Oracle® Communications Diameter Signaling Router

DSR RBAR Feature Activation Procedure Release 8.2

E88978 Revision 01

January 2018



Oracle Communications Diameter Signaling Router RBAR Feature Activation Procedure, Release 8.2.

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Change History

Date	Version	Author	Description	Approved (Yes/No)
12/04/2014	0.1	K. Olschner	New Oracle part number formatting changed to reflect Customer facing.	No
12/16/2014	0.7	K. Olschner	Changes after review comments	Yes
02/10/2015	1.0	K. Olschner	Correcting changes related to feature activation/deactivation in regards to spare SOAM topologies	Yes
05/27/2015	0.1	K. Olschner	DSR 7.1 changes, new revision	No
06/22/2015	0.4	K. Olschner	Changes after review + bug 20982658	Yes
09/28/2015	0.5	K. Olschner	DSR 7.2, No changes	Yes
06/09/2016	0.6	K. Olschner	DSR 7.3 , No changes	Yes
07/07/2016	0.7	K. Olschner	Copyright update	Yes
08/18/2016	0.8	K. Olschner	DSR 8.0, updated screenshots, new doc number	No
06/06/2017	0.9	Gurjeet Singh	8.1 No changes Draft	No
06/19/2017	1.0	Gurjeet Singh	8.1 No changes Approved	Yes
07/14/2017	1.1	J. Carlino	Format, Edit, and Post to OTN	Yes
10/04/2017	1.2	Pallavi Manikere	Initial draft for DSR 8.2	No
10/23/2017	1.3	Pallavi Manikere	Review comments incorporated	No
11/14/2017	1.4	Pallavi Manikere	Approved	Yes
11/30/2017	1.5	J. Carlino	Post to OHC for DSR version 8.2	Yes

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1. Introduction

1.1 Purpose and Scope

This document defines the procedure that is executed to activate the Range-Based Address Resolution (RBAR) feature on a DSR network element (NE). This procedure may be run either 1) as part of a new DSR installation, after the standard DSR installation is complete, but before the NE is in service, or 2) on an in-service DSR NE, where the RBAR feature is activated during a planned maintenance window to minimize the impact to network traffic.

This document also provides a procedure to deactivate RBAR after it has been activated. Please see Section 6 for a discussion of deactivation.

No additional software installation is required before executing this procedure. The standard DSR installation procedure has loaded all of the required software, even if the RBAR feature is activated at a later time.

1.2 Acronyms

An alphabetized list of acronyms used in the document.

Table 1. Acronyms

Acronym	Definition
BNS	Broadband Networking Solutions
DA-MP	Diameter Agent Message Processor
DB	Database
DSR	Diameter Signaling Router
FOA	First Office Application
GUI	Graphical User Interface
НА	High Availability
IMI	Internal Management Interface
IP	Internet Protocol
MP	Message Processing or Message Processor
NE	Network Element
NO	Network OAM
NOAM	Network OAM
OAM	Operations, Administration and Maintenance
RBAR	Range-Based Address Resolution
SOAM	System OAM
SSH	Secure Shell
UI	User Interface
VIP	Virtual IP
VPN	Virtual Private Network
XMI	External Management Interface

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1.3 Terminology

Table 2. Terminology

Term	Definition
Communication Agent	An EXG common infrastructure component delivered as part of a common plug-in that uses the COMCOL MX framework in support of communicating Stack Events between EXG application processes on different servers.
ComAgent	Same as Communication Agent

1.4 General Procedure Step Format

Where it is necessary to identify the server explicitly on which a particular step is to be taken, the server name is given in the title box for the step (e.g., "ServerX" in Figure 1. Example of a Procedure Step).

Each step has a checkbox for every command within the step that the technician should check to keep track of the progress of the procedure.

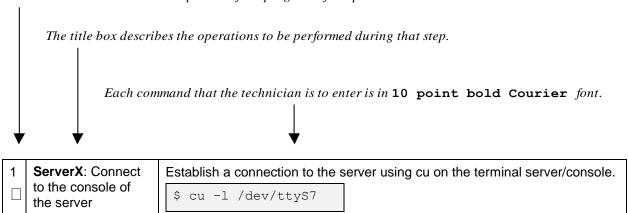


Figure 1. Example of a Procedure Step

2. Feature Activation Overview

This section lists the required materials and information needed to execute the feature activation. In addition, Table 3. Pre-Feature Activation Overview through Table 8. Post-Feature Deactivation Overview provide estimates of the time required to execute the procedure. These tables can be used to estimate the total time necessary to complete the feature activation. The timing values shown are estimates only – use these tables to plan the timing of the activation, **not** to execute the procedure. The detailed procedure steps to be executed begin in Section 5.

