DR-SOAM-A	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-DR-SOAM-B	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-MP1	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-MP2	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-NOAMP-A	Site1_S1_NE_NO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-NOAMP-B	Site1_S1_NE_NO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-SOAM-A	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-SOAM-B	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							

Procedure 14: Backout of Primary NOAMP NE

Step	Procedure	Result
5. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>1) From the Status & Manage/Server filter pull-down, select the name for the Primary NOAMP NE.</p> <p>2) Click on the “GO” dialogue button located on the right end of the filter bar</p>	
6. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>The user should be presented with the list of servers associated with the Primary NOAMP NE.</p> <p>Identify each “Server Hostname” and its associated “Reporting Status” and “Appl State”.</p>	
7. <input type="checkbox"/>	<p>Using the list of servers associated with the Primary NOAMP NE shown in the above Step...</p> <p>Record the Server names associated with the Primary NOAMP NE.</p>	<p>Identify the Primary NOAMP “Server” names and record them in the space provided below:</p> <p>Standby Primary NOAMP: _____</p> <p>Active Primary NOAMP: _____</p>
8. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Execute Appendix D for the Standby Primary NOAMP Server</p>	<p>Backout the target release for the Standby Primary NOAMP Server as specified in Appendix D (Backout of a Single Server).</p>
9. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Execute Appendix D for the Active Primary NOAMP Server.</p>	<p>Backout the target release for the Active Primary NOAMP Server as specified in Appendix D (Backout of a Single Server).</p>



Oracle Communications User Data Repository Software Upgrade Procedure

Procedure 14: Backout of Primary NOAMP NE

Step	Procedure	Result
10. <input type="checkbox"/>	Active NOAMP VIP: Execute Health Check at this time only if no other servers require backout.	Execute Health Check procedures (Post Backout) as specified in Appendix B , if Backout procedures have been completed for all required servers.
THIS PROCEDURE HAS BEEN COMPLETED		

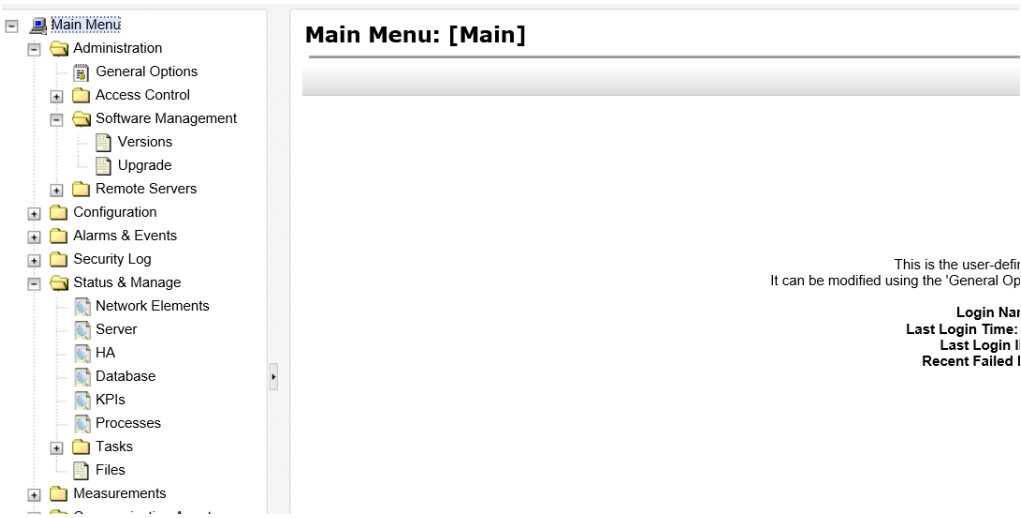
APPENDIX A. ACCESSING THE OAM SERVER GUI (NOAMP / SOAM)

Appendix A: Accessing the OAM Server GUI (NOAMP / SOAM)

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p>Active OAM VIP:</p> <p>1) Launch Internet Explorer or other and connect to the XMI Virtual IP address (VIP) assigned to Active OAM site</p> <p>2) If a Certificate Error is received, click on the box which states...</p> <p>“Proceed anyway.”</p>	 <p>There’s a problem with this website’s security certificate</p> <p>This might mean that someone’s trying to fool you or steal any info you send to the server. You should close this site immediately.</p> <p><input type="checkbox"/> Go to my homepage instead</p> <p><input checked="" type="checkbox"/> Continue to this webpage (not recommended)</p>
<p>2.</p> <input type="checkbox"/>	<p>Active OAM VIP:</p> <p>The user should be presented the login screen shown on the right.</p> <p>Login to the GUI using the default user and password.</p>	 <p>The screenshot shows the Oracle System Login page. At the top is the Oracle logo. Below it is the text 'Oracle System Login' and the date 'Sat Sep 30 05:00:38 2023 EDT'. The main content area is a light gray box with the title 'Log In' and the instruction 'Enter your username and password to log in'. Below this is a message: 'Failed login attempt via browser.' There are two input fields for 'Username:' and 'Password:'. Below the password field is a checkbox labeled 'Change password' and a 'Log In' button. At the bottom of the page, there is a 'Welcome to the Oracle System Login.' message, a paragraph about browser compatibility, a 'Unauthorized access is prohibited.' warning, and a footer with copyright information: 'Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners. Copyright © 2010, 2023, Oracle and/or its affiliates. All rights reserved.'</p>

Oracle Communications User Data Repository Software Upgrade Procedure

Appendix A: Accessing the OAM Server GUI (NOAMP / SOAM)

Step	Procedure	Result
<p>3.</p> <div style="border: 1px solid black; width: 20px; height: 20px; margin-left: 10px;"></div>	<p>Active OAM VIP:</p> <p>1) The user should be presented the Main Menu as shown on the right.</p> <p>2) Verify that the message shown across the top of the right panel indicates that the browser is using the “VIP” connected to the Active OAM server.</p>	 <p>NOTE: The message may show connection to either a “ACTIVE NETWORK OAM&P” or a “SYSTEM OAM” depending on the selected NE.</p>
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>		

APPENDIX B. HEALTH CHECK PROCEDURES

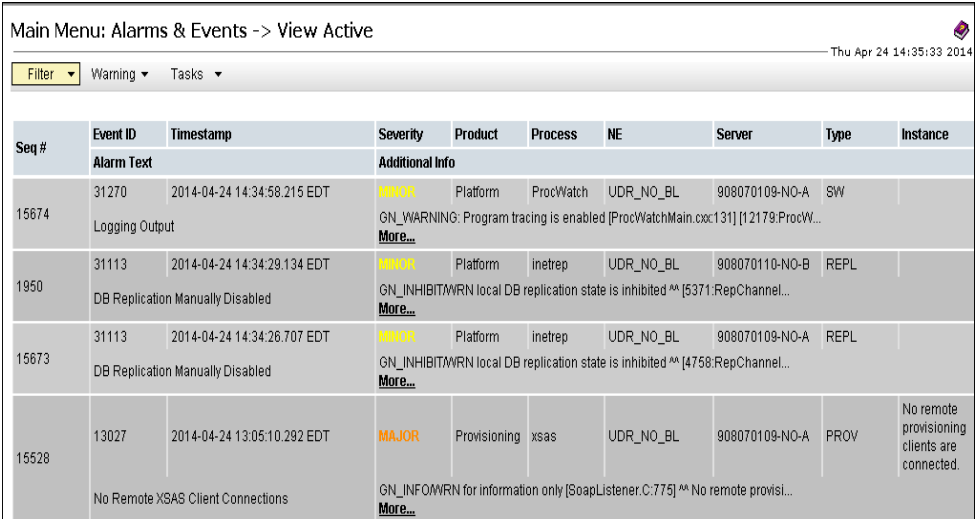
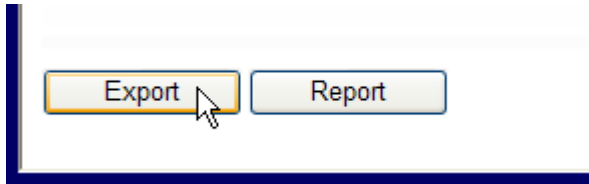
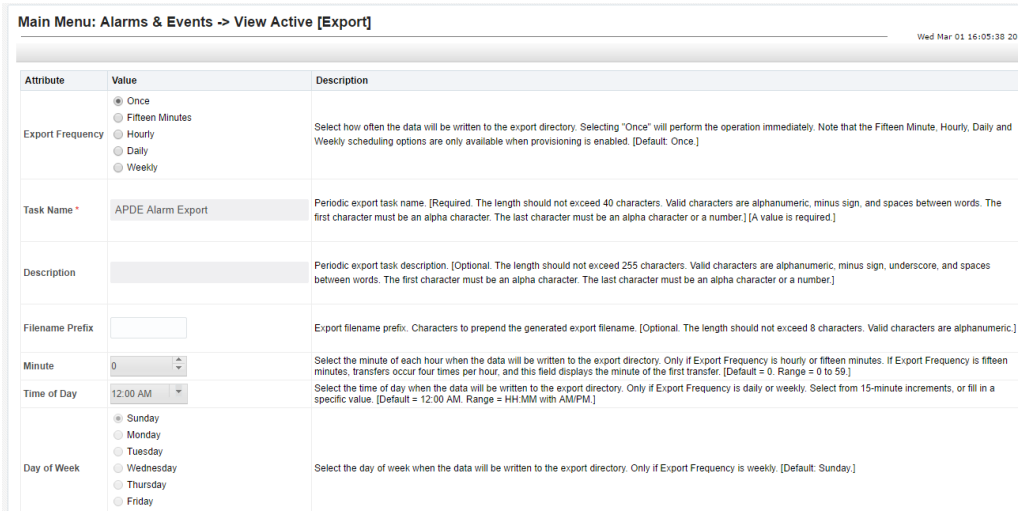
This procedure is part of Software Upgrade Preparation and is used to determine the health and status of the Oracle Communications User Data Repository network and servers.

Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

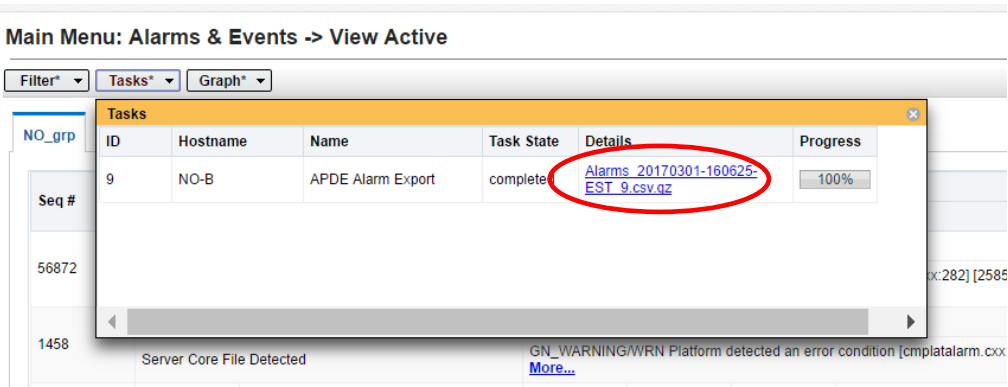
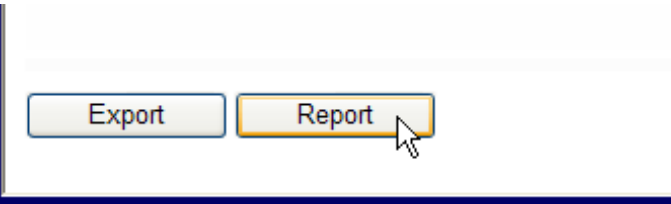
Appendix B: Health Check Procedures

Step	Procedure	Result																																																																																											
1. <input style="width: 30px; height: 20px;" type="checkbox"/>	Using the VIP address, access the Primary NOAMP GUI.	Access the Primary NOAMP GUI as specified in Appendix A .																																																																																											
2. <input style="width: 30px; height: 20px;" type="checkbox"/>	<p>Active NOAMP VIP: Select...</p> <p>Main Menu → Status & Manage → Server</p> <p>... as shown on the right.</p>	<div style="border: 1px solid black; padding: 5px;"> <p>Main Menu: Status & Manage -> Server</p> <p>Filter* ▾</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #f2f2f2;"> <th>Server Hostname</th> <th>Network Element</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr><td>OCUDR-DR-MP3</td><td>Site2_S2_NE_SO</td><td>Enabled</td><td style="background-color: #f44336;">Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-DR-MP4</td><td>Site2_S2_NE_SO</td><td>Enabled</td><td style="background-color: #f44336;">Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-DR-NOAMP-A</td><td>Site2_S2_NE_NO</td><td>Enabled</td><td style="background-color: #ffc107;">Warn</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-DR-NOAMP-B</td><td>Site2_S2_NE_NO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-DR-SOAM-A</td><td>Site2_S2_NE_SO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-DR-SOAM-B</td><td>Site2_S2_NE_SO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-MP1</td><td>Site1_S1_NE_SO</td><td>Enabled</td><td style="background-color: #f44336;">Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-MP2</td><td>Site1_S1_NE_SO</td><td>Enabled</td><td style="background-color: #f44336;">Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-NOAMP-A</td><td>Site1_S1_NE_NO</td><td>Enabled</td><td style="background-color: #f44336;">Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-NOAMP-B</td><td>Site1_S1_NE_NO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-SOAM-A</td><td>Site1_S1_NE_SO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-SOAM-B</td><td>Site1_S1_NE_SO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> </tbody> </table> </div> <p>Verify that all server statuses show “Norm” as shown above.</p>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	OCUDR-DR-MP3	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-DR-MP4	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-DR-NOAMP-A	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm	OCUDR-DR-NOAMP-B	Site2_S2_NE_NO	Enabled	Norm	Norm	Norm	Norm	OCUDR-DR-SOAM-A	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-DR-SOAM-B	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-MP1	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-MP2	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-NOAMP-A	Site1_S1_NE_NO	Enabled	Err	Norm	Norm	Norm	OCUDR-NOAMP-B	Site1_S1_NE_NO	Enabled	Norm	Norm	Norm	Norm	OCUDR-SOAM-A	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-SOAM-B	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																																																																																							
OCUDR-DR-MP3	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-DR-MP4	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-DR-NOAMP-A	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm																																																																																							
OCUDR-DR-NOAMP-B	Site2_S2_NE_NO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-DR-SOAM-A	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-DR-SOAM-B	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-MP1	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-MP2	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-NOAMP-A	Site1_S1_NE_NO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-NOAMP-B	Site1_S1_NE_NO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-SOAM-A	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-SOAM-B	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
3. <input style="width: 30px; height: 20px;" type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>If any other server statuses are present, they will appear in a colored box as shown on the right.</p> <p>NOTE: Other server states include “Err, Warn, Man, Unk and Disabled”.</p>	<div style="border: 1px solid black; padding: 5px;"> <p>Main Menu: Status & Manage -> Server</p> <p>Filter* ▾</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr style="background-color: #f2f2f2;"> <th>Server Hostname</th> <th>Network Element</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr><td>OCUDR-DR-MP3</td><td>Site2_S2_NE_SO</td><td>Enabled</td><td style="background-color: #f44336;">Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-DR-MP4</td><td>Site2_S2_NE_SO</td><td>Enabled</td><td style="background-color: #f44336;">Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-DR-NOAMP-A</td><td>Site2_S2_NE_NO</td><td>Enabled</td><td style="background-color: #ffc107;">Warn</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-DR-NOAMP-B</td><td>Site2_S2_NE_NO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-DR-SOAM-A</td><td>Site2_S2_NE_SO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-DR-SOAM-B</td><td>Site2_S2_NE_SO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-MP1</td><td>Site1_S1_NE_SO</td><td>Enabled</td><td style="background-color: #f44336;">Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-MP2</td><td>Site1_S1_NE_SO</td><td>Enabled</td><td style="background-color: #f44336;">Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-NOAMP-A</td><td>Site1_S1_NE_NO</td><td>Enabled</td><td style="background-color: #f44336;">Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-NOAMP-B</td><td>Site1_S1_NE_NO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-SOAM-A</td><td>Site1_S1_NE_SO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-SOAM-B</td><td>Site1_S1_NE_SO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> </tbody> </table> </div> <p>If server state is any value besides NORM, follow My Oracle Support (MOS) to contact My Oracle Support.</p>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	OCUDR-DR-MP3	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-DR-MP4	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-DR-NOAMP-A	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm	OCUDR-DR-NOAMP-B	Site2_S2_NE_NO	Enabled	Norm	Norm	Norm	Norm	OCUDR-DR-SOAM-A	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-DR-SOAM-B	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-MP1	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-MP2	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-NOAMP-A	Site1_S1_NE_NO	Enabled	Err	Norm	Norm	Norm	OCUDR-NOAMP-B	Site1_S1_NE_NO	Enabled	Norm	Norm	Norm	Norm	OCUDR-SOAM-A	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-SOAM-B	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																																																																																							
OCUDR-DR-MP3	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-DR-MP4	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-DR-NOAMP-A	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm																																																																																							
OCUDR-DR-NOAMP-B	Site2_S2_NE_NO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-DR-SOAM-A	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-DR-SOAM-B	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-MP1	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-MP2	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-NOAMP-A	Site1_S1_NE_NO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-NOAMP-B	Site1_S1_NE_NO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-SOAM-A	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-SOAM-B	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							