2.1 Definition of Activation for the RBAR Feature

The precise meaning of activation varies from feature to feature. This section briefly defines what activation means with respect to the RBAR feature.

All software required to run RBAR is available by default as part of a DSR release installation or upgrade. The process of activating the feature simply makes proper use of software elements and file system files that are already present, to change the behavior of the DSR NE.

Before RBAR feature activation, there are no RBAR menu items visible on the SOAM GUI, and there is no RBAR-related processing taking place on the DA-MP(s).

After feature activation, all selectable RBAR-related menu items are present on the SOAM GUI, allowing full RBAR configuration and provisioning. Specifically, the top-level RBAR folder is visible on the Main

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Menu, and a new entry is added to the **Diameter -> Maintenance -> Applications** table, showing RBAR and its state. After activation, the DA-MP(s) are prepared to act on RBAR configuration and provisioning information entered at and replicated from the NOAM.

Important: Once the RBAR feature is activated, it is not automatically enabled. Activation simply means the mechanism for provisioning RBAR behavior is in place. But the DA-MP(s) accepts and acts on RBAR provisioning information only after RBAR has been enabled (via the Diameter -> Maintenance -> Applications screen). RBAR should not be enabled until after the appropriate provisioning data has been entered. RBAR provisioning is beyond the scope of this document.

2.2 Feature Activation Overview

2.2.1 Pre-Feature Activation Overview

The pre-activation procedures shown in the following table may be executed outside a maintenance window if desired. Procedure completion times shown here are estimates. Times may vary due to differences in database size, network configuration and loading, user experience, and user preparation.

	Elapsed Time (Hours:Minutes)			
Procedure	This Step	Cum.	Activity Feature Activation Preparation	Impact
System Topology	0:20	0:20	Verify Network Element Configuration data.	
Check (Procedure 1)			Verify System Group Configuration data.	None
(Flocedule 1)			Analyze and plan DA-MP restart sequence.	
Perform Health	0:05	0.25	Verify DSR release.	
Check (Procedure 2)			Verify server status.	None
(110000010 2)			Log all current alarms.	

Table 3. Pre-Feature Activation Overview

2.2.2 Feature Activation Execution Overview

The procedures shown in the following table are executed inside a single maintenance window. Procedure completion times shown here are estimates. Times may vary due to differences in database size, network configuration and loading, user experience, and user preparation.

	Elapsed Time (Hours:Minutes)			
Procedure	This Step	Cum.	Activity Feature Activation Execution	Impact
Perform Health	0:05	0:05	Verify DSR release.	
Check (Procedure 3)			Verify proper RBAR feature state.	
			Verify server status.	None
			Log all current alarms.	

Table 4. Feature Activation Execution Overview

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	Elapsed Time (Hours:Minutes)			
Procedure	This Step	Cum.	Activity Feature Activation Execution	Impact
Feature Activation	0:20	0:25	Log out of NOAM/SOAM GUI.	
(Procedure 4)			SSH to active NOAM.	
			Login as admusr.	
			Change directory to /usr/TKLC/dsr/prod/maint/loaders/	
			Execute the feature activation script.	
			Log into SOAM GUI	RBAR is
			Verify the RBAR Folder.	activated
			Restart each active DA-MP server.	
			Verify Maintenance screen.	
			Log into NOAM GUI.	
			Verify Maintenance screen.	
			Close SSH connections to NOAM.	

2.2.3 Post-Feature Activation Overview

The procedures shown in the following table are executed inside a maintenance window. Procedure completion times shown here are estimates. Times may vary due to differences in database size, network configuration and loading, user experience, and user preparation.

Table 5. Post-Feature Activation Overview

	Elapsed Time (Hours:Minutes) This Step Cum.		•		Impact	
Procedure			Completion			
Perform Health Check	0:05	0:05	Verify server status.	RBAR has been		
(Procedure 5)			Log all current alarms.	activated on DSR		

3. Feature Deactivation Overview

3.1 Pre-Feature Deactivation Overview

The procedures shown in the following table are executed inside a maintenance window. Deactivation procedure times are only estimates as the reason to execute a deactivation has a direct impact on any additional deactivation preparation that must be done. Times may vary due to differences in database size, network configuration and loading, user experience, and user preparation.

Table 6. Pre-Feature Deactivation Overview

	Elapsed Time (Hours:Minutes)			
Procedure	This Step	Cum.	Activity Deactivation Procedures	Impact
Perform Health Check	0:05	0:05	Verify DSR release.	
(Procedure 6)			Verify proper RBAR feature state.	
			Verify server status.	None
			Log current alarms.	

3.2 Feature Deactivation Execution Overview

The procedures shown in the following table are executed inside a maintenance window. Deactivation procedure times are only estimates as the reason to execute a deactivation has a direct impact on any additional deactivation preparation that must be done. Times may vary due to differences in database size, network configuration and loading, user experience, and user preparation.

Table 7. Feature Deactivation Overview

	Elapsed Time (Hours:Minutes)			
Procedure	This Step	Cum.	Activity Deactivation Procedures	Impact
Deactivation Setup	0:30	0:30	The reason to deactivate has a direct impact on any additional backout preparation that must be done. Since all possible reasons cannot be predicted ahead of time, only estimates are given here. Execution time will vary.	None

	Elapsed Time (Hours:Minutes)			
Procedure	This Step	Cum.	Activity Deactivation Procedures	Impact
Deactivation	00:20	0:50	Log out of active NOAM/SOAM GUI.	
(Procedure 7)			SSH into active NOAM.	
			Login as admusr	
			Change directory to /usr/TKLC/dsr/prod/maint/loaders/.	
			Execute the feature deactivation script.	RBAR is
			Log into NOAM or SOAM GUI.	deactivated
			Verify the RBAR folder.	
			Restart each active DA-MP server.	
			Log into NOAM GUI.	
			Verify Maintenance screen.	

3.3 Post-Feature Deactivation Overview

The procedures shown in the following table are executed inside a maintenance window. Deactivation procedure times are only estimates as the reason to execute a deactivation has a direct impact on any additional deactivation preparation that must be done. Times may vary due to differences in database size, network configuration and loading, user experience, and user preparation.

Table 8. Post-Feature Deactivation Overview

	Elapsed Time (H	ours:Minutes)	Activity Deactivation	
Procedure	This Step	Cum.	Procedures	Impact
Perform Health Check	0:05	0:05	Verify server status.	
(Procedure 8)			Log all current alarms.	None

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4. Feature Activation Preparation

This section provides detailed procedures to prepare a system for RBAR feature activation. These procedures are executed outside a maintenance window.

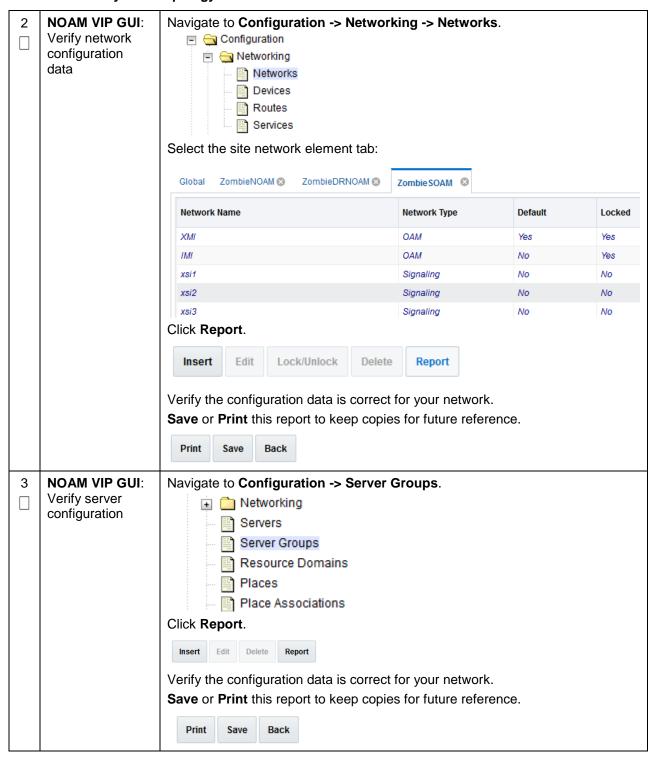
4.1 System Topology Check

This procedure is part of feature activation preparation and is used to verify the system topology of the DSR network and servers.