Appendix B: Health Check Procedures

Step	Procedure	Result																																																																																										
4. <input type="checkbox"/>	<p>Active NOAMP VIP: Select...</p> <p>Main Menu → Alarm & Events → View Active</p> <p>...as shown on the right.</p>	 <p>Main Menu: Alarms & Events -> View Active</p> <p>Thu Apr 24 14:35:33 2014</p> <p>Filter Warning Tasks</p> <table border="1"> <thead> <tr> <th>Seq #</th> <th>Event ID</th> <th>Timestamp</th> <th>Severity</th> <th>Product</th> <th>Process</th> <th>NE</th> <th>Server</th> <th>Type</th> <th>Instance</th> </tr> </thead> <tbody> <tr> <td>15674</td> <td>31270</td> <td>2014-04-24 14:34:58.215 EDT</td> <td>WARNING</td> <td>Platform</td> <td>ProcWatch</td> <td>UDR_NO_BL</td> <td>908070109-NO-A</td> <td>SW</td> <td></td> </tr> <tr> <td></td> <td colspan="2">Logging Output</td> <td colspan="7">GN_WARNING: Program tracing is enabled [ProcWatchMain.cxx:131] [12179.ProcW... More...</td> </tr> <tr> <td>1950</td> <td>31113</td> <td>2014-04-24 14:34:29.134 EDT</td> <td>WARNING</td> <td>Platform</td> <td>inetrep</td> <td>UDR_NO_BL</td> <td>908070110-NO-B</td> <td>REPL</td> <td></td> </tr> <tr> <td></td> <td colspan="2">DB Replication Manually Disabled</td> <td colspan="7">GN_INHIBITWRN local DB replication state is inhibited ^^ [5371:RepChannel... More...</td> </tr> <tr> <td>15673</td> <td>31113</td> <td>2014-04-24 14:34:26.707 EDT</td> <td>WARNING</td> <td>Platform</td> <td>inetrep</td> <td>UDR_NO_BL</td> <td>908070109-NO-A</td> <td>REPL</td> <td></td> </tr> <tr> <td></td> <td colspan="2">DB Replication Manually Disabled</td> <td colspan="7">GN_INHIBITWRN local DB replication state is inhibited ^^ [4758:RepChannel... More...</td> </tr> <tr> <td>15528</td> <td>13027</td> <td>2014-04-24 13:05:10.292 EDT</td> <td>MAJOR</td> <td>Provisioning</td> <td>xsas</td> <td>UDR_NO_BL</td> <td>908070109-NO-A</td> <td>PROV</td> <td>No remote provisioning clients are connected.</td> </tr> <tr> <td></td> <td colspan="2">No Remote XSAS Client Connections</td> <td colspan="7">GN_INFOWRN for information only [SoapListener.C:775] ^^ No remote provisi... More...</td> </tr> </tbody> </table>	Seq #	Event ID	Timestamp	Severity	Product	Process	NE	Server	Type	Instance	15674	31270	2014-04-24 14:34:58.215 EDT	WARNING	Platform	ProcWatch	UDR_NO_BL	908070109-NO-A	SW			Logging Output		GN_WARNING: Program tracing is enabled [ProcWatchMain.cxx:131] [12179.ProcW... More...							1950	31113	2014-04-24 14:34:29.134 EDT	WARNING	Platform	inetrep	UDR_NO_BL	908070110-NO-B	REPL			DB Replication Manually Disabled		GN_INHIBITWRN local DB replication state is inhibited ^^ [5371:RepChannel... More...							15673	31113	2014-04-24 14:34:26.707 EDT	WARNING	Platform	inetrep	UDR_NO_BL	908070109-NO-A	REPL			DB Replication Manually Disabled		GN_INHIBITWRN local DB replication state is inhibited ^^ [4758:RepChannel... More...							15528	13027	2014-04-24 13:05:10.292 EDT	MAJOR	Provisioning	xsas	UDR_NO_BL	908070109-NO-A	PROV	No remote provisioning clients are connected.		No Remote XSAS Client Connections		GN_INFOWRN for information only [SoapListener.C:775] ^^ No remote provisi... More...						
Seq #	Event ID	Timestamp	Severity	Product	Process	NE	Server	Type	Instance																																																																																			
15674	31270	2014-04-24 14:34:58.215 EDT	WARNING	Platform	ProcWatch	UDR_NO_BL	908070109-NO-A	SW																																																																																				
	Logging Output		GN_WARNING: Program tracing is enabled [ProcWatchMain.cxx:131] [12179.ProcW... More...																																																																																									
1950	31113	2014-04-24 14:34:29.134 EDT	WARNING	Platform	inetrep	UDR_NO_BL	908070110-NO-B	REPL																																																																																				
	DB Replication Manually Disabled		GN_INHIBITWRN local DB replication state is inhibited ^^ [5371:RepChannel... More...																																																																																									
15673	31113	2014-04-24 14:34:26.707 EDT	WARNING	Platform	inetrep	UDR_NO_BL	908070109-NO-A	REPL																																																																																				
	DB Replication Manually Disabled		GN_INHIBITWRN local DB replication state is inhibited ^^ [4758:RepChannel... More...																																																																																									
15528	13027	2014-04-24 13:05:10.292 EDT	MAJOR	Provisioning	xsas	UDR_NO_BL	908070109-NO-A	PROV	No remote provisioning clients are connected.																																																																																			
	No Remote XSAS Client Connections		GN_INFOWRN for information only [SoapListener.C:775] ^^ No remote provisi... More...																																																																																									
5. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Select the “Export” dialogue button from the bottom left corner of the screen.</p>	 <p>Note: This step cannot be performed if global provisioning is disabled. The “export” button will be greyed out in that scenario.</p>																																																																																										
6. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Click the “Ok” button at the bottom of the screen.</p> <p>Default values are fine.</p>	 <p>Main Menu: Alarms & Events -> View Active [Export]</p> <p>Wed Mar 01 16:05:38 20</p> <table border="1"> <thead> <tr> <th>Attribute</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Export Frequency</td> <td> <input checked="" type="radio"/> Once <input type="radio"/> Fifteen Minutes <input type="radio"/> Hourly <input type="radio"/> Daily <input type="radio"/> Weekly </td> <td>Select how often the data will be written to the export directory. Selecting "Once" will perform the operation immediately. Note that the Fifteen Minute, Hourly, Daily and Weekly scheduling options are only available when provisioning is enabled. [Default: Once]</td> </tr> <tr> <td>Task Name *</td> <td>APDE Alarm Export</td> <td>Periodic export task name. [Required. The length should not exceed 40 characters. Valid characters are alphanumeric, minus sign, and spaces between words. The first character must be an alpha character. The last character must be an alpha character or a number.] [A value is required.]</td> </tr> <tr> <td>Description</td> <td></td> <td>Periodic export task description. [Optional. The length should not exceed 255 characters. Valid characters are alphanumeric, minus sign, underscore, and spaces between words. The first character must be an alpha character. The last character must be an alpha character or a number.]</td> </tr> <tr> <td>Filename Prefix</td> <td></td> <td>Export filename prefix. Characters to prepend the generated export filename. [Optional. The length should not exceed 8 characters. Valid characters are alphanumeric.]</td> </tr> <tr> <td>Minute</td> <td>0</td> <td>Select the minute of each hour when the data will be written to the export directory. Only if Export Frequency is hourly or fifteen minutes. If Export Frequency is fifteen minutes, transfers occur four times per hour, and this field displays the minute of the first transfer. [Default = 0. Range = 0 to 59.]</td> </tr> <tr> <td>Time of Day</td> <td>12:00 AM</td> <td>Select the time of day when the data will be written to the export directory. Only if Export Frequency is daily or weekly. Select from 15-minute increments, or fill in a specific value. [Default = 12:00 AM. Range = HH:MM with AM/PM.]</td> </tr> <tr> <td>Day of Week</td> <td> <input checked="" type="radio"/> Sunday <input type="radio"/> Monday <input type="radio"/> Tuesday <input type="radio"/> Wednesday <input type="radio"/> Thursday <input type="radio"/> Friday </td> <td>Select the day of week when the data will be written to the export directory. Only if Export Frequency is weekly. [Default: Sunday]</td> </tr> </tbody> </table>	Attribute	Value	Description	Export Frequency	<input checked="" type="radio"/> Once <input type="radio"/> Fifteen Minutes <input type="radio"/> Hourly <input type="radio"/> Daily <input type="radio"/> Weekly	Select how often the data will be written to the export directory. Selecting "Once" will perform the operation immediately. Note that the Fifteen Minute, Hourly, Daily and Weekly scheduling options are only available when provisioning is enabled. [Default: Once]	Task Name *	APDE Alarm Export	Periodic export task name. [Required. The length should not exceed 40 characters. Valid characters are alphanumeric, minus sign, and spaces between words. The first character must be an alpha character. The last character must be an alpha character or a number.] [A value is required.]	Description		Periodic export task description. [Optional. The length should not exceed 255 characters. Valid characters are alphanumeric, minus sign, underscore, and spaces between words. The first character must be an alpha character. The last character must be an alpha character or a number.]	Filename Prefix		Export filename prefix. Characters to prepend the generated export filename. [Optional. The length should not exceed 8 characters. Valid characters are alphanumeric.]	Minute	0	Select the minute of each hour when the data will be written to the export directory. Only if Export Frequency is hourly or fifteen minutes. If Export Frequency is fifteen minutes, transfers occur four times per hour, and this field displays the minute of the first transfer. [Default = 0. Range = 0 to 59.]	Time of Day	12:00 AM	Select the time of day when the data will be written to the export directory. Only if Export Frequency is daily or weekly. Select from 15-minute increments, or fill in a specific value. [Default = 12:00 AM. Range = HH:MM with AM/PM.]	Day of Week	<input checked="" type="radio"/> Sunday <input type="radio"/> Monday <input type="radio"/> Tuesday <input type="radio"/> Wednesday <input type="radio"/> Thursday <input type="radio"/> Friday	Select the day of week when the data will be written to the export directory. Only if Export Frequency is weekly. [Default: Sunday]																																																																		
Attribute	Value	Description																																																																																										
Export Frequency	<input checked="" type="radio"/> Once <input type="radio"/> Fifteen Minutes <input type="radio"/> Hourly <input type="radio"/> Daily <input type="radio"/> Weekly	Select how often the data will be written to the export directory. Selecting "Once" will perform the operation immediately. Note that the Fifteen Minute, Hourly, Daily and Weekly scheduling options are only available when provisioning is enabled. [Default: Once]																																																																																										
Task Name *	APDE Alarm Export	Periodic export task name. [Required. The length should not exceed 40 characters. Valid characters are alphanumeric, minus sign, and spaces between words. The first character must be an alpha character. The last character must be an alpha character or a number.] [A value is required.]																																																																																										
Description		Periodic export task description. [Optional. The length should not exceed 255 characters. Valid characters are alphanumeric, minus sign, underscore, and spaces between words. The first character must be an alpha character. The last character must be an alpha character or a number.]																																																																																										
Filename Prefix		Export filename prefix. Characters to prepend the generated export filename. [Optional. The length should not exceed 8 characters. Valid characters are alphanumeric.]																																																																																										
Minute	0	Select the minute of each hour when the data will be written to the export directory. Only if Export Frequency is hourly or fifteen minutes. If Export Frequency is fifteen minutes, transfers occur four times per hour, and this field displays the minute of the first transfer. [Default = 0. Range = 0 to 59.]																																																																																										
Time of Day	12:00 AM	Select the time of day when the data will be written to the export directory. Only if Export Frequency is daily or weekly. Select from 15-minute increments, or fill in a specific value. [Default = 12:00 AM. Range = HH:MM with AM/PM.]																																																																																										
Day of Week	<input checked="" type="radio"/> Sunday <input type="radio"/> Monday <input type="radio"/> Tuesday <input type="radio"/> Wednesday <input type="radio"/> Thursday <input type="radio"/> Friday	Select the day of week when the data will be written to the export directory. Only if Export Frequency is weekly. [Default: Sunday]																																																																																										

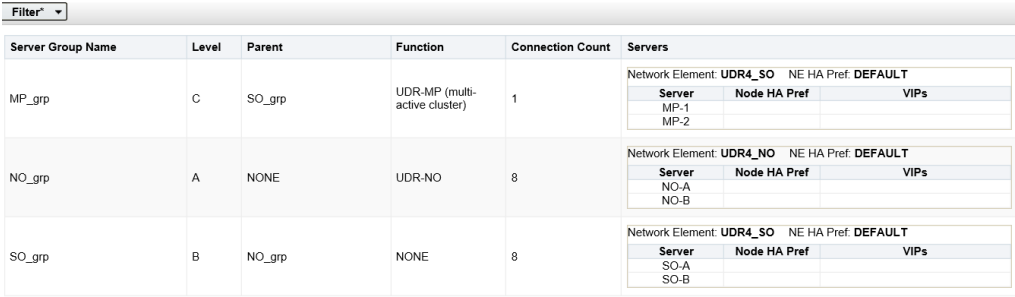
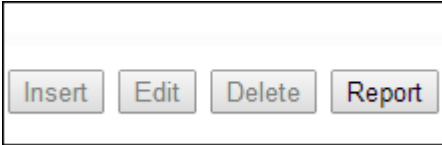
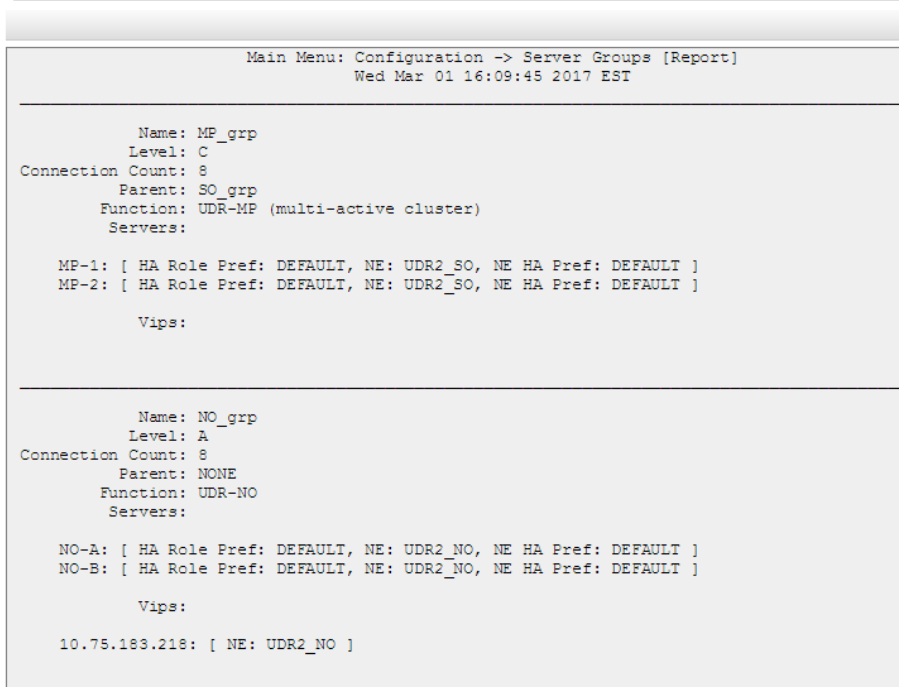
Appendix B: Health Check Procedures

Step	Procedure	Result
<p>7.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Click the Tasks dropdown.</p> <p>The name of the exported Alarms CSV file will appear in the banner at the top of the right panel.</p>	
<p>8.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Record the filename of Alarms CSV file generated in the space provided to the right.</p>	<p>Example: <i>Alarms<yyyymmdd>_<hhmmss>.csv</i></p> <p>Alarms _____ .CSV</p>
<p>9.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Select the “Report” dialogue button from the bottom left corner of the screen.</p>	

Appendix B: Health Check Procedures


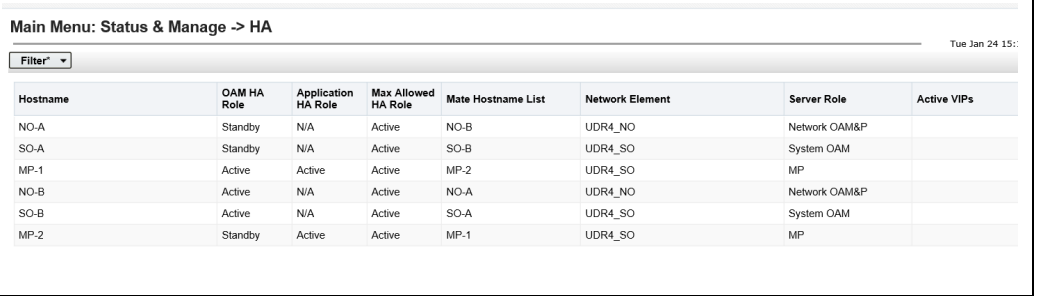
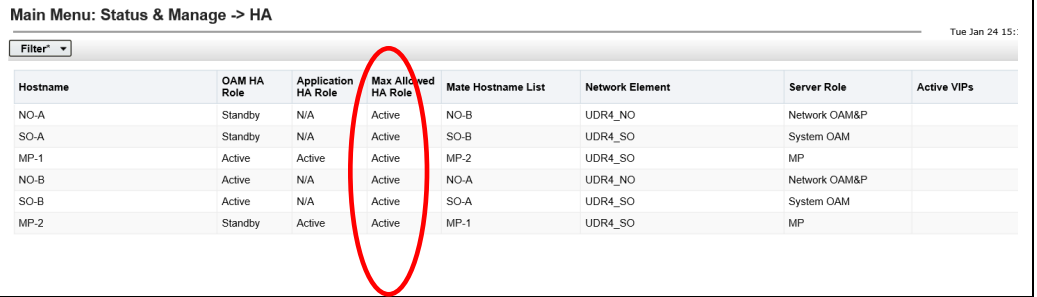
Step	Procedure	Result						
<p>10.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Active “Alarms & Events” Report will be generated and displayed in the right panel.</p>	<p>Main Menu: Alarms & Events -> View Active [Report]</p> <hr/> <p style="text-align: center;">Main Menu: Alarms & Events -> View Active [Report] Wed Mar 01 16:08:11 2017 EST</p> <hr/> <pre> TIMESTAMP: 2017-03-01 16:07:49.971 EST NETWORK_ELEMENT: UDR2_NO SERVER: NO-B SEQ_NUM: 56878 EVENT_NUMBER: 31270 SEVERITY: MINOR PRODUCT: Platform PROCESS: ProcWatch TYPE: SW INSTANCE: NAME: Logging Output DESCR: Logging Output set to Above Normal ERR_INFO: GN WARNING: Program tracing is enabled [ProcWatchMain.cxx:282] [25857:ProcWatchMain.cxx:283] NSECS: 1598159982881848712 ID: 0 </pre> <hr/> <pre> TIMESTAMP: 2017-03-01 05:58:12.010 EST NETWORK_ELEMENT: UDR2_SO SERVER: SO-A SEQ_NUM: 1458 EVENT_NUMBER: 32508 SEVERITY: MINOR PRODUCT: TPD PROCESS: cmplatalarm TYPE: PLAT INSTANCE: </pre> <p style="text-align: right;">Print Save Back</p>						
<p>11.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>1) Select the “Save” dialogue button from the bottom/middle of the right panel.</p> <p>2) Click the “Save” dialogue and save to a directory.</p>							
<p>12.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Configuration → Network Elements</p> <p>...as shown on the right.</p>	<p>Main Menu: Status & Manage -> Network Elements</p> <hr/> <p>Filter* ▼</p> <table border="1"> <thead> <tr> <th>Network Element Name</th> <th>Customer Router Monitoring</th> </tr> </thead> <tbody> <tr> <td>UDR4_NO</td> <td>Disabled</td> </tr> <tr> <td>UDR4_SO</td> <td>Disabled</td> </tr> </tbody> </table>	Network Element Name	Customer Router Monitoring	UDR4_NO	Disabled	UDR4_SO	Disabled
Network Element Name	Customer Router Monitoring							
UDR4_NO	Disabled							
UDR4_SO	Disabled							

Appendix B: Health Check Procedures

Step	Procedure	Result
<p>13.</p> <input type="checkbox"/>	<p>Active NOAMP VIP: Select...</p> <p>Main Menu → Configuration → Server Groups</p> <p>...as shown on the right.</p>	<p>Main Menu: Configuration -> Server Groups</p> 
<p>14.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Select the “Report” dialogue button from the bottom left corner of the screen.</p>	
<p>15.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>A “Server Group Report” will be generated and displayed in the right panel.</p>	<p>Main Menu: Configuration -> Server Groups [Report]</p> 

Oracle Communications User Data Repository Software Upgrade Procedure

Appendix B: Health Check Procedures

Step	Procedure	Result																																																								
16. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>1) Select the “Save” dialogue button from the bottom/middle of the right panel.</p> <p>2) Click the “Save” dialogue and save to a directory.</p>																																																									
17. <input type="checkbox"/>	<p>Provide the saved files to the Customer Care Center for Health Check Analysis.</p>	<p>If executing this procedure as a pre or post Upgrade Health Check (HC1/HC2/HC3), provide the following saved files to the Customer Care Center for proper Health Check Analysis:</p> <p>Active “Alarms & Events” Report [Appendix B, Step 11] Network Elements Report [Appendix B, Step 1] Server Group Report [Appendix B, Step 16]</p>																																																								
18. <input type="checkbox"/>	<p>Active NOAMP VIP: Select...</p> <p>Main Menu → Status & Manage →HA</p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM HA Role</th> <th>Application HA Role</th> <th>Max Allowed HA Role</th> <th>Mate Hostname List</th> <th>Network Element</th> <th>Server Role</th> <th>Active VIPs</th> </tr> </thead> <tbody> <tr> <td>NO-A</td> <td>Standby</td> <td>N/A</td> <td>Active</td> <td>NO-B</td> <td>UDR4_NO</td> <td>Network OAM&P</td> <td></td> </tr> <tr> <td>SO-A</td> <td>Standby</td> <td>N/A</td> <td>Active</td> <td>SO-B</td> <td>UDR4_SO</td> <td>System OAM</td> <td></td> </tr> <tr> <td>MP-1</td> <td>Active</td> <td>Active</td> <td>Active</td> <td>MP-2</td> <td>UDR4_SO</td> <td>MP</td> <td></td> </tr> <tr> <td>NO-B</td> <td>Active</td> <td>N/A</td> <td>Active</td> <td>NO-A</td> <td>UDR4_NO</td> <td>Network OAM&P</td> <td></td> </tr> <tr> <td>SO-B</td> <td>Active</td> <td>N/A</td> <td>Active</td> <td>SO-A</td> <td>UDR4_SO</td> <td>System OAM</td> <td></td> </tr> <tr> <td>MP-2</td> <td>Standby</td> <td>Active</td> <td>Active</td> <td>MP-1</td> <td>UDR4_SO</td> <td>MP</td> <td></td> </tr> </tbody> </table>	Hostname	OAM HA Role	Application HA Role	Max Allowed HA Role	Mate Hostname List	Network Element	Server Role	Active VIPs	NO-A	Standby	N/A	Active	NO-B	UDR4_NO	Network OAM&P		SO-A	Standby	N/A	Active	SO-B	UDR4_SO	System OAM		MP-1	Active	Active	Active	MP-2	UDR4_SO	MP		NO-B	Active	N/A	Active	NO-A	UDR4_NO	Network OAM&P		SO-B	Active	N/A	Active	SO-A	UDR4_SO	System OAM		MP-2	Standby	Active	Active	MP-1	UDR4_SO	MP	
Hostname	OAM HA Role	Application HA Role	Max Allowed HA Role	Mate Hostname List	Network Element	Server Role	Active VIPs																																																			
NO-A	Standby	N/A	Active	NO-B	UDR4_NO	Network OAM&P																																																				
SO-A	Standby	N/A	Active	SO-B	UDR4_SO	System OAM																																																				
MP-1	Active	Active	Active	MP-2	UDR4_SO	MP																																																				
NO-B	Active	N/A	Active	NO-A	UDR4_NO	Network OAM&P																																																				
SO-B	Active	N/A	Active	SO-A	UDR4_SO	System OAM																																																				
MP-2	Standby	Active	Active	MP-1	UDR4_SO	MP																																																				
19. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>1) Verify that the “HA Status” for all servers shows either “Active” or “Standby” as shown to the right.</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM HA Role</th> <th>Application HA Role</th> <th>Max Allowed HA Role</th> <th>Mate Hostname List</th> <th>Network Element</th> <th>Server Role</th> <th>Active VIPs</th> </tr> </thead> <tbody> <tr> <td>NO-A</td> <td>Standby</td> <td>N/A</td> <td>Active</td> <td>NO-B</td> <td>UDR4_NO</td> <td>Network OAM&P</td> <td></td> </tr> <tr> <td>SO-A</td> <td>Standby</td> <td>N/A</td> <td>Active</td> <td>SO-B</td> <td>UDR4_SO</td> <td>System OAM</td> <td></td> </tr> <tr> <td>MP-1</td> <td>Active</td> <td>Active</td> <td>Active</td> <td>MP-2</td> <td>UDR4_SO</td> <td>MP</td> <td></td> </tr> <tr> <td>NO-B</td> <td>Active</td> <td>N/A</td> <td>Active</td> <td>NO-A</td> <td>UDR4_NO</td> <td>Network OAM&P</td> <td></td> </tr> <tr> <td>SO-B</td> <td>Active</td> <td>N/A</td> <td>Active</td> <td>SO-A</td> <td>UDR4_SO</td> <td>System OAM</td> <td></td> </tr> <tr> <td>MP-2</td> <td>Standby</td> <td>Active</td> <td>Active</td> <td>MP-1</td> <td>UDR4_SO</td> <td>MP</td> <td></td> </tr> </tbody> </table>	Hostname	OAM HA Role	Application HA Role	Max Allowed HA Role	Mate Hostname List	Network Element	Server Role	Active VIPs	NO-A	Standby	N/A	Active	NO-B	UDR4_NO	Network OAM&P		SO-A	Standby	N/A	Active	SO-B	UDR4_SO	System OAM		MP-1	Active	Active	Active	MP-2	UDR4_SO	MP		NO-B	Active	N/A	Active	NO-A	UDR4_NO	Network OAM&P		SO-B	Active	N/A	Active	SO-A	UDR4_SO	System OAM		MP-2	Standby	Active	Active	MP-1	UDR4_SO	MP	
Hostname	OAM HA Role	Application HA Role	Max Allowed HA Role	Mate Hostname List	Network Element	Server Role	Active VIPs																																																			
NO-A	Standby	N/A	Active	NO-B	UDR4_NO	Network OAM&P																																																				
SO-A	Standby	N/A	Active	SO-B	UDR4_SO	System OAM																																																				
MP-1	Active	Active	Active	MP-2	UDR4_SO	MP																																																				
NO-B	Active	N/A	Active	NO-A	UDR4_NO	Network OAM&P																																																				
SO-B	Active	N/A	Active	SO-A	UDR4_SO	System OAM																																																				
MP-2	Standby	Active	Active	MP-1	UDR4_SO	MP																																																				
20. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Repeat Step 19 of this procedure until the last page of the [Main Menu: Status & Manage →HA] screen is reached.</p>	<p>Verify the “HA Status” for each page of the [Main Menu: Status & Manage →HA] screen and click “Next” to reach the next page.</p>																																																								
<p>STEP 21 IS POST-UPGRADE ONLY</p>																																																										