Procedure 1: System Topology Check

S	This procedure ver	s procedure verifies system topology.				
T	Check off $()$ each step as it is completed. Boxes have been provided for this purpose under each					
Е	•	step number.				
Р	If this procedure fa	is procedure fails, contact My Oracle Support (MOS) and ask for assistance.				
#						
1	NOAM VIP GUI: Login	Establish a GUI session on the NOAM server by using the VIP address of the NOAM server. Open the web browser and enter a URL of:				
		http:// <primary_noam_vip_ip_address></primary_noam_vip_ip_address>				
		Login as the <i>guiadmin</i> user:				
		ORACLE				
		Oracle System Login Mon Jul 11 13:59:37 2016 EDT				
		Log In Enter your username and password to log in Username: Password: Change password Log In				
		Welcome to the Oracle System Login.				
		This application is designed to work with most modern HTML5 compliant browsers and uses both JavaScript and cookies. Please refer to the <u>Oracle Software Web Browser Support Policy</u> for details.				
		Unauthorized access is prohibited.				
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Procedure 1: System Topology Check



Procedure 1: System Topology Check

4	Analyze and plan DA-MP restart sequence	Analyze system topology and plan for any DA-MPs which will be out-of-service during the feature activation sequence.	
		Analyze system topology gathered in Steps 2 and 3.	
		Determine exact sequence which DA-MP servers will be restarted (with the expected out-of-service periods).	
		Note : It is recommended that no more than 50% of the MPs be restarted at once.	

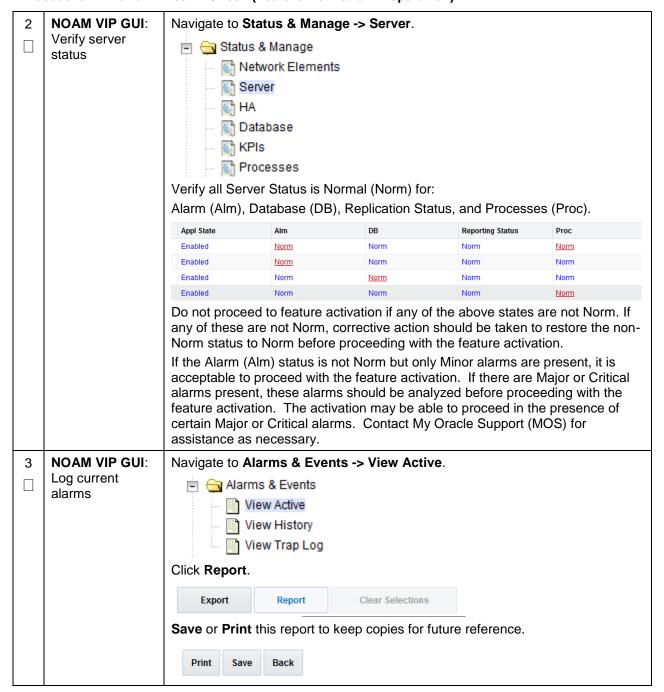
4.2 Perform Health Check

This procedure is part of feature activation preparation and is used to determine the health and status of the DSR release 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 before the start of the maintenance window in which the feature activation will take place.

Procedure 2: Perform Health Check (Feature Activation Preparation)

S T E P #	This procedure provides steps to perform needed health checks. Check off (√) each step as it is completed. Boxes have been provided for this purpose under each step number. If this procedure fails, contact My Oracle Support (MOS) and ask for assistance. NOAM VIP GUI: Establish a GUI session on the NOAM server by using the VIP address of the NOAM server. Open the web browser and enter a URL of:					
		http:// <primary_noam_vip_ip_address></primary_noam_vip_ip_address>				
		Login as the <i>guiadmin</i> user:				
		Coracle System Login Log In Enter your username and password to log in Username: Password: Change password Log In Welcome to the Oracle System Login. This application is designed to work with most modern HTML5 compliant browsers and uses both JavaScript and cookies. Please refer to the Oracle Software Web Browser Support Policy for details. Unauthorized access is prohibited.				

Procedure 2: Perform Health Check (Feature Activation Preparation)



5. Feature Activation

Before feature activation, perform the system health check in Section 4.2. This check ensures that the system is ready for feature activation. Performing the system health check determines which alarms are present in the system and if feature activation 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 feature activation process is started.

If alarms are present on the server, contact My Oracle Support (MOS) to diagnose those alarms and determine whether they need to be addressed or if it is safe to proceed with the feature activation.

Please read the following notes on feature activation procedures:

- 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 feature activation must initial each step. A check box should be provided. For
 procedures which are executed multiple times, the check box can be skipped, but the technician must
 initial each iteration the step is executed. The space on either side of the step number can be used
 (margin on left side or column on right side).
- Captured data is required for future support reference.