Oracle Communications User Data Repository Software Upgrade Procedure

Appendix B: Health Check Procedures

Step	Procedure	Result
21. <input type="checkbox"/>	Active NOAMP VIP: Determine if any errors were reported.	Use an SSH client to connect to the recently upgraded server(s) (e.g., ssh, putty): ssh< server IMI IP address> login as: admusr password: <enter password> Switch to root su - password: <enter password> # verifyUpgrade Examine the output of the above command to determine if any errors were reported. Contact the Oracle CGBU Customer Care Center in case of errors.
THIS PROCEDURE HAS BEEN COMPLETED		

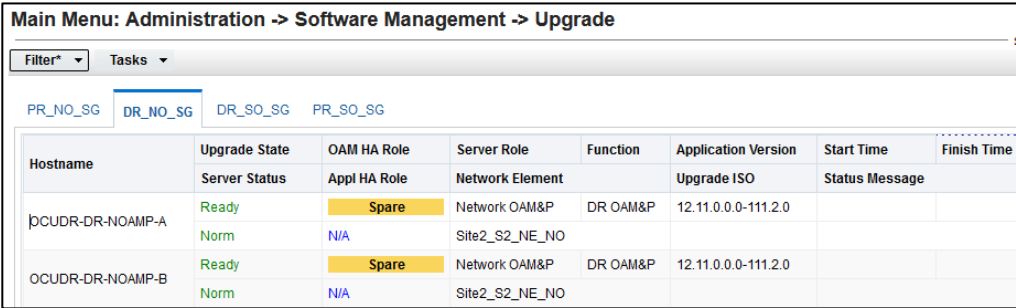
APPENDIX C. UPGRADE OF A SERVER [VM TO VM – UDR-12.11.X TO UDR-15.0]

C.1 Upgrade Server

Appendix C.1: Upgrade Server

Note: During "Fatal Error" the server cannot be recovered and you need to rebuild the server again with the same UDR release of its mate server. During normal failure the system can be recovered with the following command:

/var/TKLC/backout/diUpgrade -clearError

Step	Procedure	Result																																						
1.	Resize the disk size of server	Use the Appendix H for resizing the disk of a server before initiating upgrade																																						
2. <input type="checkbox"/>	Using the VIP address, access the Active NOAMP.	Access the Primary NOAMP GUI as specified in Appendix A . NOTE: Please ensure there are no users under /var/TKLC/db/filemgmt directory on server to be upgraded																																						
3. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>1) Select...</p> <p>Main Menu → Administration → Software Management → Upgrade</p> <p>2) Select server group tab for server(s) to be upgraded.</p> <p>3) Verify that the Upgrade State shows “Ready” for the server(s) to be upgraded.</p> <p>4) Verify the Application Version value for server(s) is the source software release version</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>Upgrade State</th> <th>OAM HA Role</th> <th>Server Role</th> <th>Function</th> <th>Application Version</th> <th>Start Time</th> <th>Finish Time</th> </tr> </thead> <tbody> <tr> <td rowspan="2">DCUDR-DR-NOAMP-A</td> <td>Ready</td> <td>Spare</td> <td>Network OAM&P</td> <td>DR OAM&P</td> <td>12.11.0.0.0-111.2.0</td> <td></td> <td></td> </tr> <tr> <td>Norm</td> <td>N/A</td> <td>Site2_S2_NE_NO</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="2">OCUDR-DR-NOAMP-B</td> <td>Ready</td> <td>Spare</td> <td>Network OAM&P</td> <td>DR OAM&P</td> <td>12.11.0.0.0-111.2.0</td> <td></td> <td></td> </tr> <tr> <td>Norm</td> <td>N/A</td> <td>Site2_S2_NE_NO</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time	DCUDR-DR-NOAMP-A	Ready	Spare	Network OAM&P	DR OAM&P	12.11.0.0.0-111.2.0			Norm	N/A	Site2_S2_NE_NO					OCUDR-DR-NOAMP-B	Ready	Spare	Network OAM&P	DR OAM&P	12.11.0.0.0-111.2.0			Norm	N/A	Site2_S2_NE_NO				
Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time																																	
DCUDR-DR-NOAMP-A	Ready	Spare	Network OAM&P	DR OAM&P	12.11.0.0.0-111.2.0																																			
	Norm	N/A	Site2_S2_NE_NO																																					
OCUDR-DR-NOAMP-B	Ready	Spare	Network OAM&P	DR OAM&P	12.11.0.0.0-111.2.0																																			
	Norm	N/A	Site2_S2_NE_NO																																					
4. <input type="checkbox"/>	<p>Server IMI IP (SSH):</p> <p>SSH to server and login as root user</p>	<p>Use your SSH client to connect to the server (ex. ssh, putty):</p> <p>ssh<server address></p> <p>login as: admusr password: <enter password></p> <p>Switch to root su - password: <enter password></p>																																						

Oracle Communications User Data Repository Software Upgrade Procedure

Appendix C.1: Upgrade Server

Note: During "Fatal Error" the server cannot be recovered and you need to rebuild the server again with the same UDR release of its mate server. During normal failure the system can be recovered with the following command:

```
# /var/TKLC/backout/diUpgrade -clearError
```

Step	Procedure	Result
5.	Copy and mount TPD 7.4 based ISO to the UDR server which is to be upgrded	<pre># cp /var/TKLC/db/filemgmt/TPD.install-8.0.0.0.0_90.13.0-OracleLinux7.4-x86_64-DIU.iso /var/TKLC/upgrade/</pre> <pre># chmod 777 /var/TKLC/upgrade/TPD.install-8.0.0.0.0_90.13.0-OracleLinux7.4-x86_64-DIU.iso</pre> <pre># mount /var/TKLC/upgrade/TPD.install-8.0.0.0.0_90.13.0-OracleLinux7.4-x86_64-DIU.iso /mnt/upgrade -o loop</pre> <p>Note: Please download DIU ISO from mos and upload to server at filemgmt area using ISO Administration and then copy to path: /var/TKLC/upgrade on server to upgrade.</p>
6.	Make a directory, copy UDR DIU ISO and mount it	<pre># mkdir /var/TKLC/ol8_diu</pre> <p>Note: copy application DIU iso in filemgmt location as iso is >9 GB</p> <pre># mount /var/TKLC/db/filemgmt/UDR-15.0.0.0.0_115.10.0-x86_64-DIU.iso /var/TKLC/ol8_diu -o loop</pre>

Oracle Communications User Data Repository Software Upgrade Procedure

Appendix C.1: Upgrade Server

Note: During "Fatal Error" the server cannot be recovered and you need to rebuild the server again with the same UDR release of its mate server. During normal failure the system can be recovered with the following command:

```
# /var/TKLC/backout/diUpgrade --clearError
```

Step	Procedure	Result
7.	Install and then apply upgrade of TPD 7.4 first	<pre># alarmMgr --clear 32509;alarmMgr --clear 32500 # /mnt/upgrade/upgrade/diUpgrade --install --ignoreDevCheck --debug Output: Migrating 152 directories Migrating 845 files Migrating 1 symlinks Image install complete ##### # INSTALL COMPLETE # ##### Transitioning from 'Installing Upgrade' to 'Ready to Apply Upgrade' [root@OCUDR-DR-NOAMP-A filemgmt]# █ # alarmMgr --clear 32509;alarmMgr --clear 32500 # /var/TKLC/backout/diUpgrade --apply --ignoreDevCheck --debug Output: [root@OCUDR-DR-NOAMP-A filemgmt]# /var/TKLC/backout/diUpgrade --apply --ignoreDevCheck --debug Resuming from state STATE_READY_TO_APPLY Transitioning from 'Ready to Apply Upgrade' to 'Applying Upgrade' ##### # APPLY INITIATED # ##### APPLY START TIME: Sat Sep 30 07:11:24 2023 EDT (11:11:24 UTC) Validating image pre-apply /mnt/upgrade/images/plat_root.gz /mnt/upgrade/images/plat_usr.gz /mnt/upgrade/images/plat_var.gz /mnt/upgrade/images/plat_var_tklc.gz Migrating 1 symlinks Enabling service upgrade... Converting from MBR to GPT Updating bootloader... Add md uuid to grub... Unmounting images... Performing reboot... Inhibiting upgrade services... Allowing upgrade services... [root@OCUDR-DR-NOAMP-A filemgmt]# login as: admusr admusr@10.75.180.18's password: Last login: Sat Sep 30 06:44:19 2023 from 10.69.110.163 OCUDR VM from OVA file ===== This system has been upgraded but the upgrade has not yet been accepted or rejected. Please accept or reject the upgrade soon. ===== [admusr@ocudr-dr-noamp-a ~]\$ █</pre> <p>Note: Server reboots after 'apply upgrade' finishes.</p>

Oracle Communications User Data Repository Software Upgrade Procedure

Appendix C.1: Upgrade Server

Note: During "Fatal Error" the server cannot be recovered and you need to rebuild the server again with the same UDR release of its mate server. During normal failure the system can be recovered with the following command:

```
# /var/TKLC/backout/diUpgrade -clearError
```

Step	Procedure	Result
8.	Accept upgrade of TPD 7.4	<p>Note: Before accepting, please make sure 'Upgrade Applied' state is shown, use below command to show the status: # /var/TKLC/backout/diUpgrade --status</p> <p>Output:</p> <pre>[root@ocudr-dr-noamp-a admusr]# /var/TKLC/backout/diUpgrade --status State: Upgrade Applied Status Messages: - Performing early checks - Downloading upgrade data - Verifying image - Performing image pre-install - Configuring images - Identifying resources - Reserving image storage - Installing image - Performing image post-install - Verifying configuration sanity - Image install complete - Validating image pre-apply - Performing image pre-apply - Applying image - Performing configuration export - Performing image post-apply - Image Apply Complete [root@ocudr-dr-noamp-a admusr]#</pre> <p>Note: If we don't need to proceed further upgrade then we can reject the upgrade at this stage, using below step # /var/TKLC/backout/diUpgrade -reject</p> <p>Skip the above step if we want to continue upgrade # /var/TKLC/backout/diUpgrade --accept</p> <p>Output:</p> <pre>[root@ocudr-dr-noamp-a admusr]# /var/TKLC/backout/diUpgrade --accept Resuming from state STATE_UPGRADE_APPLIED Transitioning from 'Upgrade Applied' to 'Accepting Upgrade' Enabling service rebootcheck... ##### # ACCEPT INITIATED # ##### ACCEPT START TIME: Sat Sep 30 07:21:23 2023 EDT (11:21:23 UTC) Validating image pre-accept Performing image post-accept Running postAccept() for DIUpgrade::Policy::P20TPD upgrade policy... Running postAccept() for DIUpgrade::Policy::P36APPpworks upgrade policy... Running postAccept() for DIUpgrade::Policy::P38APPawpcommon upgrade policy... Running postAccept() for DIUpgrade::Policy::P39APPdpi upgrade policy... Running postAccept() for DIUpgrade::Policy::P42APPcomagent upgrade policy... Running postAccept() for DIUpgrade::Policy::P43APPccl upgrade policy... Running postAccept() for DIUpgrade::Policy::P50APPudr upgrade policy... Creating alarm script: /tmp/vu3svF5lJl ##### # ACCEPT COMPLETE # ##### Check is rebootcheck is enabled ... Disabling service rebootcheck... Transitioning from 'Accepting Upgrade' to 'No Upgrade Available' Inhibiting upgrade services... Allowing upgrade services... Cleaning backout directory. [root@ocudr-dr-noamp-a admusr]#</pre>
Release 15.0.0.0.0		84 October 2023

Oracle Communications User Data Repository Software Upgrade Procedure

Appendix C.1: Upgrade Server

Note: During "Fatal Error" the server cannot be recovered and you need to rebuild the server again with the same UDR release of its mate server. During normal failure the system can be recovered with the following command:

```
# /var/TKLC/backout/diUpgrade -clearError
```

Step	Procedure	Result
9.	Update fstab and re-create filemgmt directory	<pre># vim /etc/fstab Add below line at bottom /dev/vgroot/filemgmt /var/TKLC/db/filemgmt ext4 defaults 1 2 # mkdir -p /var/TKLC/db/filemgmt # mount -a</pre>

Oracle Communications User Data Repository Software Upgrade Procedure

Appendix C.1: Upgrade Server

Note: During "Fatal Error" the server cannot be recovered and you need to rebuild the server again with the same UDR release of its mate server. During normal failure the system can be recovered with the following command:


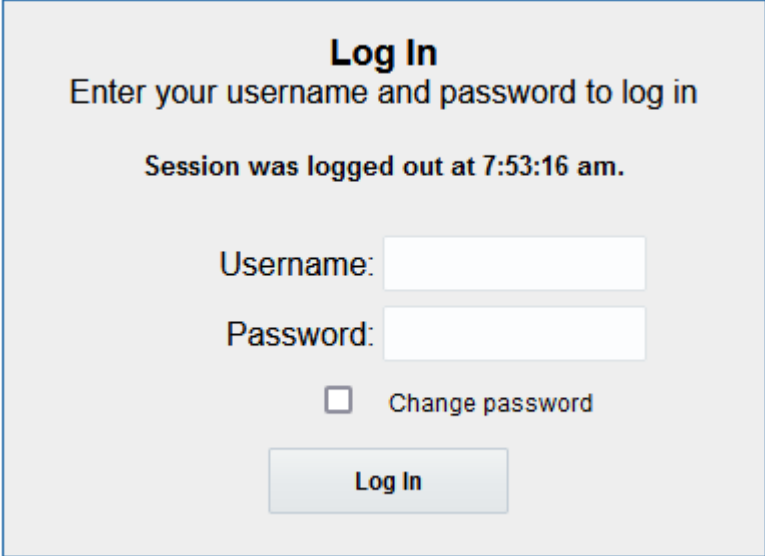


```
# /var/TKLC/backout/diUpgrade -clearError
```

Step	Procedure	Result
10.	Mount UDR DIU iso and first install and then upgrade	<pre># mount /var/TKLC/db/filemgmt/UDR-15.0.0.0.0_115.10.0-x86_64-DIU.iso /mnt/upgrade -o loop # alarmMgr --clear 32509;alarmMgr --clear 32500 # /mnt/upgrade/upgrade/diUpgrade --install --ignoreDevCheck --debug Output: Migrating 76 directories Migrating 372 files Migrating 1 symlinks Image install complete ##### # INSTALL COMPLETE # ##### Transitioning from 'Installing Upgrade' to 'Ready to Apply Upgrade' [root@ocudr-dr-noamp-a admusr]#</pre> <pre># alarmMgr --clear 32509;alarmMgr --clear 32500 # /var/TKLC/backout/diUpgrade --apply --ignoreDevCheck --debug Output: [root@OCUDR-DR-NOAMP-A admusr]# /var/TKLC/backout/diUpgrade --status State: Upgrade Applied Status Messages: - Performing early checks - Downloading upgrade data - Verifying image - Performing image pre-install - Configuring images - Identifying resources - Reserving image storage - Installing image - Performing image post-install - Verifying configuration sanity - Image install complete - Validating image pre-apply - Performing image pre-apply - Applying image - Performing configuration export - Performing image post-apply - Image Apply Complete [root@OCUDR-DR-NOAMP-A admusr]#</pre> <p>NOTE:1: After reboots, upgrade post apply takes time so keep checking status on console. NOTE:2: During the upgrade, you might see the following expected alarms. Not all servers have all alarms:</p> <ul style="list-style-type: none"> Alarm ID = 31101(DB Replication to a slave DB has failed) Alarm ID = 31106(DB Merging to a parent Merge Node has failed) Alarm ID = 31107(DB Merging from a child source Node has failed) Alarm ID = 31114 (DB Replication of configuration data via ...) Alarm ID = 13071 No northbound Provisioning Connections) Alarm ID = 10073 (Server Group Max Allowed HA Role Warning) Alarm ID = 10075 (Application processes have been manually stopped) Alarm ID = 32515 (Server HA Failover Inhibited) Alarm ID = 31283 (HA Highly available server failed to receive) Alarm ID = 31226 (The High Availability Status is degraded)
Release 15.0.0.0.0		<p style="text-align: center;">86</p> <p style="text-align: right;">October 2023</p>

Oracle Communications User Data Repository Software Upgrade Procedure

Appendix C.1: Upgrade Server

Note: During "Fatal Error" the server cannot be recovered and you need to rebuild the server again with the same UDR release of its mate server. During normal failure the system can be recovered with the following command:
`# /var/TKLC/backout/diUpgrade -clearError`

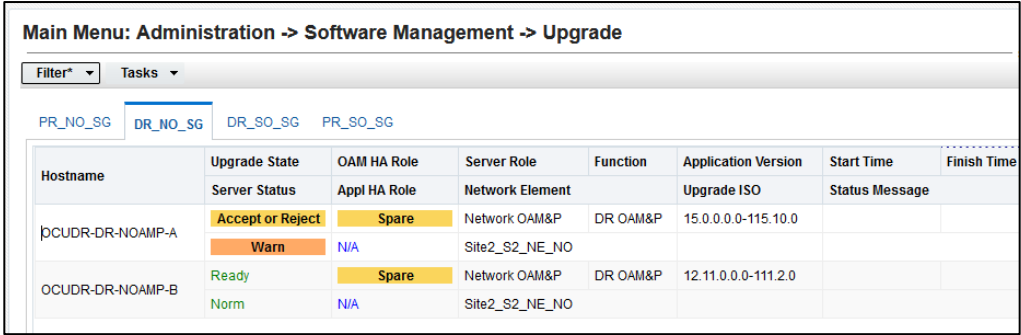
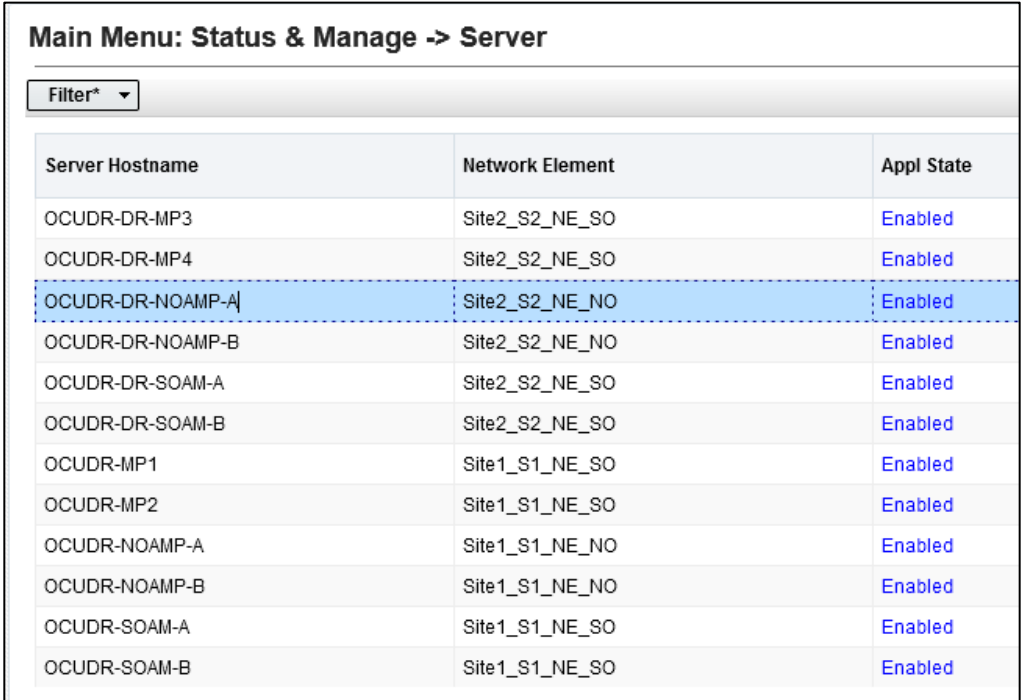
Step	Procedure	Result
<p>11.</p> 	<p>Active NOAMP VIP:</p> <p>** For Active NOAMP only – Once the User completes Step 9,</p> <p>Login to the GUI using the default user and password.</p>	
<p>12.</p> 	<p>Active NOAM VIP:</p> <p>** For Active NOAMP only</p> <p>The user should be presented the Main Menu as shown on the right.</p> <p>Verify that the message shown across the top of the right panel indicates that the browser is using the “VIP” connected to the Active Network OAM&P server.</p>	

Oracle Communications User Data Repository Software Upgrade Procedure

Appendix C.1: Upgrade Server


Note: During "Fatal Error" the server cannot be recovered and you need to rebuild the server again with the same UDR release of its mate server. During normal failure the system can be recovered with the following command:

```
# /var/TKLC/backout/diUpgrade -clearError
```

Step	Procedure	Result
13.	<p>Active NOAMP VIP:</p> <p>1) Select the appropriate tab (NO_SG, MP_SG or SO_SG) and select the row containing the hostname of the server that was upgraded.</p> <p>2) Verify that the Status Message shows "Success" and "Upgrade State" is "Accept or Reject"</p>	<p>Main Menu: Administration -> Software Management -> Upgrade</p>  <p>Note: If the upgrade status indicates "Server could not restart the application to complete the upgrade" and alarm 10134 –Server Upgrade Failed" appears; ensure replication is up for (use irepstat command on active server and verify status is "active"): The Status to change to "Success" Alarm 10134 to clear</p>
14.	<p>1) If upgrade status still indicates that "Server could not restart the application to complete the upgrade, restart the server by clicking the "Restart" button.</p> <p>2) Verify that the Status Message shows "Success" and "Upgrade State" is "Accept or Reject"</p>	<p>Main Menu: Status & Manage -> Server</p>  <p>Stop Restart Reboot NTP Sync Report</p>

Appendix C.1: Upgrade Server

Note: During "Fatal Error" the server cannot be recovered and you need to rebuild the server again with the same UDR release of its mate server. During normal failure the system can be recovered with the following command:
 # /var/TKLC/backout/diUpgrade -clearError

Step	Procedure	Result																																													
<p>15.</p> 	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Status & Manage → HA [Edit]</p>	<p>NOTE: Only execute the following step if "Upgrade State" is "DEGRADED".</p> <p>Change "Max Allowed HA Role" for server (Server that was already upgraded) to Active</p> <div style="border: 1px solid black; padding: 5px;"> <p>Main Menu: Status & Manage -> HA [Edit]</p> <hr/> <p>Modifying HA attributes</p> <table border="1"> <thead> <tr> <th>Server Name</th> <th>Role</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>OCUDR-DR-NOAMP-A</td> <td>Active</td> <td>The maximum desired HA Role for OCUDR-DR-NOAMP-A</td> </tr> <tr> <td>OCUDR-DR-NOAMP-B</td> <td>Active</td> <td>The maximum desired HA Role for OCUDR-DR-NOAMP-B</td> </tr> <tr> <td>OCUDR-DR-SOAM-A</td> <td>Active</td> <td>The maximum desired HA Role for OCUDR-DR-SOAM-A</td> </tr> <tr> <td>OCUDR-DR-SOAM-B</td> <td>Active</td> <td>The maximum desired HA Role for OCUDR-DR-SOAM-B</td> </tr> <tr> <td>OCUDR-DR-MP3</td> <td>Active</td> <td>The maximum desired HA Role for OCUDR-DR-MP3</td> </tr> </tbody> </table> </div> <p>Restart Server from Main Menu->Status & Manage -> Server screen</p> <div style="border: 1px solid black; padding: 5px;"> <p>Main Menu: Status & Manage -> Server</p> <p>Filter* ▾</p> <table border="1"> <thead> <tr> <th>Server Hostname</th> <th>Network Element</th> <th>Appl State</th> </tr> </thead> <tbody> <tr> <td>OCUDR-DR-MP3</td> <td>Site2_S2_NE_SO</td> <td>Enabled</td> </tr> <tr> <td>OCUDR-DR-MP4</td> <td>Site2_S2_NE_SO</td> <td>Enabled</td> </tr> <tr style="background-color: #e0f0ff;"> <td>OCUDR-DR-NOAMP-A</td> <td>Site2_S2_NE_NO</td> <td>Enabled</td> </tr> <tr> <td>OCUDR-DR-NOAMP-B</td> <td>Site2_S2_NE_NO</td> <td>Enabled</td> </tr> <tr> <td>OCUDR-DR-SOAM-A</td> <td>Site2_S2_NE_SO</td> <td>Enabled</td> </tr> <tr> <td>OCUDR-DR-SOAM-B</td> <td>Site2_S2_NE_SO</td> <td>Enabled</td> </tr> <tr> <td>OCUDR-MP1</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> </tr> <tr> <td>OCUDR-MP2</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> </tr> </tbody> </table> <p> <input type="button" value="Stop"/> <input type="button" value="Restart"/> <input type="button" value="Reboot"/> <input type="button" value="NTP Sync"/> <input type="button" value="Report"/> </p> </div>	Server Name	Role	Description	OCUDR-DR-NOAMP-A	Active	The maximum desired HA Role for OCUDR-DR-NOAMP-A	OCUDR-DR-NOAMP-B	Active	The maximum desired HA Role for OCUDR-DR-NOAMP-B	OCUDR-DR-SOAM-A	Active	The maximum desired HA Role for OCUDR-DR-SOAM-A	OCUDR-DR-SOAM-B	Active	The maximum desired HA Role for OCUDR-DR-SOAM-B	OCUDR-DR-MP3	Active	The maximum desired HA Role for OCUDR-DR-MP3	Server Hostname	Network Element	Appl State	OCUDR-DR-MP3	Site2_S2_NE_SO	Enabled	OCUDR-DR-MP4	Site2_S2_NE_SO	Enabled	OCUDR-DR-NOAMP-A	Site2_S2_NE_NO	Enabled	OCUDR-DR-NOAMP-B	Site2_S2_NE_NO	Enabled	OCUDR-DR-SOAM-A	Site2_S2_NE_SO	Enabled	OCUDR-DR-SOAM-B	Site2_S2_NE_SO	Enabled	OCUDR-MP1	Site1_S1_NE_SO	Enabled	OCUDR-MP2	Site1_S1_NE_SO	Enabled
Server Name	Role	Description																																													
OCUDR-DR-NOAMP-A	Active	The maximum desired HA Role for OCUDR-DR-NOAMP-A																																													
OCUDR-DR-NOAMP-B	Active	The maximum desired HA Role for OCUDR-DR-NOAMP-B																																													
OCUDR-DR-SOAM-A	Active	The maximum desired HA Role for OCUDR-DR-SOAM-A																																													
OCUDR-DR-SOAM-B	Active	The maximum desired HA Role for OCUDR-DR-SOAM-B																																													
OCUDR-DR-MP3	Active	The maximum desired HA Role for OCUDR-DR-MP3																																													
Server Hostname	Network Element	Appl State																																													
OCUDR-DR-MP3	Site2_S2_NE_SO	Enabled																																													
OCUDR-DR-MP4	Site2_S2_NE_SO	Enabled																																													
OCUDR-DR-NOAMP-A	Site2_S2_NE_NO	Enabled																																													
OCUDR-DR-NOAMP-B	Site2_S2_NE_NO	Enabled																																													
OCUDR-DR-SOAM-A	Site2_S2_NE_SO	Enabled																																													
OCUDR-DR-SOAM-B	Site2_S2_NE_SO	Enabled																																													
OCUDR-MP1	Site1_S1_NE_SO	Enabled																																													
OCUDR-MP2	Site1_S1_NE_SO	Enabled																																													

Oracle Communications User Data Repository Software Upgrade Procedure

Appendix C.1: Upgrade Server

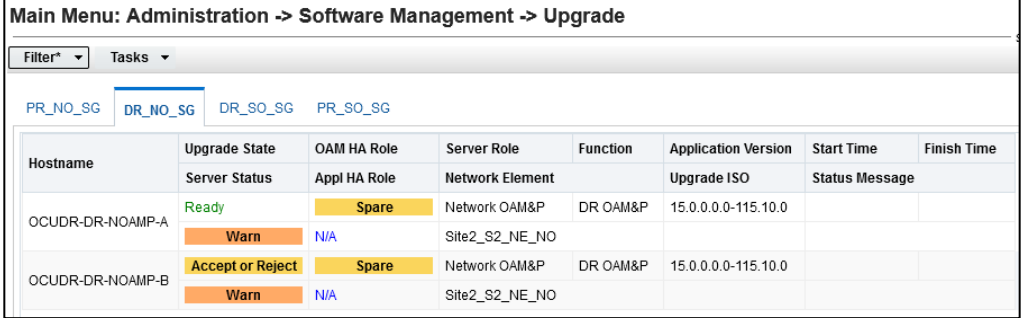
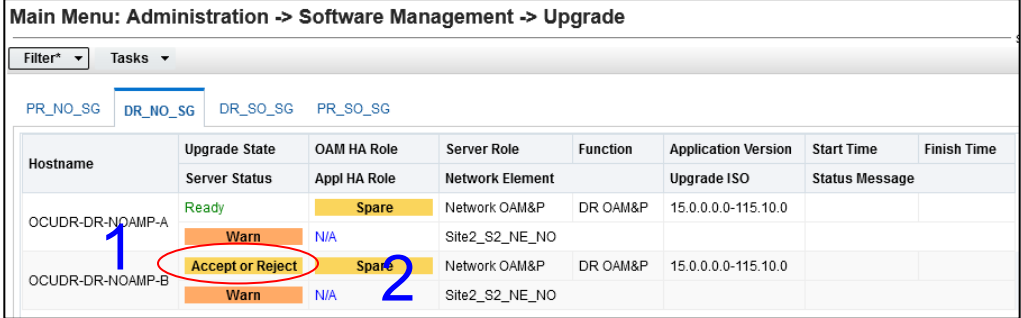
Note: During "Fatal Error" the server cannot be recovered and you need to rebuild the server again with the same UDR release of its mate server. During normal failure the system can be recovered with the following command:

```
# /var/TKLC/backout/diUpgrade -clearError
```

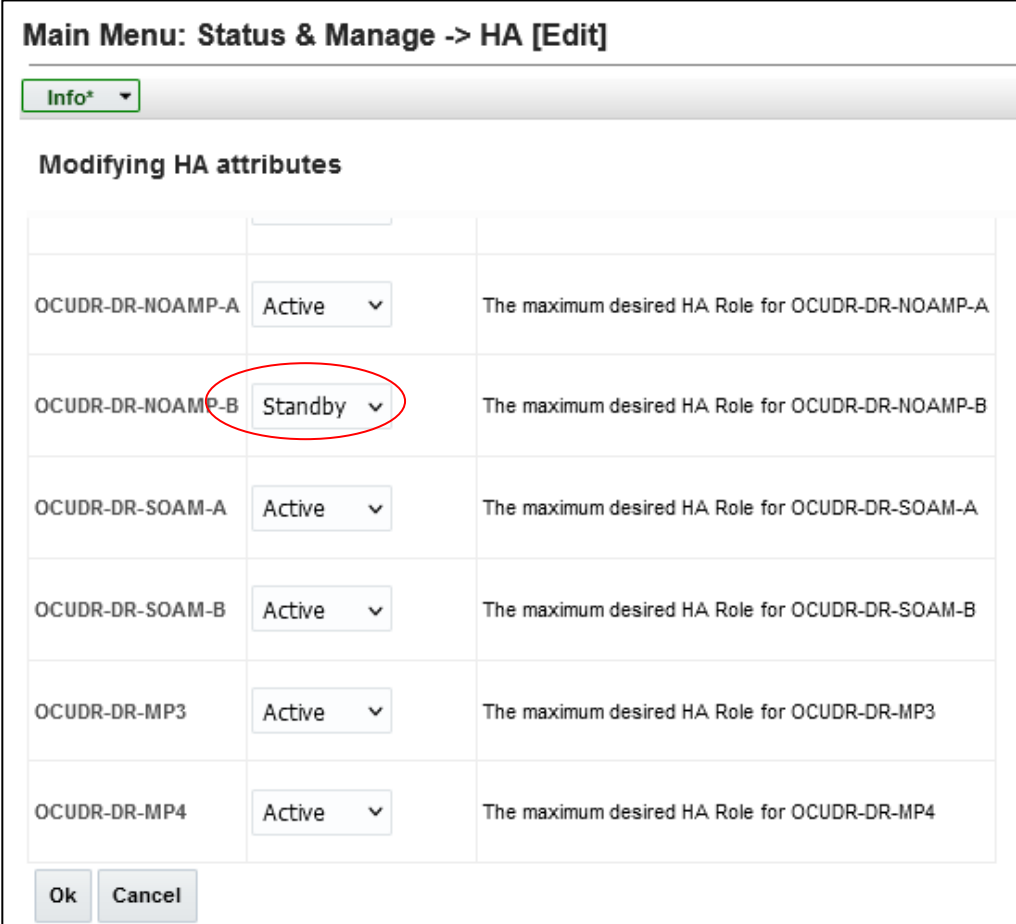
Step	Procedure	Result
16. <input type="checkbox"/>	Active NOAMP VIP: View post-upgrade status	View post-upgrade status of the server(s): (The following alarms may be present) Active NO server will have the following expected alarms: Alarm ID = 13071 (No Northbound Provisioning Connections) You may also see the alarm: Alarm ID = 32532 (Server Upgrade Pending Accept/Reject) You may also see this alarm due to DRNO servers <i>Max Allowed HA Role being set to standby</i> in Procedure 7. Alarm ID =10073 (Server Group Max Allowed HA Role Warning)
17. <input type="checkbox"/>	Active NOAMP VIP: Clear browser cache	JavaScript libraries, images and other objects are often modified in the upgrade. Browsers can sometimes cause GUI problems by holding on to the old objects in the built-in cache. To prevent these problems always clear the browser cache before logging in to an NO or SO which has been upgraded: Simultaneously hold down the Ctrl, Shift and Delete keys. Select the appropriate type of objects and delete from the cache via the pop-up dialog. For Internet Explorer the relevant object type is "Temporary Internet Files". Other browsers may label these objects differently.
THIS PROCEDURE HAS BEEN COMPLETED		

APPENDIX D. BACKOUT OF A SERVER

Appendix D: Backout of a Server

Step	Procedure	Result																																																
1. <input type="checkbox"/>	Using the VIP address, access the Primary NOAMP GUI.	Access the Primary NOAMP GUI as specified in Appendix A .																																																
2. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Administration → Software Management → Upgrade</p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>Upgrade State</th> <th>OAM HA Role</th> <th>Server Role</th> <th>Function</th> <th>Application Version</th> <th>Start Time</th> <th>Finish Time</th> </tr> <tr> <th></th> <th>Server Status</th> <th>Appl HA Role</th> <th>Network Element</th> <th></th> <th>Upgrade ISO</th> <th>Status Message</th> <th></th> </tr> </thead> <tbody> <tr> <td>OCUDR-DR-NOAMP-A</td> <td>Ready</td> <td>Spare</td> <td>Network OAM&P</td> <td>DR OAM&P</td> <td>15.0.0.0-115.10.0</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Warn</td> <td>N/A</td> <td>Site2_S2_NE_NO</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>OCUDR-DR-NOAMP-B</td> <td>Accept or Reject</td> <td>Spare</td> <td>Network OAM&P</td> <td>DR OAM&P</td> <td>15.0.0.0-115.10.0</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Warn</td> <td>N/A</td> <td>Site2_S2_NE_NO</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time		Server Status	Appl HA Role	Network Element		Upgrade ISO	Status Message		OCUDR-DR-NOAMP-A	Ready	Spare	Network OAM&P	DR OAM&P	15.0.0.0-115.10.0				Warn	N/A	Site2_S2_NE_NO					OCUDR-DR-NOAMP-B	Accept or Reject	Spare	Network OAM&P	DR OAM&P	15.0.0.0-115.10.0				Warn	N/A	Site2_S2_NE_NO				
Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time																																											
	Server Status	Appl HA Role	Network Element		Upgrade ISO	Status Message																																												
OCUDR-DR-NOAMP-A	Ready	Spare	Network OAM&P	DR OAM&P	15.0.0.0-115.10.0																																													
	Warn	N/A	Site2_S2_NE_NO																																															
OCUDR-DR-NOAMP-B	Accept or Reject	Spare	Network OAM&P	DR OAM&P	15.0.0.0-115.10.0																																													
	Warn	N/A	Site2_S2_NE_NO																																															
3. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>1) Select the tab containing the server to be downgraded.</p> <p>2) Scroll to the row containing the hostname of the server to be backed-out.</p> <p>3) Verify that the Upgrade State shows "Accept or Reject".</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>Upgrade State</th> <th>OAM HA Role</th> <th>Server Role</th> <th>Function</th> <th>Application Version</th> <th>Start Time</th> <th>Finish Time</th> </tr> <tr> <th></th> <th>Server Status</th> <th>Appl HA Role</th> <th>Network Element</th> <th></th> <th>Upgrade ISO</th> <th>Status Message</th> <th></th> </tr> </thead> <tbody> <tr> <td>OCUDR-DR-NOAMP-A</td> <td>Ready</td> <td>Spare</td> <td>Network OAM&P</td> <td>DR OAM&P</td> <td>15.0.0.0-115.10.0</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Warn</td> <td>N/A</td> <td>Site2_S2_NE_NO</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>OCUDR-DR-NOAMP-B</td> <td>Accept or Reject</td> <td>Spare</td> <td>Network OAM&P</td> <td>DR OAM&P</td> <td>15.0.0.0-115.10.0</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Warn</td> <td>N/A</td> <td>Site2_S2_NE_NO</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time		Server Status	Appl HA Role	Network Element		Upgrade ISO	Status Message		OCUDR-DR-NOAMP-A	Ready	Spare	Network OAM&P	DR OAM&P	15.0.0.0-115.10.0				Warn	N/A	Site2_S2_NE_NO					OCUDR-DR-NOAMP-B	Accept or Reject	Spare	Network OAM&P	DR OAM&P	15.0.0.0-115.10.0				Warn	N/A	Site2_S2_NE_NO				
Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time																																											
	Server Status	Appl HA Role	Network Element		Upgrade ISO	Status Message																																												
OCUDR-DR-NOAMP-A	Ready	Spare	Network OAM&P	DR OAM&P	15.0.0.0-115.10.0																																													
	Warn	N/A	Site2_S2_NE_NO																																															
OCUDR-DR-NOAMP-B	Accept or Reject	Spare	Network OAM&P	DR OAM&P	15.0.0.0-115.10.0																																													
	Warn	N/A	Site2_S2_NE_NO																																															

Appendix D: Backout of a Server

Step	Procedure	Result																		
<p>4.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>Make the server ready for downgrade:</p> <p>Select...</p> <p>Main Menu →Status & Manage→HA</p> <p>1) Press the Edit button</p> <p>2) Select the server to be downgraded and choose a “Max Allowed Role” value of Standby or Spare for DR servers.</p> <p>3) Press OK button</p> <p>4) ** For Active NOAMP only, the user will be logged out after this step due to HA switchover, will need to log back in to continue. The active server will be “standby”</p>	 <p>Main Menu: Status & Manage -> HA [Edit]</p> <p>Info*</p> <p>Modifying HA attributes</p> <table border="1"> <tbody> <tr> <td>OCUDR-DR-NOAMP-A</td> <td>Active</td> <td>The maximum desired HA Role for OCUDR-DR-NOAMP-A</td> </tr> <tr> <td>OCUDR-DR-NOAMP-B</td> <td>Standby</td> <td>The maximum desired HA Role for OCUDR-DR-NOAMP-B</td> </tr> <tr> <td>OCUDR-DR-SOAM-A</td> <td>Active</td> <td>The maximum desired HA Role for OCUDR-DR-SOAM-A</td> </tr> <tr> <td>OCUDR-DR-SOAM-B</td> <td>Active</td> <td>The maximum desired HA Role for OCUDR-DR-SOAM-B</td> </tr> <tr> <td>OCUDR-DR-MP3</td> <td>Active</td> <td>The maximum desired HA Role for OCUDR-DR-MP3</td> </tr> <tr> <td>OCUDR-DR-MP4</td> <td>Active</td> <td>The maximum desired HA Role for OCUDR-DR-MP4</td> </tr> </tbody> </table> <p>Ok Cancel</p>	OCUDR-DR-NOAMP-A	Active	The maximum desired HA Role for OCUDR-DR-NOAMP-A	OCUDR-DR-NOAMP-B	Standby	The maximum desired HA Role for OCUDR-DR-NOAMP-B	OCUDR-DR-SOAM-A	Active	The maximum desired HA Role for OCUDR-DR-SOAM-A	OCUDR-DR-SOAM-B	Active	The maximum desired HA Role for OCUDR-DR-SOAM-B	OCUDR-DR-MP3	Active	The maximum desired HA Role for OCUDR-DR-MP3	OCUDR-DR-MP4	Active	The maximum desired HA Role for OCUDR-DR-MP4
OCUDR-DR-NOAMP-A	Active	The maximum desired HA Role for OCUDR-DR-NOAMP-A																		
OCUDR-DR-NOAMP-B	Standby	The maximum desired HA Role for OCUDR-DR-NOAMP-B																		
OCUDR-DR-SOAM-A	Active	The maximum desired HA Role for OCUDR-DR-SOAM-A																		
OCUDR-DR-SOAM-B	Active	The maximum desired HA Role for OCUDR-DR-SOAM-B																		
OCUDR-DR-MP3	Active	The maximum desired HA Role for OCUDR-DR-MP3																		
OCUDR-DR-MP4	Active	The maximum desired HA Role for OCUDR-DR-MP4																		