5.1 Pre-Activation Procedures

5.1.1 Perform Health Check

This procedure is used to determine the health and status of the network and servers. This must be executed at the start of every maintenance window.

Note: The Health Check procedure below is the same as the Health Check procedure described in Section 4.2 when preparing for feature activation, but it is repeated here to emphasize that it is being re-executed if Section 4.2 was performed outside the maintenance window.

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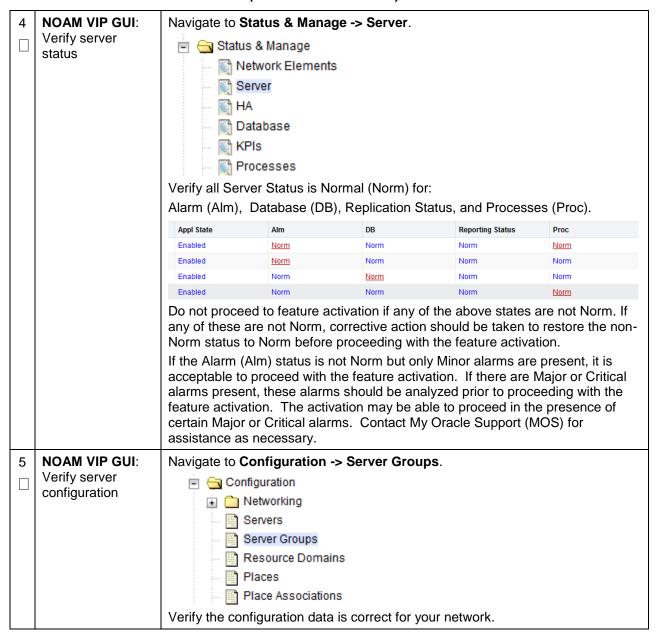
Procedure 3: Perform Health Check (Pre Feature Activation)

S	This procedure performs needed health checks.						
T E	Check off (√) each s step number.	step as it is completed. Boxes have been provided for this purpose under each					
P	If this procedure fails	s, contact My Oracle Support (MOS) and ask for assistance.					
#							
1	SOAM VIP GUI: Login	Establish a GUI session on the SOAM server by using the VIP address of the SOAM server. Open the web browser and enter a URL of:					
		http:// <primary_soam_vip_ip_address></primary_soam_vip_ip_address>					
		Login as the <i>guiadmin</i> user:					
		ORACLE°					
		Oracle System Login Mon Jul 11 13:59:37 2016 EDT					
		Log In Enter your username and password to log in Username:					
		Password:					
		Change password					
		Log In					
		Welcome to the Oracle System Login.					
		This application is designed to work with most modern HTML5 compliant browsers and uses both JavaScript and cookies. Please refer to the Oracle Software Web Browser Support Policy for details.					
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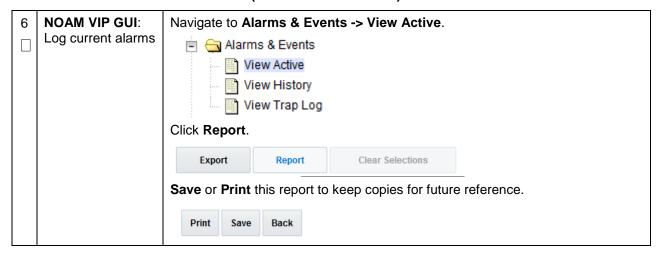
Procedure 3: Perform Health Check (Pre Feature Activation)

2	NOAM VIP GUI:	Under Main Menu , verify the RBAR folder is NOT present.		
	Verify RBAR	- 💂 Main Menu		
	folder is not present	Administration		
	p. 555	→ Configuration		
		Alarms & Events		
		Measurements		
		Communication Agent		
		<u> </u> <u>□</u> Diameter		
		. ■ SBR		
		→ 🏈 Help		
		Legal Notices		
3	NOAM VIP GUI:	Establish a GUI session on the NOAM server by using the VIP address of the		
	Login	NOAM server. Open the web browser and enter a URL of:		
		http:// <primary_noam_vip_ip_address></primary_noam_vip_ip_address>		
		Login on the guindmin upor:		
		Login as the <i>guiadmin</i> user:		
		ORACLE°		
		CIEACEC		
		Oracle System Login		
		Mon Jul 11 13:59:37 2016 EDT		
		Log In		
		Enter your username and password to log in		
		Enter your username and password to log in		
		Enter your username and password to log in Username:		
		Enter your username and password to log in Username: Password: Change password		
		Enter your username and password to log in Username: Password:		
		Enter your username and password to log in Username: Password: Change password Log In		
		Enter your username and password to log in Username: Password: Change password		
		Enter your username and password to log in Username: Password: Change password Log In Welcome to the Oracle System Login.		