Appendix D: Backout of a Server

Step	Procedure	Result																																																																																																																																																																																						
<p>5.</p> <div style="border: 1px solid black; width: 20px; height: 20px; margin-bottom: 10px;"></div> <p>Select...</p> <p>Main Menu → Status & Manage → Server</p> <p>1) Select the server to be downgraded and press STOP</p> <p>2) Click OK to confirm the operation, then ensure the Appl State updates to Disabled.</p>		<div style="border: 1px solid black; padding: 5px;"> <p>Main Menu: Status & Manage -> Server</p> <p>Filter* ▼</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Server Hostname</th> <th>Network Element</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr><td>OCUDR-DR-MP3</td><td>Site2_S2_NE_SO</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-DR-MP4</td><td>Site2_S2_NE_SO</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-DR-NOAMP-A</td><td>Site2_S2_NE_NO</td><td>Enabled</td><td>Warn</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr style="border: 2px dashed blue;"><td>OCUDR-DR-NOAMP-B</td><td>Site2_S2_NE_NO</td><td>Enabled</td><td>Warn</td><td>Norm</td><td>Man</td><td>Norm</td></tr> <tr><td>OCUDR-DR-SOAM-A</td><td>Site2_S2_NE_SO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-DR-SOAM-B</td><td>Site2_S2_NE_SO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-MP1</td><td>Site1_S1_NE_SO</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-MP2</td><td>Site1_S1_NE_SO</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-NOAMP-A</td><td>Site1_S1_NE_NO</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-NOAMP-B</td><td>Site1_S1_NE_NO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-SOAM-A</td><td>Site1_S1_NE_SO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-SOAM-B</td><td>Site1_S1_NE_SO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> </tbody> </table> <p style="margin-top: 5px;"> Stop Restart Reboot NTP Sync Report </p> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p>🌐 10.75.180.10</p> <p>Are you sure you wish to stop application software on the following server(s)?</p> <p>OCUDR-DR-NOAMP-B</p> <p style="text-align: right;"> OK Cancel </p> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Main Menu: Status & Manage -> Server</p> <p>Filter* ▼ Info* ▼</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Server Hostname</th> <th>Network Element</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr><td>OCUDR-DR-MP3</td><td>Site2_S2_NE_SO</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-DR-MP4</td><td>Site2_S2_NE_SO</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-DR-NOAMP-A</td><td>Site2_S2_NE_NO</td><td>Enabled</td><td>Warn</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr style="border: 2px dashed orange;"><td>OCUDR-DR-NOAMP-B</td><td>Site2_S2_NE_NO</td><td>Disabled</td><td>Warn</td><td>Norm</td><td>Man</td><td>Man</td></tr> <tr><td>OCUDR-DR-SOAM-A</td><td>Site2_S2_NE_SO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-DR-SOAM-B</td><td>Site2_S2_NE_SO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-MP1</td><td>Site1_S1_NE_SO</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-MP2</td><td>Site1_S1_NE_SO</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-NOAMP-A</td><td>Site1_S1_NE_NO</td><td>Enabled</td><td>Err</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-NOAMP-B</td><td>Site1_S1_NE_NO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-SOAM-A</td><td>Site1_S1_NE_SO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> <tr><td>OCUDR-SOAM-B</td><td>Site1_S1_NE_SO</td><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr> </tbody> </table> </div> </div>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	OCUDR-DR-MP3	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-DR-MP4	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-DR-NOAMP-A	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm	OCUDR-DR-NOAMP-B	Site2_S2_NE_NO	Enabled	Warn	Norm	Man	Norm	OCUDR-DR-SOAM-A	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-DR-SOAM-B	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-MP1	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-MP2	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-NOAMP-A	Site1_S1_NE_NO	Enabled	Err	Norm	Norm	Norm	OCUDR-NOAMP-B	Site1_S1_NE_NO	Enabled	Norm	Norm	Norm	Norm	OCUDR-SOAM-A	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-SOAM-B	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	OCUDR-DR-MP3	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-DR-MP4	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-DR-NOAMP-A	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm	OCUDR-DR-NOAMP-B	Site2_S2_NE_NO	Disabled	Warn	Norm	Man	Man	OCUDR-DR-SOAM-A	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-DR-SOAM-B	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-MP1	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-MP2	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-NOAMP-A	Site1_S1_NE_NO	Enabled	Err	Norm	Norm	Norm	OCUDR-NOAMP-B	Site1_S1_NE_NO	Enabled	Norm	Norm	Norm	Norm	OCUDR-SOAM-A	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-SOAM-B	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																																																																																																																																																																																		
OCUDR-DR-MP3	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																																																																																																																		
OCUDR-DR-MP4	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																																																																																																																		
OCUDR-DR-NOAMP-A	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm																																																																																																																																																																																		
OCUDR-DR-NOAMP-B	Site2_S2_NE_NO	Enabled	Warn	Norm	Man	Norm																																																																																																																																																																																		
OCUDR-DR-SOAM-A	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																																																																																																																		
OCUDR-DR-SOAM-B	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																																																																																																																		
OCUDR-MP1	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																																																																																																																		
OCUDR-MP2	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																																																																																																																		
OCUDR-NOAMP-A	Site1_S1_NE_NO	Enabled	Err	Norm	Norm	Norm																																																																																																																																																																																		
OCUDR-NOAMP-B	Site1_S1_NE_NO	Enabled	Norm	Norm	Norm	Norm																																																																																																																																																																																		
OCUDR-SOAM-A	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																																																																																																																		
OCUDR-SOAM-B	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																																																																																																																		
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																																																																																																																																																																																		
OCUDR-DR-MP3	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																																																																																																																		
OCUDR-DR-MP4	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																																																																																																																		
OCUDR-DR-NOAMP-A	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm																																																																																																																																																																																		
OCUDR-DR-NOAMP-B	Site2_S2_NE_NO	Disabled	Warn	Norm	Man	Man																																																																																																																																																																																		
OCUDR-DR-SOAM-A	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																																																																																																																		
OCUDR-DR-SOAM-B	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																																																																																																																		
OCUDR-MP1	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																																																																																																																		
OCUDR-MP2	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																																																																																																																		
OCUDR-NOAMP-A	Site1_S1_NE_NO	Enabled	Err	Norm	Norm	Norm																																																																																																																																																																																		
OCUDR-NOAMP-B	Site1_S1_NE_NO	Enabled	Norm	Norm	Norm	Norm																																																																																																																																																																																		
OCUDR-SOAM-A	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																																																																																																																		
OCUDR-SOAM-B	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																																																																																																																		

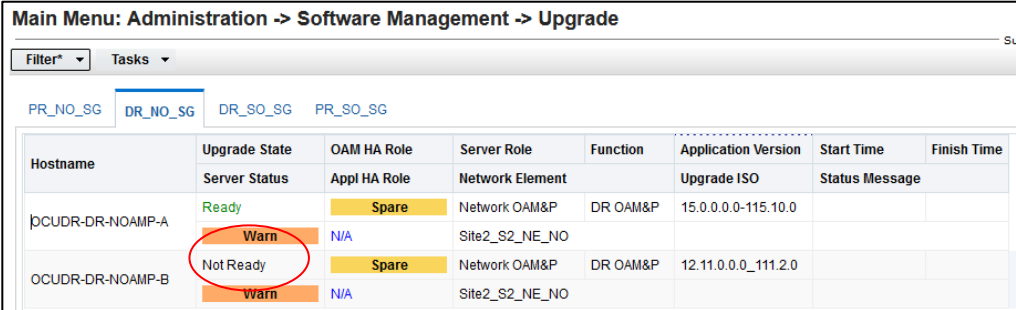
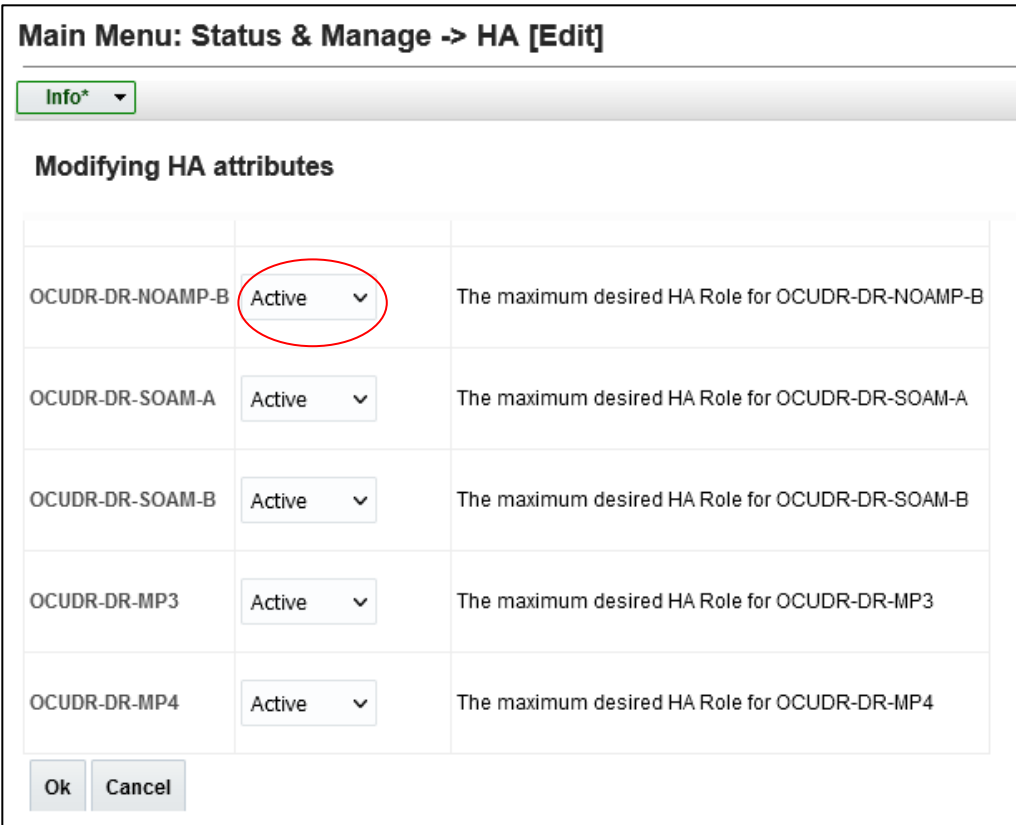
Appendix D: Backout of a Server

Step	Procedure	Result																																
6. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Select ...</p> <p>Main Menu → Administration → Software Management → Upgrade</p> <p>...as shown on the right.</p>	<table border="1"> <thead> <tr> <th>Hostname</th> <th>Upgrade State</th> <th>OAM HA Role</th> <th>Server Role</th> <th>Function</th> <th>Application Version</th> <th>Start Time</th> <th>Finish Time</th> </tr> <tr> <th></th> <th>Server Status</th> <th>Appl HA Role</th> <th>Network Element</th> <th></th> <th>Upgrade ISO</th> <th>Status Message</th> <th></th> </tr> </thead> <tbody> <tr> <td>OCUDR-DR-NOAMP-A</td> <td>Ready Warn</td> <td>Spare N/A</td> <td>Network OAM&P Site2_S2_NE_NO</td> <td>DR OAM&P</td> <td>15.0.0.0-115.10.0</td> <td></td> <td></td> </tr> <tr> <td>OCUDR-DR-NOAMP-B</td> <td>Backout Ready Warn</td> <td>Spare N/A</td> <td>Network OAM&P Site2_S2_NE_NO</td> <td>DR OAM&P</td> <td>15.0.0.0-115.10.0</td> <td></td> <td></td> </tr> </tbody> </table>	Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time		Server Status	Appl HA Role	Network Element		Upgrade ISO	Status Message		OCUDR-DR-NOAMP-A	Ready Warn	Spare N/A	Network OAM&P Site2_S2_NE_NO	DR OAM&P	15.0.0.0-115.10.0			OCUDR-DR-NOAMP-B	Backout Ready Warn	Spare N/A	Network OAM&P Site2_S2_NE_NO	DR OAM&P	15.0.0.0-115.10.0		
Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time																											
	Server Status	Appl HA Role	Network Element		Upgrade ISO	Status Message																												
OCUDR-DR-NOAMP-A	Ready Warn	Spare N/A	Network OAM&P Site2_S2_NE_NO	DR OAM&P	15.0.0.0-115.10.0																													
OCUDR-DR-NOAMP-B	Backout Ready Warn	Spare N/A	Network OAM&P Site2_S2_NE_NO	DR OAM&P	15.0.0.0-115.10.0																													
7. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>1) Select the tab containing the server to be downgraded.</p> <p>2) Scroll to the row containing the hostname of the server to be backed-out.</p> <p>3) Verify that the Upgrade State shows “Backout Ready”. (It may take a few moments to change status)</p>	<table border="1"> <thead> <tr> <th>Hostname</th> <th>Upgrade State</th> <th>OAM HA Role</th> <th>Server Role</th> <th>Function</th> <th>Application Version</th> <th>Start Time</th> <th>Finish Time</th> </tr> <tr> <th></th> <th>Server Status</th> <th>Appl HA Role</th> <th>Network Element</th> <th></th> <th>Upgrade ISO</th> <th>Status Message</th> <th></th> </tr> </thead> <tbody> <tr> <td>OCUDR-DR-NOAMP-A</td> <td>Ready Warn</td> <td>Spare N/A</td> <td>Network OAM&P Site2_S2_NE_NO</td> <td>DR OAM&P</td> <td>15.0.0.0-115.10.0</td> <td></td> <td></td> </tr> <tr> <td>OCUDR-DR-NOAMP-B</td> <td>Backout Ready Warn</td> <td>Spare N/A</td> <td>Network OAM&P Site2_S2_NE_NO</td> <td>DR OAM&P</td> <td>15.0.0.0-115.10.0</td> <td></td> <td></td> </tr> </tbody> </table>	Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time		Server Status	Appl HA Role	Network Element		Upgrade ISO	Status Message		OCUDR-DR-NOAMP-A	Ready Warn	Spare N/A	Network OAM&P Site2_S2_NE_NO	DR OAM&P	15.0.0.0-115.10.0			OCUDR-DR-NOAMP-B	Backout Ready Warn	Spare N/A	Network OAM&P Site2_S2_NE_NO	DR OAM&P	15.0.0.0-115.10.0		
Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time																											
	Server Status	Appl HA Role	Network Element		Upgrade ISO	Status Message																												
OCUDR-DR-NOAMP-A	Ready Warn	Spare N/A	Network OAM&P Site2_S2_NE_NO	DR OAM&P	15.0.0.0-115.10.0																													
OCUDR-DR-NOAMP-B	Backout Ready Warn	Spare N/A	Network OAM&P Site2_S2_NE_NO	DR OAM&P	15.0.0.0-115.10.0																													
8. <input type="checkbox"/>	<p>Server XMI IP (SSH):</p> <p>SSH to server</p>	<p>Use your SSH client to connect to the server (ex. ssh, putty):</p> <p>ssh<server address></p>																																
9. <input type="checkbox"/>	<p>Server XMI IP (SSH):</p> <p>Login as admusr user</p>	<p>Login as “admusr”:</p> <pre>login as: admusr Password: <enter password> Switch to root su - password: <enter password></pre>																																

Appendix D: Backout of a Server

Step	Procedure	Result
<p>10.</p> <input type="checkbox"/>	<p>Server XMI IP (SSH): Execute the backout</p>	<p>1. Find out the state of the server which is going to be backed out. Server shall be in Standby/Spare. Execute following command to find the HA state:</p> <pre># ha.mystate</pre> <p>NOTE: If the state of the server is Active then follow these steps to move to standby.</p> <p>Go to Main Menu: Status & Manage -> HA Click edit Switch Max Allowed HA role to “standby”</p> <p>2. Execute the backout using the reject script:</p> <pre># /var/TKLC/backout/diUpgrade --reject</pre> <p>Output:</p> <pre>[root@OCUDR-DR-NOAMP-B admusr]# /var/TKLC/backout/diUpgrade --reject Resuming from state STATE_UPGRADE_APPLIED Transitioning from 'Upgrade Applied' to 'Rejecting Upgrade' Enabling service rebootcheck... ##### # REJECT INITIATED # ##### REJECT START TIME: Sun Oct 1 07:10:32 2023 EDT (11:10:32 UTC) Validating image pre-reject /mnt/upgrade/images/plat_root.tar.gz /mnt/upgrade/images/plat_usr.tar.gz</pre> <p>NOTE: If backout asks if you would like to continue backout, answer “y”.</p>
<p>11.</p> <input type="checkbox"/>	<p>Server XMI IP (SSH): Backout proceeds</p>	<p>Many informational messages will come across the terminal screen as the backout proceeds.</p> <p>Finally, after backout is complete, the server will automatically reboot.</p>
<p>12.</p> <input type="checkbox"/>	<p>Server XMI IP (SSH): SSH to server and login as root user</p>	<p>Use your SSH client to connect to the server (ex. ssh, putty):</p> <pre>ssh<server address></pre> <p>login as: admusr password: <enter password></p> <p>Switch to root su - password: <enter password></p>
<p>13.</p> <input type="checkbox"/>	<p>Server XMI IP (SSH): Verify services restart</p>	<p>If this is an NOAMP or SOAM server, verify httpd service is running. Execute the command: <pre># service httpd status</pre></p> <p>Verify expected output displays httpd is running (the process IDs are variable so the list of numbers can be ignored): httpd<process IDs will be listed here> is running...</p> <p>If httpd is still not running after ~3 minutes, then services have failed to restart.</p> <p>Exit from the command line of backed-out server. <pre># exit</pre></p>

Appendix D: Backout of a Server

Step	Procedure	Result																				
<p>14.</p> <p><input type="checkbox"/></p>	<p>Using the VIP address, access the Primary NOAMP GUI.</p>	<p>Access the Primary NOAMP GUI as specified in Appendix A.</p>																				
<p>15.</p> <p><input type="checkbox"/></p>	<p>Active NOAMP VIP:</p> <p>Verify server states:</p> <p>Select...</p> <p>Main Menu → Administration → Software Management → Upgrade</p> <p>...as shown on the right.</p>	 <p>Main Menu: Administration -> Software Management -> Upgrade</p> <table border="1"> <thead> <tr> <th>PR_NO_SG</th> <th>DR_NO_SG</th> <th>DR_SO_SG</th> <th>PR_SO_SG</th> </tr> </thead> <tbody> <tr> <td>OCUDR-DR-NOAMP-A</td> <td>Ready</td> <td>Spare</td> <td>Network OAM&P</td> </tr> <tr> <td>OCUDR-DR-NOAMP-B</td> <td>Warn</td> <td>N/A</td> <td>Site2_S2_NE_NO</td> </tr> <tr> <td>OCUDR-DR-NOAMP-B</td> <td>Not Ready</td> <td>Spare</td> <td>Network OAM&P</td> </tr> <tr> <td>OCUDR-DR-NOAMP-B</td> <td>Warn</td> <td>N/A</td> <td>Site2_S2_NE_NO</td> </tr> </tbody> </table> <p>If the state is Ready, you are finished with procedure.</p> <p>If the state is “Not Ready”, continue to next step.</p>	PR_NO_SG	DR_NO_SG	DR_SO_SG	PR_SO_SG	OCUDR-DR-NOAMP-A	Ready	Spare	Network OAM&P	OCUDR-DR-NOAMP-B	Warn	N/A	Site2_S2_NE_NO	OCUDR-DR-NOAMP-B	Not Ready	Spare	Network OAM&P	OCUDR-DR-NOAMP-B	Warn	N/A	Site2_S2_NE_NO
PR_NO_SG	DR_NO_SG	DR_SO_SG	PR_SO_SG																			
OCUDR-DR-NOAMP-A	Ready	Spare	Network OAM&P																			
OCUDR-DR-NOAMP-B	Warn	N/A	Site2_S2_NE_NO																			
OCUDR-DR-NOAMP-B	Not Ready	Spare	Network OAM&P																			
OCUDR-DR-NOAMP-B	Warn	N/A	Site2_S2_NE_NO																			
<p>16.</p>	<p>Active NOAMP VIP:</p> <p>Correct Upgrade State on downgraded server</p> <p>Select...</p> <p>Main Menu Status & Manage→HA[Edit]</p> <p>Select the downgraded server and choose a Max Allowed HA Role value of Active (Press the Ok button). Verify the Max Allowed HA Role is set to the desired value for the server.</p>	<p>Due to backout being initiated from the command line instead of through the GUI, you will have to modify the downgraded server, so its Upgrade State moves to Ready.</p>  <p>Main Menu: Status & Manage -> HA [Edit]</p> <p>Info*</p> <p>Modifying HA attributes</p> <table border="1"> <tbody> <tr> <td>OCUDR-DR-NOAMP-B</td> <td>Active</td> <td>The maximum desired HA Role for OCUDR-DR-NOAMP-B</td> </tr> <tr> <td>OCUDR-DR-SOAM-A</td> <td>Active</td> <td>The maximum desired HA Role for OCUDR-DR-SOAM-A</td> </tr> <tr> <td>OCUDR-DR-SOAM-B</td> <td>Active</td> <td>The maximum desired HA Role for OCUDR-DR-SOAM-B</td> </tr> <tr> <td>OCUDR-DR-MP3</td> <td>Active</td> <td>The maximum desired HA Role for OCUDR-DR-MP3</td> </tr> <tr> <td>OCUDR-DR-MP4</td> <td>Active</td> <td>The maximum desired HA Role for OCUDR-DR-MP4</td> </tr> </tbody> </table> <p>Ok Cancel</p>	OCUDR-DR-NOAMP-B	Active	The maximum desired HA Role for OCUDR-DR-NOAMP-B	OCUDR-DR-SOAM-A	Active	The maximum desired HA Role for OCUDR-DR-SOAM-A	OCUDR-DR-SOAM-B	Active	The maximum desired HA Role for OCUDR-DR-SOAM-B	OCUDR-DR-MP3	Active	The maximum desired HA Role for OCUDR-DR-MP3	OCUDR-DR-MP4	Active	The maximum desired HA Role for OCUDR-DR-MP4					
OCUDR-DR-NOAMP-B	Active	The maximum desired HA Role for OCUDR-DR-NOAMP-B																				
OCUDR-DR-SOAM-A	Active	The maximum desired HA Role for OCUDR-DR-SOAM-A																				
OCUDR-DR-SOAM-B	Active	The maximum desired HA Role for OCUDR-DR-SOAM-B																				
OCUDR-DR-MP3	Active	The maximum desired HA Role for OCUDR-DR-MP3																				
OCUDR-DR-MP4	Active	The maximum desired HA Role for OCUDR-DR-MP4																				