Procedure 3: Perform Health Check (Pre Feature Activation)



Procedure 3: Perform Health Check (Pre Feature Activation)



5.2 Activation Procedures

This section provides the detailed procedure steps of the feature activation execution. These procedures are executed inside a maintenance window.

5.2.1 Feature Activation

Detailed steps for RBAR feature activation are provided in this procedure.

Procedure 4: Feature Activation

S	This procedure activates RBAR.				
T E	Check off $()$ each step as it is completed. Boxes have been provided for this purpose under each step number.				
P #	If this procedure fails, contact My Oracle Support (MOS) and ask for assistance.				
1	NOAM/SOAM VIP GUI: Logout	Logout of any active NOAM and/or SOAM GUI sessions: Pause Updates Help Logged in Account guiadmin Log Out Fri Aug 12 13:13:00 2016 EDT			
2	NOAM VIP: Establish an SSH session	Establish an SSH session to the NOAM VIP. Login as <i>admusr</i> .			
3	NOAM VIP: Navigate to the feature activation directory	Navigate to the feature activation directory by executing the following command: \$ cd /usr/TKLC/dsr/prod/maint/loaders/			

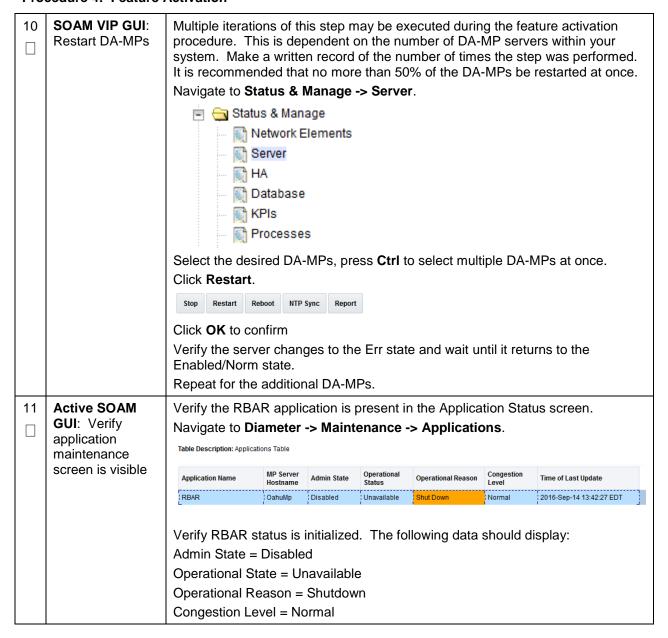
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5	Active SOAM GUI: Login	Establish a GUI session on the active SOAM server by using IP address of the SOAM server. Open the web browser and enter a URL of:				
	http:// <active_soam_ip_address></active_soam_ip_address>					
		Login as the <i>guiadmin</i> user:				
		Oracle System Login Mon Jul 11 13:59:37 2016 EDT				
		Log In Enter your username and password to log in				
		Username: Password:				
		Change password Log In				
		Welcome to the Oracle System Login.				
		This application is designed to work with most modern HTML5 compliant browsers and uses both JavaScript and cookies. Please refer to the Oracle Software Web Browser Support Policy for details.				
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6	Active SOAM GUI: Verify the RBAR folder is visible	Locate and verify the RBAR folder from the Main Menu is visible and the configuration folder items are present. RBAR Configuration Applications Exceptions Destinations Address Tables Address Resolutions System Options				

7 □	Active SOAM GUI: Verify	Verify the RBAR application is present in the Application Status screen. Navigate to Diameter -> Maintenance -> Applications .					
	application maintenance		ZombieDAM Disabled	Unk	Unk	Unk	Unk
	screen is visible	RBAR	ZombieDAM Disabled	Unk	Unk	Unk	Unk
		Verify RBAR st Admin State = Operational Sta Operational Re Congestion Lev	Disabled ate = Unk ason =Unk	lized. The	e following da	ita should	l display:
8	Standby SOAM GUI: Repeat verification steps			the stand	by SOAM diff		he active SOAM,
9	SOAM VIP GUI: Login	Establish a GU SOAM server.					P address of the
		http:// <pr< th=""><th>imary_SOAM_</th><th>VIP_IP_</th><th>Address></th><th></th><th></th></pr<>	imary_SOAM_	VIP_IP_	Address>		
		Login as the <i>gu</i>	<i>uiadmin</i> user:				
		Oracle Syster		// / //			l 13:59:37 2016 EDT
			1	Username: Password:	nd password to	log in	
		and cod	s designed to work wit okies. Please refer to t Un e and Java are registe	n most modern ne <u>Oracle Softw</u> authorized acce red trademarks ay be trademar	cle System Login. HTML5 compliant by are Web Browser Stress is prohibited. of Oracle Corporations of their respectives.	upport Policy fo on and/or its a e owners.	or details.