Appendix D: Backout of a Server


Step	Procedure	Result																																																																																											
17.	<p>Active NOAMP VIP:</p> <p>Correct Upgrade State on downgraded server</p> <p>Select...</p> <p>Main Menu Status & Manage→Server</p> <p>Select the downgraded server and enable it by clicking on “Restart” button.</p>	<p>Main Menu: Status & Manage -> Server</p> <p>Filter*</p> <table border="1"> <thead> <tr> <th>Server Hostname</th> <th>Network Element</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>OCUDR-DR-MP3</td> <td>Site2_S2_NE_SO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-DR-MP4</td> <td>Site2_S2_NE_SO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-DR-NOAMP-A</td> <td>Site2_S2_NE_NO</td> <td>Enabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr style="background-color: #e6f2ff;"> <td>OCUDR-DR-NOAMP-B</td> <td>Site2_S2_NE_NO</td> <td>Disabled</td> <td>Warn</td> <td>Norm</td> <td>Norm</td> <td>Man</td> </tr> <tr> <td>OCUDR-DR-SOAM-A</td> <td>Site2_S2_NE_SO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-DR-SOAM-B</td> <td>Site2_S2_NE_SO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-MP1</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-MP2</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-NOAMP-A</td> <td>Site1_S1_NE_NO</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-NOAMP-B</td> <td>Site1_S1_NE_NO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-SOAM-A</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>OCUDR-SOAM-B</td> <td>Site1_S1_NE_SO</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> </tbody> </table> <p>Stop Restart Reboot NTP Sync Report</p>	Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc	OCUDR-DR-MP3	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-DR-MP4	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-DR-NOAMP-A	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm	OCUDR-DR-NOAMP-B	Site2_S2_NE_NO	Disabled	Warn	Norm	Norm	Man	OCUDR-DR-SOAM-A	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-DR-SOAM-B	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-MP1	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-MP2	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm	OCUDR-NOAMP-A	Site1_S1_NE_NO	Enabled	Err	Norm	Norm	Norm	OCUDR-NOAMP-B	Site1_S1_NE_NO	Enabled	Norm	Norm	Norm	Norm	OCUDR-SOAM-A	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm	OCUDR-SOAM-B	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm
Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc																																																																																							
OCUDR-DR-MP3	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-DR-MP4	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-DR-NOAMP-A	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm																																																																																							
OCUDR-DR-NOAMP-B	Site2_S2_NE_NO	Disabled	Warn	Norm	Norm	Man																																																																																							
OCUDR-DR-SOAM-A	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-DR-SOAM-B	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-MP1	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-MP2	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-NOAMP-A	Site1_S1_NE_NO	Enabled	Err	Norm	Norm	Norm																																																																																							
OCUDR-NOAMP-B	Site1_S1_NE_NO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-SOAM-A	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
OCUDR-SOAM-B	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm																																																																																							
18.	<p>Active NOAMP VIP:</p> <p>Select Main Menu Administration→ Software Management→ Upgrade;</p> <p>Select the tab of the server group containing the server to be downgraded. Verify its Upgrade State is now “Ready”. (It might take a couple minutes for the grid to update.)</p>	<p>Main Menu: Administration -> Software Management -> Upgrade</p> <p>Filter* Tasks</p> <p>PR_NO_SG DR_NO_SG DR_SO_SG PR_SO_SG</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Upgrade State</th> <th>OAM HA Role</th> <th>Server Role</th> <th>Function</th> <th>Application Version</th> <th>Start Time</th> <th>Finish Time</th> </tr> <tr> <th></th> <th>Server Status</th> <th>Appl HA Role</th> <th>Network Element</th> <th></th> <th>Upgrade ISO</th> <th>Status Message</th> <th></th> </tr> </thead> <tbody> <tr> <td>OCUDR-DR-NOAMP-A</td> <td>Ready</td> <td>Spare</td> <td>Network OAM&P</td> <td>DR OAM&P</td> <td>15.0.0.0.0-115.10.0</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Warn</td> <td>N/A</td> <td>Site2_S2_NE_NO</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>OCUDR-DR-NOAMP-B</td> <td>Ready</td> <td>Spare</td> <td>Network OAM&P</td> <td>DR OAM&P</td> <td>12.11.0.0.0_111.2.0</td> <td></td> <td></td> </tr> <tr> <td></td> <td>Norm</td> <td>N/A</td> <td>Site2_S2_NE_NO</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time		Server Status	Appl HA Role	Network Element		Upgrade ISO	Status Message		OCUDR-DR-NOAMP-A	Ready	Spare	Network OAM&P	DR OAM&P	15.0.0.0.0-115.10.0				Warn	N/A	Site2_S2_NE_NO					OCUDR-DR-NOAMP-B	Ready	Spare	Network OAM&P	DR OAM&P	12.11.0.0.0_111.2.0				Norm	N/A	Site2_S2_NE_NO																																															
Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time																																																																																						
	Server Status	Appl HA Role	Network Element		Upgrade ISO	Status Message																																																																																							
OCUDR-DR-NOAMP-A	Ready	Spare	Network OAM&P	DR OAM&P	15.0.0.0.0-115.10.0																																																																																								
	Warn	N/A	Site2_S2_NE_NO																																																																																										
OCUDR-DR-NOAMP-B	Ready	Spare	Network OAM&P	DR OAM&P	12.11.0.0.0_111.2.0																																																																																								
	Norm	N/A	Site2_S2_NE_NO																																																																																										
19.	<p>Verify application version</p>	<p>Verify the Application Version value for this server has been downgraded to the original release version.</p>																																																																																											
<p>THIS PROCEDURE HAS BEEN COMPLETED</p>																																																																																													

APPENDIX E. UPGRADE ACCEPTANCE

The upgrade needs either to be accepted or rejected before any subsequent upgrades are performed in the future.

The Alarm 32532 (Server Upgrade Pending Accept/Reject) will be displayed for each server until one of these two actions (accept or reject) is performed.

An upgrade should be accepted only after it was determined to be successful as “accept” is final. This frees up file storage but prevents a backout from the previous upgrade.



NOTE: Once the upgrade is accepted for a server, that server will not be allowed to backout to previous release from which the upgrade was done

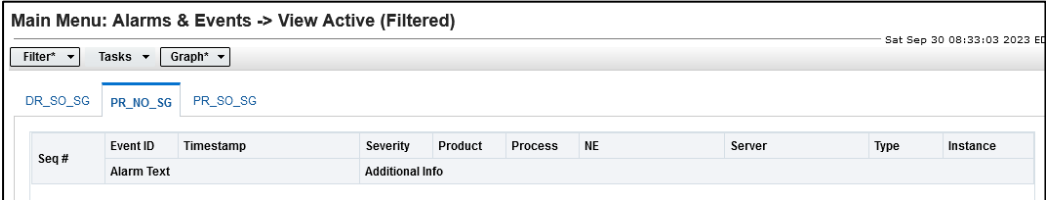
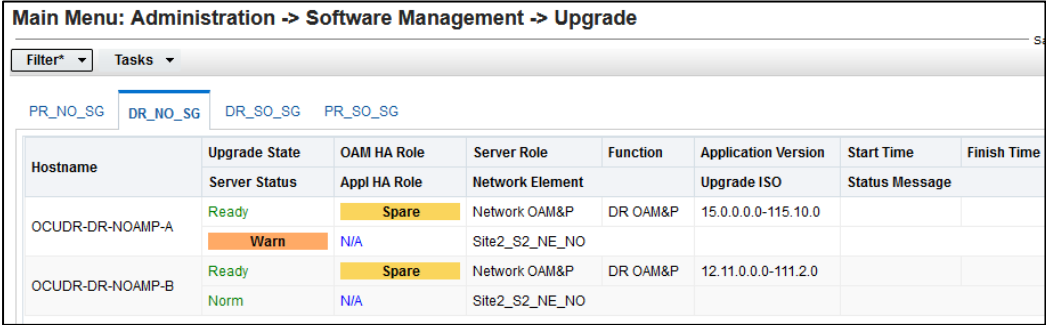
The following procedure details how to accept a successful upgrade of Oracle Communications User Data Repository system.

Procedure 15: Accept Upgrade

Step	Procedure	Result																																														
<p>1.</p> <input type="checkbox"/>	<p>Using the VIP IP, access the Primary NOAMP GUI.</p>	<p>Access the Primary NOAMP GUI as specified in Appendix A.</p>																																														
<p>2.</p> <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Administration →Software Management →Upgrade</p> <p>...as shown on the right.</p>	<div style="border: 1px solid black; padding: 5px;"> <p>Main Menu: Administration -> Software Management -> Upgrade</p> <p>Filter* Tasks</p> <p>PR_NO_SG DR_NO_SG DR_SO_SG PR_SO_SG</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Hostname</th> <th>Upgrade State</th> <th>OAM HA Role</th> <th>Server Role</th> <th>Function</th> <th>Application Version</th> <th>Start Time</th> <th>Finish Time</th> </tr> <tr> <th></th> <th>Server Status</th> <th>Appl HA Role</th> <th>Network Element</th> <th></th> <th>Upgrade ISO</th> <th>Status Message</th> <th></th> </tr> </thead> <tbody> <tr> <td rowspan="2">OCUDR-DR-NOAMP-A</td> <td>Accept or Reject</td> <td>Spare</td> <td>Network OAM&P</td> <td>DR OAM&P</td> <td>15.0.0.0-115.10.0</td> <td></td> <td></td> </tr> <tr> <td>Warn</td> <td>N/A</td> <td>Site2_S2_NE_NO</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="2">OCUDR-DR-NOAMP-B</td> <td>Ready</td> <td>Spare</td> <td>Network OAM&P</td> <td>DR OAM&P</td> <td>12.11.0.0-111.2.0</td> <td></td> <td></td> </tr> <tr> <td>Norm</td> <td>N/A</td> <td>Site2_S2_NE_NO</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> </div>	Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time		Server Status	Appl HA Role	Network Element		Upgrade ISO	Status Message		OCUDR-DR-NOAMP-A	Accept or Reject	Spare	Network OAM&P	DR OAM&P	15.0.0.0-115.10.0			Warn	N/A	Site2_S2_NE_NO					OCUDR-DR-NOAMP-B	Ready	Spare	Network OAM&P	DR OAM&P	12.11.0.0-111.2.0			Norm	N/A	Site2_S2_NE_NO				
Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time																																									
	Server Status	Appl HA Role	Network Element		Upgrade ISO	Status Message																																										
OCUDR-DR-NOAMP-A	Accept or Reject	Spare	Network OAM&P	DR OAM&P	15.0.0.0-115.10.0																																											
	Warn	N/A	Site2_S2_NE_NO																																													
OCUDR-DR-NOAMP-B	Ready	Spare	Network OAM&P	DR OAM&P	12.11.0.0-111.2.0																																											
	Norm	N/A	Site2_S2_NE_NO																																													
<p>3.</p> <input type="checkbox"/>	<p>Accept upgrade for selected server(s) by running accept upgrade command on console.</p>	<pre># /var/TKLC/backout/diUpgrade --accept</pre> <div style="background-color: black; color: white; padding: 5px; font-family: monospace;"> <pre>Running postAccept() for DIUpgrade::Policy::P50APPudr upgrade policy... Creating alarm script: /tmp/6SryxZbdWk ##### # ACCEPT COMPLETE # ##### Check is rebootcheck is enabled ... Disabling service rebootcheck... Transitioning from 'Accepting Upgrade' to 'No Upgrade Available' Cleaning backout directory. [root@OCUDR-DR-NOAMP-A admusr]#</pre> </div> <p>Note: Once upgrade is accepted, the servers will not be able to revert to their previous image states.</p>																																														

Oracle Communications User Data Repository Software Upgrade Procedure

Procedure 15: Accept Upgrade

Step	Procedure	Result																								
4. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Accept upgrade of the rest of the system</p>	<p>Accept Upgrade on all remaining servers in the Oracle Communications User Data Repository system:</p> <p>Repeat all sub-steps of step 3 of this procedure on remaining servers until the upgrade of all servers in the Oracle Communications User Data Repository system has been accepted.</p> <p>Note: As upgrade is accepted on each server the corresponding Alarm ID 32532 (Server Upgrade Pending Accept/Reject) should be removed.</p>																								
5. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Verify accept</p>	<p>Check that alarms are removed:</p> <p>Navigate to this GUI page Alarms & Events > View Active</p>  <p>Verify that Alarm ID 32532 (Server Upgrade Pending Accept/Reject) is not displayed under active alarms on Oracle Communications User Data Repository system</p>																								
6. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Select...</p> <p>Main Menu → Administration → Software Management → Upgrade</p> <p>...as shown on the right.</p>	<p>Verify server status is "Ready and Application version is updated".</p>  <table border="1"> <thead> <tr> <th>Hostname</th> <th>Upgrade State</th> <th>OAM HA Role</th> <th>Server Role</th> <th>Function</th> <th>Application Version</th> <th>Start Time</th> <th>Finish Time</th> </tr> </thead> <tbody> <tr> <td>OCUDR-DR-NOAMP-A</td> <td>Ready</td> <td>Spare</td> <td>Network OAM&P</td> <td>DR OAM&P</td> <td>15.0.0.0.0-115.10.0</td> <td></td> <td></td> </tr> <tr> <td>OCUDR-DR-NOAMP-B</td> <td>Ready</td> <td>Spare</td> <td>Network OAM&P</td> <td>DR OAM&P</td> <td>12.11.0.0.0-111.2.0</td> <td></td> <td></td> </tr> </tbody> </table>	Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time	OCUDR-DR-NOAMP-A	Ready	Spare	Network OAM&P	DR OAM&P	15.0.0.0.0-115.10.0			OCUDR-DR-NOAMP-B	Ready	Spare	Network OAM&P	DR OAM&P	12.11.0.0.0-111.2.0		
Hostname	Upgrade State	OAM HA Role	Server Role	Function	Application Version	Start Time	Finish Time																			
OCUDR-DR-NOAMP-A	Ready	Spare	Network OAM&P	DR OAM&P	15.0.0.0.0-115.10.0																					
OCUDR-DR-NOAMP-B	Ready	Spare	Network OAM&P	DR OAM&P	12.11.0.0.0-111.2.0																					
7. <input type="checkbox"/>	<p>Active NOAMP VIP:</p> <p>Configure services</p>	<p>Run the procedure specified in Appendix G: Configuring Services for Dual Path HA.</p>																								
THIS PROCEDURE HAS BEEN COMPLETED																										

APPENDIX F. VERIFYING SERVERS ARE SYNCHRONIZED

Step	Procedure	Result																																																																																																																																															
<p>1.</p> <div style="border: 1px solid black; width: 20px; height: 20px; margin: 5px 0;"></div>	<p>Active NOAMP VIP:</p> <p>Confirm Servers are in sync prior to upgrading the next server</p> <p>Main Menu → Status & Manage → Database</p> <p>1) Repl Status should be "allowed" 2) The DB Levels should be the same or close in numbers.</p>	<div style="border: 1px solid black; padding: 5px;"> <p>Main Menu: Status & Manage -> Database Sat Sep 30 04:11:36 2023</p> <p>Filter* Info* Tasks</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>OAM Max HA Role</th> <th>Application Max HA Role</th> <th>Status</th> <th>DB Level</th> <th>OAM Repl Status</th> <th>SIG Repl Status</th> <th>Repl Status</th> <th>Repl Audit Status</th> </tr> </thead> <tbody> <tr><td>Site2_S2_NE_NO</td><td>OCUDR-DR-NOAMP-A</td><td>Network OAM&P</td><td>Spare</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site1_S1_NE_NO</td><td>OCUDR-NOAMP-B</td><td>Network OAM&P</td><td>Standby</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site1_S1_NE_SO</td><td>OCUDR-SOAM-A</td><td>System OAM</td><td>Standby</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site1_S1_NE_SO</td><td>OCUDR-MP1</td><td>MP</td><td>Standby</td><td>Active</td><td>Normal</td><td>0</td><td>Normal</td><td>Normal</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site2_S2_NE_NO</td><td>OCUDR-DR-NOAMP-B</td><td>Network OAM&P</td><td>Spare</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site2_S2_NE_SO</td><td>OCUDR-DR-SOAM-A</td><td>System OAM</td><td>Active</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site1_S1_NE_SO</td><td>OCUDR-SOAM-B</td><td>System OAM</td><td>Active</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site2_S2_NE_SO</td><td>OCUDR-DR-MP4</td><td>MP</td><td>Standby</td><td>Active</td><td>Normal</td><td>0</td><td>Normal</td><td>Normal</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site1_S1_NE_NO</td><td>OCUDR-NOAMP-A</td><td>Network OAM&P</td><td>Active</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site2_S2_NE_SO</td><td>OCUDR-DR-SOAM-B</td><td>System OAM</td><td>Standby</td><td>N/A</td><td>Normal</td><td>0</td><td>Normal</td><td>NotApplicable</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site1_S1_NE_SO</td><td>OCUDR-MP2</td><td>MP</td><td>Active</td><td>Active</td><td>Normal</td><td>0</td><td>Normal</td><td>Normal</td><td>Allowed</td><td>NotApplicable</td></tr> <tr><td>Site2_S2_NE_SO</td><td>OCUDR-DR-MP3</td><td>MP</td><td>Active</td><td>Active</td><td>Normal</td><td>0</td><td>Normal</td><td>Normal</td><td>Allowed</td><td>NotApplicable</td></tr> </tbody> </table> </div>	Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status	DB Level	OAM Repl Status	SIG Repl Status	Repl Status	Repl Audit Status	Site2_S2_NE_NO	OCUDR-DR-NOAMP-A	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_NO	OCUDR-NOAMP-B	Network OAM&P	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-SOAM-A	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-MP1	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicable	Site2_S2_NE_NO	OCUDR-DR-NOAMP-B	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site2_S2_NE_SO	OCUDR-DR-SOAM-A	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-SOAM-B	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site2_S2_NE_SO	OCUDR-DR-MP4	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicable	Site1_S1_NE_NO	OCUDR-NOAMP-A	Network OAM&P	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site2_S2_NE_SO	OCUDR-DR-SOAM-B	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable	Site1_S1_NE_SO	OCUDR-MP2	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicable	Site2_S2_NE_SO	OCUDR-DR-MP3	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicable
Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status	DB Level	OAM Repl Status	SIG Repl Status	Repl Status	Repl Audit Status																																																																																																																																							
Site2_S2_NE_NO	OCUDR-DR-NOAMP-A	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_NO	OCUDR-NOAMP-B	Network OAM&P	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_SO	OCUDR-SOAM-A	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_SO	OCUDR-MP1	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicable																																																																																																																																							
Site2_S2_NE_NO	OCUDR-DR-NOAMP-B	Network OAM&P	Spare	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-SOAM-A	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_SO	OCUDR-SOAM-B	System OAM	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-MP4	MP	Standby	Active	Normal	0	Normal	Normal	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_NO	OCUDR-NOAMP-A	Network OAM&P	Active	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-SOAM-B	System OAM	Standby	N/A	Normal	0	Normal	NotApplicable	Allowed	NotApplicable																																																																																																																																							
Site1_S1_NE_SO	OCUDR-MP2	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicable																																																																																																																																							
Site2_S2_NE_SO	OCUDR-DR-MP3	MP	Active	Active	Normal	0	Normal	Normal	Allowed	NotApplicable																																																																																																																																							

APPENDIX G. CONFIGURING SERVICES FOR DUAL PATH HA

This Appendix provides the procedure for updating Oracle Communications User Data Repository Services for the Dual Path HA feature. This applies to all configurations that make use of a Secondary/DR Site.

Step	<p>This procedure verifies that all required materials are present.</p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p>																									
<p>1.</p> <input type="checkbox"/>	<p>Using the VIP address, access the Primary NOAMP GUI.</p>	<p>Access the Primary NOAMP GUI as specified in Appendix A.</p>																								
<p>2.</p> <input type="checkbox"/>	<p>Active NOAMP VIP: Select...</p> <p>Main Menu → Configuration → Networking → Services</p> <p>...as shown on the right.</p>	<p>Main Menu: Configuration -> Networking -> Services</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Intra-NE Network</th> <th>Inter-NE Network</th> </tr> </thead> <tbody> <tr> <td>OAM</td> <td>IMI</td> <td>XM</td> </tr> <tr> <td>Replication</td> <td>IMI</td> <td>XM</td> </tr> <tr> <td>Signaling</td> <td>XSI1</td> <td>XSI1</td> </tr> <tr> <td>HA_Secondary</td> <td>IMI</td> <td>XSI1</td> </tr> <tr> <td>HA_MP_Secondary</td> <td>IMI</td> <td>XM</td> </tr> <tr> <td>Replication_MP</td> <td>IMI</td> <td>XM</td> </tr> <tr> <td>ComAgent</td> <td>IMI</td> <td>XSI1</td> </tr> </tbody> </table>	Name	Intra-NE Network	Inter-NE Network	OAM	IMI	XM	Replication	IMI	XM	Signaling	XSI1	XSI1	HA_Secondary	IMI	XSI1	HA_MP_Secondary	IMI	XM	Replication_MP	IMI	XM	ComAgent	IMI	XSI1
Name	Intra-NE Network	Inter-NE Network																								
OAM	IMI	XM																								
Replication	IMI	XM																								
Signaling	XSI1	XSI1																								
HA_Secondary	IMI	XSI1																								
HA_MP_Secondary	IMI	XM																								
Replication_MP	IMI	XM																								
ComAgent	IMI	XSI1																								

<p>3.</p> <p><input type="checkbox"/></p> <p>Active NOAMP VIP: 1) Change Service value as shown below:</p> <p>Inter-NE HA_Secondary → XS11</p> <p>2) Select the “Apply” dialogue button.</p> <p>3) Select the “OK” dialogue button in the popup window.</p>	<p>Main Menu: Configuration -> Networking -> Services [Edit]</p> <hr/> <p>Services</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Intra-NE Network</th> <th>Inter-NE Network</th> </tr> </thead> <tbody> <tr> <td>OAM</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>Replication</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>Signaling</td> <td>XS11</td> <td>XS11</td> </tr> <tr> <td>HA_Secondary</td> <td>IMI</td> <td>XS11</td> </tr> <tr> <td>HA_MP_Secondary</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>Replication_MP</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>ComAgent</td> <td>IMI</td> <td>XS11</td> </tr> </tbody> </table> <p>Ok Apply Cancel</p> <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>You must restart all Servers to apply any services changes, ComAgent</p> <p style="text-align: right;">OK Cancel</p> </div> <p>NOAMP and MP Servers need to be restarted.</p>	Name	Intra-NE Network	Inter-NE Network	OAM	IMI	XMI	Replication	IMI	XMI	Signaling	XS11	XS11	HA_Secondary	IMI	XS11	HA_MP_Secondary	IMI	XMI	Replication_MP	IMI	XMI	ComAgent	IMI	XS11
Name	Intra-NE Network	Inter-NE Network																							
OAM	IMI	XMI																							
Replication	IMI	XMI																							
Signaling	XS11	XS11																							
HA_Secondary	IMI	XS11																							
HA_MP_Secondary	IMI	XMI																							
Replication_MP	IMI	XMI																							
ComAgent	IMI	XS11																							
<p>4.</p> <p><input type="checkbox"/></p> <p>Active NOAMP VIP: The user will be presented with the “Services” configuration screen as shown on the right</p>	<p>Main Menu: Configuration -> Networking -> Services</p> <hr/> <table border="1"> <thead> <tr> <th>Name</th> <th>Intra-NE Network</th> <th>Inter-NE Network</th> </tr> </thead> <tbody> <tr> <td>OAM</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>Replication</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>Signaling</td> <td>XS11</td> <td>XS11</td> </tr> <tr> <td>HA_Secondary</td> <td>IMI</td> <td>XS11</td> </tr> <tr> <td>HA_MP_Secondary</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>Replication_MP</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>ComAgent</td> <td>IMI</td> <td>XS11</td> </tr> </tbody> </table>	Name	Intra-NE Network	Inter-NE Network	OAM	IMI	XMI	Replication	IMI	XMI	Signaling	XS11	XS11	HA_Secondary	IMI	XS11	HA_MP_Secondary	IMI	XMI	Replication_MP	IMI	XMI	ComAgent	IMI	XS11
Name	Intra-NE Network	Inter-NE Network																							
OAM	IMI	XMI																							
Replication	IMI	XMI																							
Signaling	XS11	XS11																							
HA_Secondary	IMI	XS11																							
HA_MP_Secondary	IMI	XMI																							
Replication_MP	IMI	XMI																							
ComAgent	IMI	XS11																							

5.



Restart Reboot all NOAMP and MP Servers

Reboot all NOAMP and MP servers either by the Active NOAMP GUI's Status & Manage -> Server screen with the **Reboot** button:

Main Menu: Status & Manage -> Server

Filter*

Server Hostname	Network Element	Appl State	Alm	DB	Reporting Status	Proc
OCUDR-DR-MP3	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm
OCUDR-DR-MP4	Site2_S2_NE_SO	Enabled	Err	Norm	Norm	Norm
OCUDR-DR-NOAMP-A	Site2_S2_NE_NO	Enabled	Warn	Norm	Norm	Norm
OCUDR-DR-NOAMP-B	Site2_S2_NE_NO	Enabled	Norm	Norm	Norm	Norm
OCUDR-DR-SOAM-A	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm
OCUDR-DR-SOAM-B	Site2_S2_NE_SO	Enabled	Norm	Norm	Norm	Norm
OCUDR-MP1	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm
OCUDR-MP2	Site1_S1_NE_SO	Enabled	Err	Norm	Norm	Norm
OCUDR-NOAMP-A	Site1_S1_NE_NO	Enabled	Err	Norm	Norm	Norm
OCUDR-NOAMP-B	Site1_S1_NE_NO	Enabled	Norm	Norm	Norm	Norm
OCUDR-SOAM-A	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm
OCUDR-SOAM-B	Site1_S1_NE_SO	Enabled	Norm	Norm	Norm	Norm

Or on the terminal of each server with the reboot command:

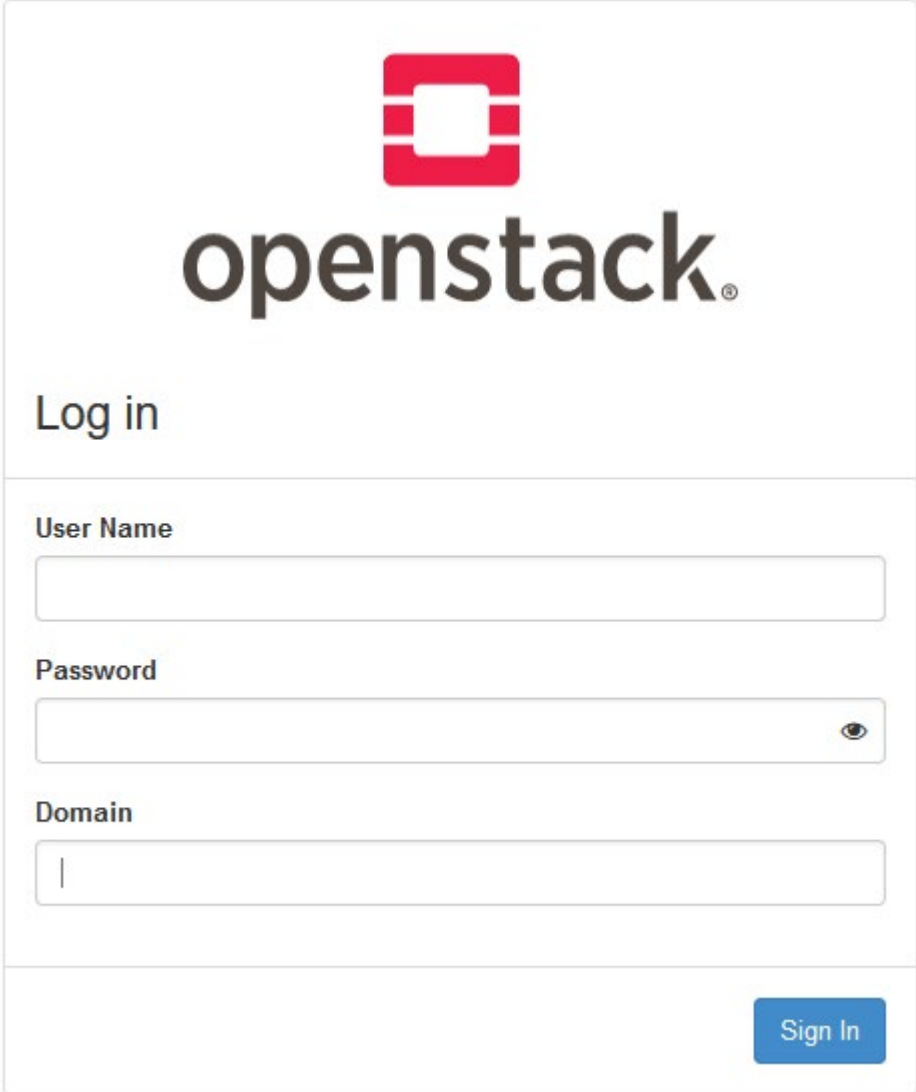
```
$ sudo reboot
```

Note: This should be executed on all NOAMPs and MPs.

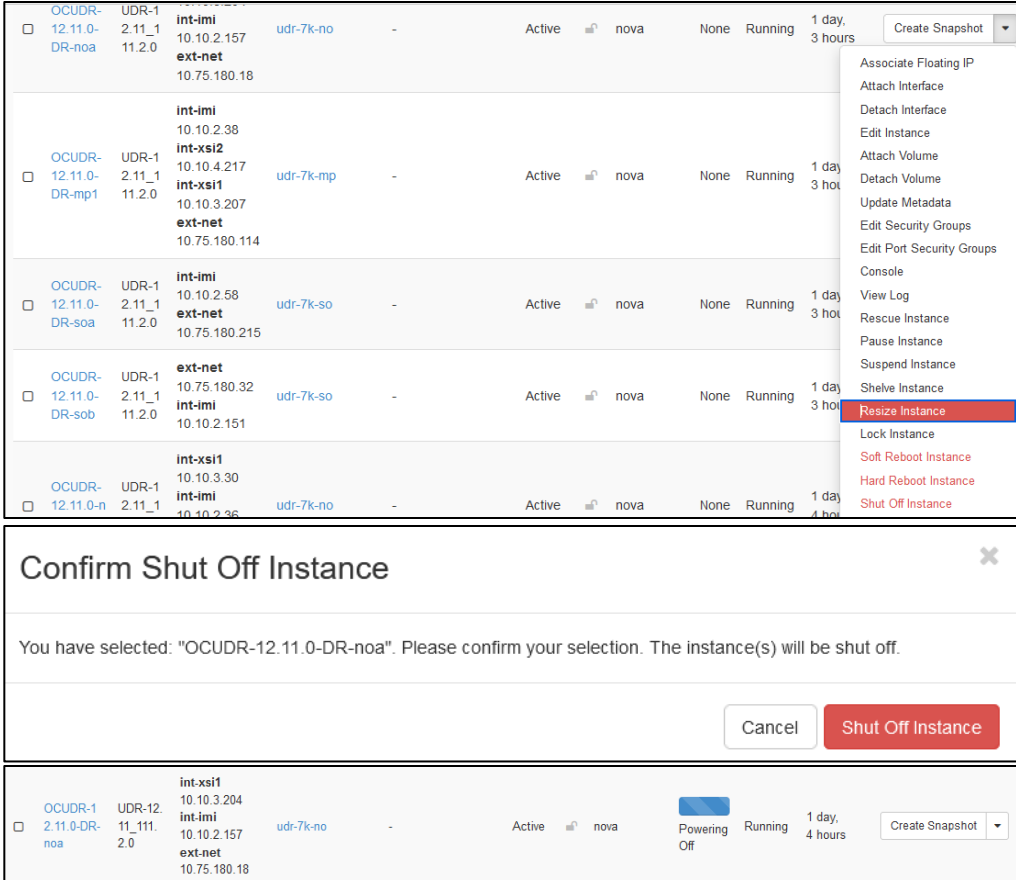
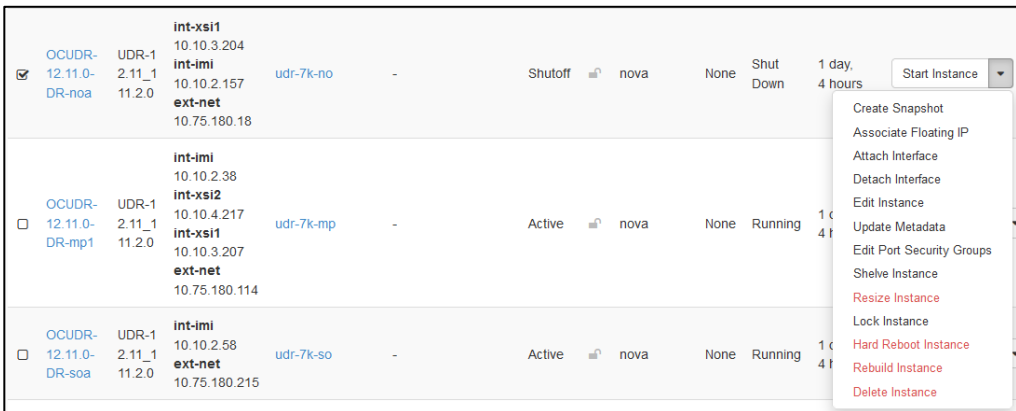
THIS PROCEDURE HAS BEEN COMPLETED

APPENDIX H. RESIZING VM GUEST DISK FOR UPGRADE

H.1 Resizing VM Guest disk for upgrade on Openstack

Step	Procedure	Result
1. <input type="checkbox"/>	Login to cloud home page.	

Oracle Communications User Data Repository Software Upgrade Procedure

<p>2.</p>	<p>Go to instance page and shut off instance</p>	 <p>The screenshot shows a table of instances with columns for ID, Name, Type, State, and Actions. The instance 'OCUDR-12.11.0-DR-noa' is selected. A context menu is open over it, with 'Resize Instance' highlighted. Below the table, a confirmation dialog titled 'Confirm Shut Off Instance' is shown, with the text: 'You have selected: "OCUDR-12.11.0-DR-noa". Please confirm your selection. The instance(s) will be shut off.' The dialog has 'Cancel' and 'Shut Off Instance' buttons.</p>
<p>3.</p>	<p>Select the instance and resize using 'Resize Instance' option.</p>	 <p>The screenshot shows the same table of instances. The instance 'OCUDR-12.11.0-DR-noa' is now in a 'Shutoff' state. A context menu is open over it, with 'Resize Instance' highlighted. The 'Start Instance' button is visible in the top right of the instance row.</p>

Oracle Communications User Data Repository Software Upgrade Procedure

<p>4.</p>	<p>Please specify the new flavor that has 50 GB disk more than existing flavor used. And press 'Resize'</p>	<div style="border: 1px solid black; padding: 10px;"> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Old Flavor</p> <p>udr-7k-no</p> <p>New Flavor * ?</p> <p>udr-no-7k-diu</p> </div> <div style="width: 50%;"> <p>Flavor Details</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Name</td><td>udr-no-7k-diu</td></tr> <tr><td>VCPUs</td><td>8</td></tr> <tr><td>Root Disk</td><td>500 GB</td></tr> <tr><td>Ephemeral Disk</td><td>0 GB</td></tr> <tr><td>Total Disk</td><td>500 GB</td></tr> <tr><td>RAM</td><td>32,768 MB</td></tr> </table> <p>Project Limits</p> <p>Number of Instances of Used</p> <p>Number of VCPUs of Used</p> <p>Total RAM of MB Used</p> </div> </div> <div style="text-align: right; margin-top: 10px;"> Cancel Resize </div> </div> <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"><input type="checkbox"/></td> <td style="width: 15%;">OCUDR-12.11.0-DR-noa</td> <td style="width: 15%;">UDR-12.11_11.2.0</td> <td style="width: 15%;">int-xsi1 10.10.3.204</td> <td style="width: 15%;">int-imi 10.10.2.157</td> <td style="width: 15%;">udr-7k-no</td> <td style="width: 15%; text-align: center;">-</td> <td style="width: 15%; text-align: center;">Resize/Migrate nova</td> <td style="width: 15%; text-align: center;">Resizing or Migrating</td> <td style="width: 15%; text-align: center;">Shut Down</td> <td style="width: 15%; text-align: center;">1 day, 4 hours</td> <td style="width: 15%; text-align: right;">Associate Floating IP ▼</td> </tr> </table> </div>	Name	udr-no-7k-diu	VCPUs	8	Root Disk	500 GB	Ephemeral Disk	0 GB	Total Disk	500 GB	RAM	32,768 MB	<input type="checkbox"/>	OCUDR-12.11.0-DR-noa	UDR-12.11_11.2.0	int-xsi1 10.10.3.204	int-imi 10.10.2.157	udr-7k-no	-	Resize/Migrate nova	Resizing or Migrating	Shut Down	1 day, 4 hours	Associate Floating IP ▼												
Name	udr-no-7k-diu																																					
VCPUs	8																																					
Root Disk	500 GB																																					
Ephemeral Disk	0 GB																																					
Total Disk	500 GB																																					
RAM	32,768 MB																																					
<input type="checkbox"/>	OCUDR-12.11.0-DR-noa	UDR-12.11_11.2.0	int-xsi1 10.10.3.204	int-imi 10.10.2.157	udr-7k-no	-	Resize/Migrate nova	Resizing or Migrating	Shut Down	1 day, 4 hours	Associate Floating IP ▼																											
<p>5.</p>	<p>Click on 'Confirm Resize Migrate' button and start instance</p>	<div style="border: 1px solid gray; padding: 5px; margin-bottom: 5px;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"><input type="checkbox"/></td> <td style="width: 15%;">OCUDR-12.11.0-DR-noa</td> <td style="width: 15%;">UDR-12.11_11.2.0</td> <td style="width: 15%;">int-xsi1 10.10.3.204</td> <td style="width: 15%;">int-imi 10.10.2.157</td> <td style="width: 15%;">udr-no-7k-diu</td> <td style="width: 15%; text-align: center;">-</td> <td style="width: 15%; text-align: center;">Confirm or Revert Resize/Migrate nova</td> <td style="width: 15%; text-align: center;">None</td> <td style="width: 15%; text-align: center;">Shut Down</td> <td style="width: 15%; text-align: center;">1 day, 4 hours</td> <td style="width: 15%; text-align: right;">Confirm Resize/Migrate ▼</td> </tr> </table> </div> <div style="border: 1px solid gray; padding: 5px; margin-bottom: 5px;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"><input type="checkbox"/></td> <td style="width: 15%;">OCUDR-12.11.0-DR-noa</td> <td style="width: 15%;">UDR-12.11_11.2.0</td> <td style="width: 15%;">int-xsi1 10.10.3.204</td> <td style="width: 15%;">int-imi 10.10.2.157</td> <td style="width: 15%;">udr-no-7k-diu</td> <td style="width: 15%; text-align: center;">-</td> <td style="width: 15%; text-align: center;">Shutoff nova</td> <td style="width: 15%; text-align: center;">None</td> <td style="width: 15%; text-align: center;">Shut Down</td> <td style="width: 15%; text-align: center;">1 day, 4 hours</td> <td style="width: 15%; text-align: right;">Start Instance ▼</td> </tr> </table> </div> <div style="border: 1px solid gray; padding: 5px;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"><input type="checkbox"/></td> <td style="width: 15%;">OCUDR-12.11.0-DR-noa</td> <td style="width: 15%;">UDR-12.11_11.2.0</td> <td style="width: 15%;">int-xsi1 10.10.3.204</td> <td style="width: 15%;">int-imi 10.10.2.157</td> <td style="width: 15%;">udr-no-7k-diu</td> <td style="width: 15%; text-align: center;">-</td> <td style="width: 15%; text-align: center;">Active nova</td> <td style="width: 15%; text-align: center;">None</td> <td style="width: 15%; text-align: center;">Running</td> <td style="width: 15%; text-align: center;">1 day, 4 hours</td> <td style="width: 15%; text-align: right;">Create Snapshot ▼</td> </tr> </table> </div>	<input type="checkbox"/>	OCUDR-12.11.0-DR-noa	UDR-12.11_11.2.0	int-xsi1 10.10.3.204	int-imi 10.10.2.157	udr-no-7k-diu	-	Confirm or Revert Resize/Migrate nova	None	Shut Down	1 day, 4 hours	Confirm Resize/Migrate ▼	<input type="checkbox"/>	OCUDR-12.11.0-DR-noa	UDR-12.11_11.2.0	int-xsi1 10.10.3.204	int-imi 10.10.2.157	udr-no-7k-diu	-	Shutoff nova	None	Shut Down	1 day, 4 hours	Start Instance ▼	<input type="checkbox"/>	OCUDR-12.11.0-DR-noa	UDR-12.11_11.2.0	int-xsi1 10.10.3.204	int-imi 10.10.2.157	udr-no-7k-diu	-	Active nova	None	Running	1 day, 4 hours	Create Snapshot ▼
<input type="checkbox"/>	OCUDR-12.11.0-DR-noa	UDR-12.11_11.2.0	int-xsi1 10.10.3.204	int-imi 10.10.2.157	udr-no-7k-diu	-	Confirm or Revert Resize/Migrate nova	None	Shut Down	1 day, 4 hours	Confirm Resize/Migrate ▼																											
<input type="checkbox"/>	OCUDR-12.11.0-DR-noa	UDR-12.11_11.2.0	int-xsi1 10.10.3.204	int-imi 10.10.2.157	udr-no-7k-diu	-	Shutoff nova	None	Shut Down	1 day, 4 hours	Start Instance ▼																											
<input type="checkbox"/>	OCUDR-12.11.0-DR-noa	UDR-12.11_11.2.0	int-xsi1 10.10.3.204	int-imi 10.10.2.157	udr-no-7k-diu	-	Active nova	None	Running	1 day, 4 hours	Create Snapshot ▼																											

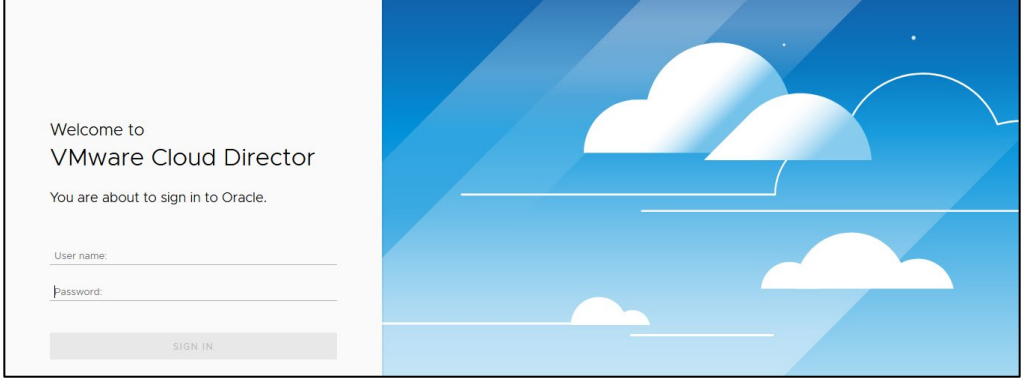
Oracle Communications User Data Repository Software Upgrade Procedure