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5.3 Post-Activation Procedures

5.3.1 Perform Health Check

This procedure is used to determine the health and status of the DSR release network and servers.

Procedure 5: Perform Health Check (Post-Feature Activation)

S	This procedure perfo	forms a post activation health check.				
T E	Check off $()$ each step number.	step as it is completed. Boxes have been provided for this purpose under each				
Р	If this procedure fails	s, contact My Oracle Support (MOS) and ask for assistance.				
#						
1	NOAM VIP GUI: Login	Establish a GUI session on the NOAM server by using the VIP address of the NOAM server. Open the web browser and enter a URL of: http:// <primary_noam_vip_ip_address> Login as the <i>guiadmin</i> user:</primary_noam_vip_ip_address>				
		ORACLE® Oracle System Login				
		Mon Jul 11 13:59:37 2016 EDT				
		Log In Enter your username and password to log in Username: Password: Change password Log In Welcome to the Oracle System Login. This application is designed to work with most modern HTML5 compliant browsers and uses both JavaScript and cookies. Please refer to the Oracle Software Web Browser Support Policy for details. Unauthorized access is prohibited. Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates.				
		Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners. Copyright © 2010, 2016, Oracle and/or its affiliates. All rights reserved.				
		Copyright 9 2010, 2010, <u>viaute</u> and/or to annated. An righto reserved.				

NOAM VIP GUI: Navigate to Status & Manage -> Server. Verify server Status & Manage status Network Elements Server HA Database Processes Verify all Server Status is Normal (Norm) for: Alarm (Alm), Database (DB), Replication Status, and Processes (Proc). Appl State Reporting Status Proc Enabled Norm Norm Norm Norm Enabled Norm Norm Norm Norm Enabled Norm Norm Norm Enabled Norm Norm <u>Norm</u> 3 **NOAM VIP GUI:** Navigate to Alarms & Events -> View Active. Log current alarms 😑 😋 Alarms & Events View Active View History View Trap Log Click Report. Export Report Clear Selections Save or Print this report to keep copies for future reference. **Print** Save Back

Procedure 5: Perform Health Check (Post-Feature Activation)

6. Feature Deactivation

Execute this section only if there is a problem and it is desired to revert back to the pre-activation version of the software. In general, as long as there are no Application Routing Rules using the RBAR application, it will have no impact on the system and does not need to be deactivated. The deactivation procedure will cause all the RBAR related configuration data to be removed. The crafts person must ensure that this is acceptable.

Contact My Oracle Support (MOS) if needed.

Compare this alarm report with those gathered in the pre-activation procedures.

6.1 Pre-Deactivation Procedures

Before beginning the feature deactivation, complete the Pre-Deactivation procedure below.

6.1.1 Perform Health Check

This procedure is used to determine the health and status of the DSR network and servers.

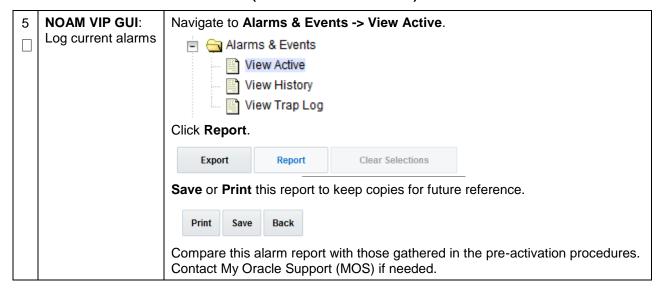
Procedure 6: Perform Health Check (Pre-Feature Deactivation)