<p>6.</p>	<p>Login to console of instance and execute the listed commands</p>	<pre># fdisk -c /dev/vda</pre> <p>Note: Device name may differ from vda to some other name like sda, vdb, vdc etc..</p> <ul style="list-style-type: none"> ➔ Press letter 'm' (It will display all possible operations) ➔ Press letter 'n' (To add a new partition) ➔ Press letter 'p' (Primary extension) ➔ Press number '3' (Enter 3 or 4 as partion number or provide default choice) ➔ It will ask for sector value, provide default value as input) ➔ It will ask for size, provide '+50G' (To add 50GB, it depends upon VM flavor) <p>Example : vg size will become 150GB , if the previous size is 100GB</p> <ul style="list-style-type: none"> ➔ Press letter 't' (To change a partion's system id) ➔ Provide partition number which we have created in earlier step ➔ It will ask fro HEX Code, enter '8e' ➔ Press letter 'w' (write table to disk and exit) <p>Example:</p> <pre>[root@OCUDR-DR-NOAMP-A filemgmt]# fdisk -c /dev/vda WARNING: cylinders as display units are deprecated. Use command 'u' to change units to sectors. Command (m for help): n Command action e extended p primary partition (1-4) p Partition number (1-4): 3 First cylinder (832204-1040253, default 832204): Using default value 832204 Last cylinder, +cylinders or +size{K,M,G} (832204-1040253, default 1040253): +50G Command (m for help): t Partition number (1-4): 3 Hex code (type L to list codes): 8e Changed system type of partition 3 to 8e (Linux LVM) Command (m for help): w The partition table has been altered! Calling ioctl() to re-read partition table. WARNING: Re-reading the partition table failed with error 16: Device or resource busy. The kernel still uses the old table. The new table will be used at the next reboot or after you run partprobe(8) or kpartx(8) Syncing disks. [root@OCUDR-DR-NOAMP-A filemgmt]# reboot</pre>
<p>7.</p>	<p>After step-6, reboot the instance</p>	<pre># reboot</pre>

Oracle Communications User Data Repository Software Upgrade Procedure

8.	After reboot, create physical volume and extend the volume group using it	<p>Note: Once partition is done then create physical volum using pvcreate command but after reboot.</p> <pre># pvcreate <new physical volum name></pre> <p>Example: pvcreate /dev/vda3</p> <pre># vgextend <vgname> <physical volume name></pre> <p>Example: vgextend vgroot /dev/vda3</p> <pre>[root@OCUDR-DR-NOAMP-A admusr]# pvs PV VG Fmt Attr PSize PFree /dev/vda2 vgroot lvm2 a--u 399.47g 117.62g [root@OCUDR-DR-NOAMP-A admusr]# [root@OCUDR-DR-NOAMP-A admusr]# pvcreate /dev/vda3 Physical volume "/dev/vda3" successfully created [root@OCUDR-DR-NOAMP-A admusr]# [root@OCUDR-DR-NOAMP-A admusr]# vgextend vgroot /dev/vda3 Volume group "vgroot" successfully extended [root@OCUDR-DR-NOAMP-A admusr]# [root@OCUDR-DR-NOAMP-A admusr]# vgs VG #PV #LV #SN Attr VSize VFree vgroot 2 11 0 wz--n- 449.44g 167.59g [root@OCUDR-DR-NOAMP-A admusr]#</pre> <p>Note: For knowledge.</p> <ul style="list-style-type: none">• use vgs command to know the vg name• use fdisk -l /dev/vda command to know the partition name which we have created in above step.
THIS PROCEDURE HAS BEEN COMPLETED		

H.2 Resizing VM Guest disk for upgrade on VMWare

Step	Procedure	Result
1. <input type="checkbox"/>	Login to VMWare home page.	

Oracle Communications User Data Repository Software Upgrade Procedure

2.

Go to vm page and shut off vm for which disk size needs to be updated

VMware Cloud Director | Data Centers | Applications | Networking

Virtual Applications | **Virtual Machines**

Find by: Name | ADVANCED FILTERING

71 Virtual Machines

NEW VM

UDR

Powered on

VM Console

Runtime lease: Never Suspends

Created On: 04/03/2023, 04:25:44 PM

Owner: siddhartha.p.pandey@oracle.c...

vApp: -

OS: Oracle Linux 6 (64-bit)

CPU: 12 | Storage: 564 GB | Memory: 64 GB | Networks: 1

occne4-alberto-navarrete-b...

Powered on

VM Console

Runtime lease: Never Suspends

Created On: 09/05/2023, 10:03:00 PM

Owner: alberto.navarrete

vApp: occne4-alberto-navarrete

OS: Oracle Linux 8 (64-bit)

CPU: 1 | Storage: 36 GB | Memory: 4 GB | Networks: 1

All Virtual Machines | Site: Morrisville | Organization: Oracle | Data center: vCNE

All Virtual Machines > UDR

UDR | Powered on

POWER ON | POWER OFF | LAUNCH WEB CONSOLE | LAUNCH REMOTE CONSOLE | ALL ACTIONS

General | EDIT

Name	UDR
State	Powered on
Computer Name	UDR
Description	Testing purpose
Operating System	Oracle Linux 6 (64-bit)
Boot Delay	0
Storage Policy	*

All Virtual Machines > UDR

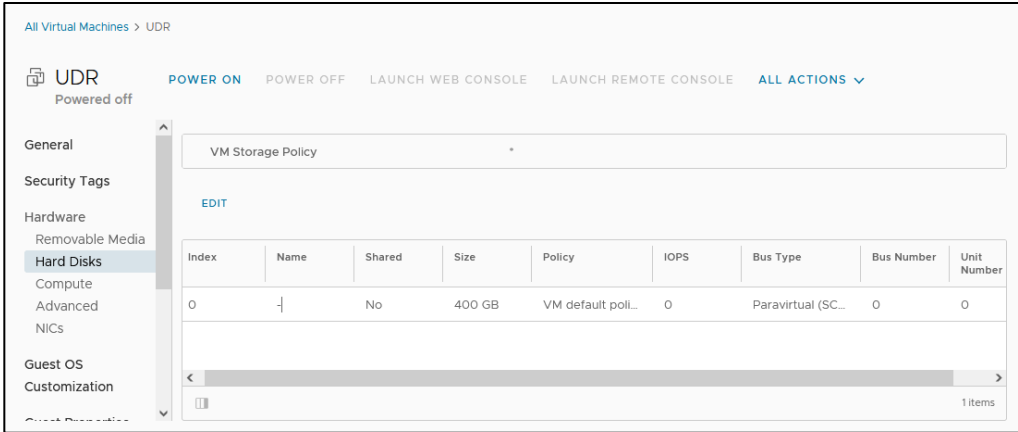
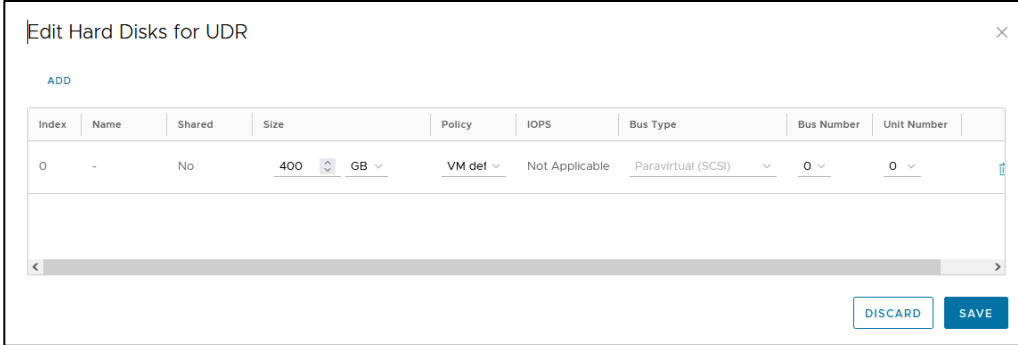
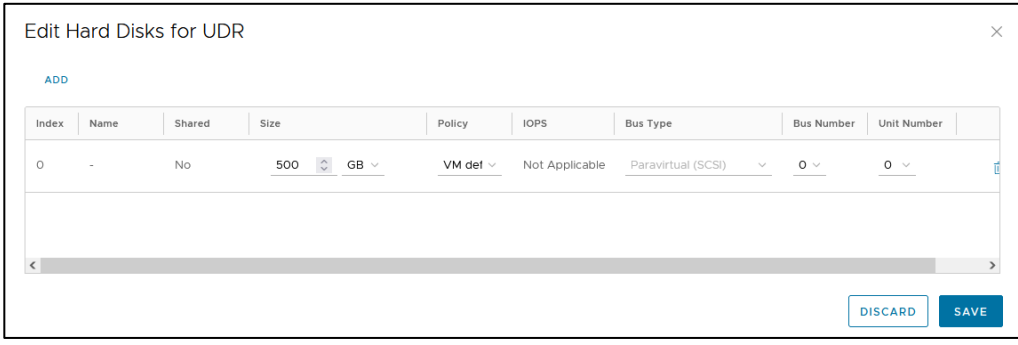
UDR | Powered off

POWER ON | POWER OFF | LAUNCH WEB CONSOLE | LAUNCH REMOTE CONSOLE | ALL ACTIONS

General | EDIT

Name	UDR
State	Powered off
Computer Name	UDR
Description	Testing purpose
Operating System	Oracle Linux 6 (64-bit)
Boot Delay	0
Storage Policy	*

Oracle Communications User Data Repository Software Upgrade Procedure

<p>3. Select the 'Hard disk' and edit using 'Edit' option.</p>	 
<p>4. Please specify the new disk size And press 'Save' button</p>	

Oracle Communications User Data Repository Software Upgrade Procedure

5.

Click on 'Power ON' button to start VM

The screenshot shows the Oracle VM console for a virtual machine named 'UDR'. The status is 'Powered off'. The left-hand navigation menu includes: General, Security Tags, Hardware (Removable Media, Hard Disks, Compute, Advanced, NICs), Guest OS, and Customization. The 'Hard Disks' section is selected, displaying a table with one disk entry.

Index	Name	Shared	Size	Policy	IOPS	Bus Type	Bus Number	Unit Number
0	-	No	500 GB	VM default poli...	0	Paravirtual (SC...	0	0

The screenshot shows the Oracle VM console for the same virtual machine 'UDR', now with the status 'Powered on'. The interface and navigation menu are identical to the previous screenshot, but the 'POWER ON' button is now disabled, and the 'POWER OFF' button is active. The 'Hard Disks' table remains the same.

Index	Name	Shared	Size	Policy	IOPS	Bus Type	Bus Number	Unit Number
0	-	No	500 GB	VM default poli...	0	Paravirtual (SC...	0	0

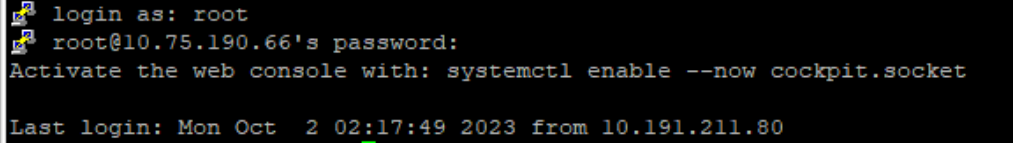
Oracle Communications User Data Repository Software Upgrade Procedure

<p>6.</p>	<p>Login to console of instance and execute the listed commands</p>	<pre># fdisk -c /dev/vda</pre> <p>Note: Device name may differ from vda to some other name like sda, vdb, vdc etc..</p> <ul style="list-style-type: none"> ➔ Press letter 'm' (It will display all possible operations) ➔ Press letter 'n' (To add a new partition) ➔ Press letter 'p' (Primary extension) ➔ Press number '3' (Enter 3 or 4 as partion number or provide default choice) ➔ It will ask for sector value, provide default value as input) ➔ It will ask for size, provide '+50G' (To add 50GB, it depends upon VM flavor) <p>Example : vg size will become 150GB , if the previous size is 100GB</p> <ul style="list-style-type: none"> ➔ Press letter 't' (To change a partion's system id) ➔ Provide partition number which we have created in earlier step ➔ It will ask fro HEX Code, enter '8e' ➔ Press letter 'w' (write table to disk and exit) <p>Example:</p> <pre>[root@OCUDR-DR-NOAMP-A filemgmt]# fdisk -c /dev/vda WARNING: cylinders as display units are deprecated. Use command 'u' to change units to sectors. Command (m for help): n Command action e extended p primary partition (1-4) p Partition number (1-4): 3 First cylinder (832204-1040253, default 832204): Using default value 832204 Last cylinder, +cylinders or +size{K,M,G} (832204-1040253, default 1040253): +50G Command (m for help): t Partition number (1-4): 3 Hex code (type L to list codes): 8e Changed system type of partition 3 to 8e (Linux LVM) Command (m for help): w The partition table has been altered! Calling ioctl() to re-read partition table. WARNING: Re-reading the partition table failed with error 16: Device or resource busy. The kernel still uses the old table. The new table will be used at the next reboot or after you run partprobe(8) or kpartx(8) Syncing disks. [root@OCUDR-DR-NOAMP-A filemgmt]# reboot</pre>
<p>7.</p>	<p>After step-6, reboot the instance</p>	<pre># reboot</pre>

Oracle Communications User Data Repository Software Upgrade Procedure

8.	After reboot, create physical volume and extend the volume group using it	<p>Note: Once partition is done then create physical volum using pvcreate command but after reboot.</p> <pre># pvcreate <new physical volum name> Example: pvcreate /dev/vda3</pre> <pre># vgextend <vgname> <physical volume name> Example: vgextend vgroot /dev/vda3</pre> <pre>[root@OCUDR-DR-NOAMP-A admusr]# pvs PV VG Fmt Attr PSize PFree /dev/vda2 vgroot lvm2 a--u 399.47g 117.62g [root@OCUDR-DR-NOAMP-A admusr]# [root@OCUDR-DR-NOAMP-A admusr]# pvcreate /dev/vda3 Physical volume "/dev/vda3" successfully created [root@OCUDR-DR-NOAMP-A admusr]# [root@OCUDR-DR-NOAMP-A admusr]# vgextend vgroot /dev/vda3 Volume group "vgroot" successfully extended [root@OCUDR-DR-NOAMP-A admusr]# [root@OCUDR-DR-NOAMP-A admusr]# vgs VG #PV #LV #SN Attr VSize VFree vgroot 2 11 0 wz--n- 449.44g 167.59g [root@OCUDR-DR-NOAMP-A admusr]#</pre> <p>Note: For knowledge.</p> <ul style="list-style-type: none">• use vgs command to know the vg name• use fdisk -l /dev/vda command to know the partition name which we have created in above step.
THIS PROCEDURE HAS BEEN COMPLETED		

H.3 Resizing VM Guest disk for upgrade on KVM

Step	Procedure	Result
1. <input type="checkbox"/>	Login to KVM host console where all KVM based machines are present.	
2.	Shutdown the VM for which disk size needs to be updated	<pre># virsh shutdown UDR-12.11.1.0.0_111.6.0 [root@X5-2-OCUDR-OL-6 ~]# virsh list --all Id Name State ----- 139 UDR-12.11.0.0.0_111.3.0 running - UDR-12.11.1.0.0_111.6.0 shut off</pre>
3.	Extend the disk size of VM.	<pre># qemu-img resize /home/image/UDR-12.11.1.0.0_111.6.0.qcow2 +50G Image resized. Note: The path of guest img may differe in customer setup.</pre>
4.	List the VM machines	<pre># virsh list -all [root@X5-2-OCUDR-OL-6 ~]# virsh list --all Id Name State ----- 139 UDR-12.11.0.0.0_111.3.0 running - UDR-12.11.1.0.0_111.6.0 shut off [root@X6-2-OCUDR-OL8 ~]#</pre>
5.	Start the VM	<pre># virsh start UDR-12.11.1.0.0_111.6.0 Domain 'UDR-12.11.0.0.0_111.5.0' started [root@X5-2-OCUDR-OL6 ~]# virsh list --all Id Name State ----- 139 UDR-12.11.0.0.0_111.3.0 running 224 UDR-12.11.1.0.0_111.6.0 running [root@X5-2-OCUDR-OL6 ~]#</pre>

Oracle Communications User Data Repository Software Upgrade Procedure

<p>6.</p>	<p>Login to console of instance and execute the listed commands</p>	<pre># fdisk -c /dev/sda</pre> <p>Note: Device name may differ from vda to some other name like sda, vdb, vdc etc..</p> <ul style="list-style-type: none"> ➔ Press letter 'm' (It will display all possible operations) ➔ Press letter 'n' (To add a new partition) ➔ Press letter 'p' (Primary extension) ➔ Press number '3' (Enter 3 or 4 as partion number or provide default choice) ➔ It will ask for sector value, provide default value as input) ➔ It will ask for size, provide '+50G' (To add 50GB, it depends upon VM flavor) <p>Example : vg size will become 150GB , if the previous size is 100GB</p> <ul style="list-style-type: none"> ➔ Press letter 't' (To change a partion's system id) ➔ Provide partition number which we have created in earlier step ➔ It will ask fro HEX Code, enter '8e' ➔ Press letter 'w' (write table to disk and exit) <p>Example: [root@UDR-SO-A ~]# fdisk -c /dev/sda</p> <p>Welcome to fdisk (util-linux 2.32.1). Changes will remain in memory only, until you decide to write them. Be careful before using the write command.</p> <p>GPT PMBR size mismatch (209715199 != 314572799) will be corrected by write. The backup GPT table is not on the end of the device. This problem will be corrected by write.</p> <p>Command (m for help): n Partition number (3-128, default 3): 3 First sector (209715167-314572766, default 209715200): Last sector, +sectors or +size {K,M,G,T,P} (209715200-314572766, default 314572766): +50G Created a new partition 3 of type 'Linux filesystem' and of size 50 GiB.</p> <p>Command (m for help): t Partition number (1-3, default 3): 3 Partition type (type L to list all types): 8e</p> <p>Type of partition 3 is unchanged: Linux filesystem.</p> <p>Command (m for help): w The partition table has been altered. Syncing disks.</p> <pre>[root@localhost ~]# reboot [root@localhost ~]# pvcreate /dev/sda3 Physical volume "/dev/sda3" successfully created. [root@UDR-SO-A ~]# pvs PV VG Fmt Attr PSize PFree /dev/sda2 vgroot lvm2 a-- <99.50g 24.26g /dev/sda3 lvm2 --- 49.00g 49.00g [root@localhost ~]# vgextend vgroot /dev/sda3 Volume group "vgroot" successfully extended [root@UDR-SO-A ~]# vgs VG #PV #LV #SN Attr VSize VFree vgroot 2 11 0 wz--n- 149.49g <74.26g [root@IUDR-SO-A ~]#</pre>
-----------	---	---

Oracle Communications User Data Repository Software Upgrade Procedure

7.	After step-6, reboot the instance	# <code>reboot</code>
8.	After reboot, create physical volume and extend the volume group using it	<p>Note: Once partition is done then create physical volum using pvcreate command but after reboot.</p> <pre># pvcreate <new physical volum name> Example: pvcreate /dev/vda3</pre> <pre># vgextend <vgname> <physical volume name> Example: vgextend vgroup /dev/vda3</pre> <div style="border: 1px solid black; background-color: #f0f0f0; padding: 5px;"> <pre>[root@OCUDR-DR-NOAMP-A admusr]# pvs PV VG Fmt Attr PSize PFree /dev/vda2 vgroup lvm2 a--u 399.47g 117.62g [root@OCUDR-DR-NOAMP-A admusr]# [root@OCUDR-DR-NOAMP-A admusr]# pvcreate /dev/vda3 Physical volume "/dev/vda3" successfully created [root@OCUDR-DR-NOAMP-A admusr]# [root@OCUDR-DR-NOAMP-A admusr]# vgextend vgroup /dev/vda3 Volume group "vgroup" successfully extended [root@OCUDR-DR-NOAMP-A admusr]# [root@OCUDR-DR-NOAMP-A admusr]# vgs VG #PV #LV #SN Attr VSize VFree vgroup 2 11 0 wz--n- 449.44g 167.59g [root@OCUDR-DR-NOAMP-A admusr]#</pre> </div> <p>Note: For knowledge.</p> <ul style="list-style-type: none"> • use vgs command to know the vg name • use fdisk -l /dev/vda command to know the partition name which we have created in above step.
THIS PROCEDURE HAS BEEN COMPLETED		

APPENDIX I. MY ORACLE SUPPORT (MOS)

MOS (<https://support.oracle.com>) is your initial point of contact for all product support and training needs. A representative at Customer Access Support (CAS) can assist you with MOS registration.

Call the CAS main number at **1-800-223-1711** (toll-free in the US), or call the Oracle Support hotline for your local country from the list at <http://www.oracle.com/us/support/contact/index.html>. When calling, make the selections in the sequence shown below on the Support telephone menu:

1. Select **2** for New Service Request
2. Select **3** for Hardware, Networking and Solaris Operating System Support
3. Select one of the following options:
 - For Technical issues such as creating a new Service Request (SR), Select **1**
 - For Non-technical issues such as registration or assistance with MOS, Select **2**

You will be connected to a live agent who can assist you with MOS registration and opening a support ticket.

MOS is available 24 hours a day, 7 days a week, 365 days a year.

APPENDIX J. LOCATE PRODUCT DOCUMENTATION ON THE ORACLE HELP CENTER SITE

Oracle Communications customer documentation is available on the web at the Oracle Help Center (OHC) site, <http://docs.oracle.com>. You do not have to register to access these documents. Viewing these files requires Adobe Acrobat Reader, which can be downloaded at <http://www.adobe.com>.

1. Log into the Oracle Technology Network site at <http://docs.oracle.com>.
2. Select the tab “Find a product”
3. Type “User Data Repository”
4. Takes you to “CGBU Documentation”.
A list of the entire documentation set for the selected product and release appears.
5. Select “User Data Repository” followed by version
6. To download a file to your location, right-click the **PDF** link, select **Save target as** (or similar command based on your browser), and save to a local folder.