S	This procedure perfo	his procedure performs a health check.					
T E	Check off $()$ each step as it is completed. Boxes have been provided for this purpose under each step number.						
P	If this procedure fails	If this procedure fails, contact My Oracle Support (MOS) and ask for assistance.					
#							
1	SOAM VIP GUI: Login	Establish a GUI session on the SOAM server by using the VIP address of the SOAM server. Open the web browser and enter a URL of:					
]		http:// <primary_soam_vip_ip_address></primary_soam_vip_ip_address>					
		Login as the <i>guiadmin</i> user:					
		ORACLE°					
		Oracle System Login Mon Jul 11 13:59:37 2016 EDT					
2	SOAM VIP GUI: Verify the RBAR	Locate and verify the RBAR folder from Main Menu is visible and the configuration folder items are present.					
Ш	folder is visible	□ 🖕 RBAR					
		☐ ☐ Configuration ☐ Applications					
		Exceptions					
		Destinations Address Tables					
		Addresses					
		Address Resolutions System Options					
		Note : It should only be present after feature activation, so if it is not present, then the feature is already deactivated and there is no need to complete this deactivation procedure.					

Procedure 6: Perform Health Check (Pre-Feature Deactivation)

Login	Establish a GUI session on the NOAM server by using the VIP address of the NOAM server. Open the web browser and enter a URL of:				
	http:// <primary_noam_vip_ip_address></primary_noam_vip_ip_address>				
	Login as the g		RAC	L e ®	
	Oracle Syste	icle System Login Mon Jul 11 13:59:37 20:			3:59:37 2016 EDT
				sword to log in	
			Password:		
			Change p	assword	
	Welcome to the Oracle System Login.				
	This application is designed to work with most modern HTML5 compliant browsers and uses both JavaScript and cookies. Please refer to the <u>Oracle Software Web Browser Support Policy</u> for details.				
	Unauthorized access is prohibited.				
	Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners. Copyright © 2010, 2016, Oracle and/or its affiliates. All rights reserved.				
NOAM VIP GUI: Verify server status	Status Ne	s & Manage etwork Elements erver atabase Pls ocesses eer Status is No	rmal (Norm) for:	tus, and Processe	es (Proc).
	Appl State	Alm	DB	Reporting Status	Proc
	Enabled	Norm	Norm	Norm	Norm
		Norm Norm			Norm
	Enabled	Norm	Norm	Norm	Norm
	NOAM VIP GUI: Verify server	NOAM VIP GUI: Verify server status Navigate to Status Status New York Noam VIP GUI: Verify server status Navigate to Status	Dracle System Login Oracle System Login Enter your Oracle and Java are registed Other names in Copyright © 2010, 2 NOAM VIP GUI: Verify server status Navigate to Status & Manage Network Elements Server HA Database KPIs Processes Verify all Server Status is No Alarm (Alm), Database (DB) Appl State Enabled Norm Enabled Enabled Enabled Norm Enabled Enabl	Login as the guiadmin user: Cracle System Login Log In Enter your username and pass Username: Password: Change p Log In Enter your derivation is designed to work with most modern HTML5 cand cookies. Please refer to the Oracle System Unauthorized access is profused in the Oracle and Java are registered trademarks of Oracle Other names may be trademarks of their Copyright 2010, 2016, Oracle and/or its affilial NoAM VIP GUI: Verify server status NoAM VIP GUI: Verify server Status & Manage Network Elements Server HA Database KPIs Processes Verify all Server Status is Normal (Norm) for: Alarm (Alm), Database (DB), Replication Stat Appl State Alm DB Enabled Norm Norm Norm Norm Norm Norm Norm Norm	Login as the guiadmin user: Cracle System Login Intervour username and password to log in Username: Password: Change password Log In Enter your username and password to log in Username: Password: Change password Log In Welcome to the Oracle System Login. This application is designed to work with most modern HTMLS compliant browsers and use and cookies. Please refer to the Oracle Solvane Web Browser Support Policy for the Oracle Solvane Web Browser Support Policy for the Oracle Advance and Java are registered trademarks of Oracle Corporation and/or its affiliates. All rights reserved. NOAM VIP GUI: Verify server status & Manage -> Server. Noam Server HA Database KPIs Processes Verify all Server Status is Normal (Norm) for: Alarm (Alm), Database (DB), Replication Status, and Processes Verify all Server Status is Normal (Norm) Norm Alarm (Alm), Database (DB), Replication Status, and Processes Appl State Alam DB Reporting Status Rom Norm No

Procedure 6: Perform Health Check (Pre-Feature Deactivation)



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6.2 Deactivation Procedures

6.2.1 Feature Deactivation

This section provides the detailed steps of the RBAR deactivation procedures.

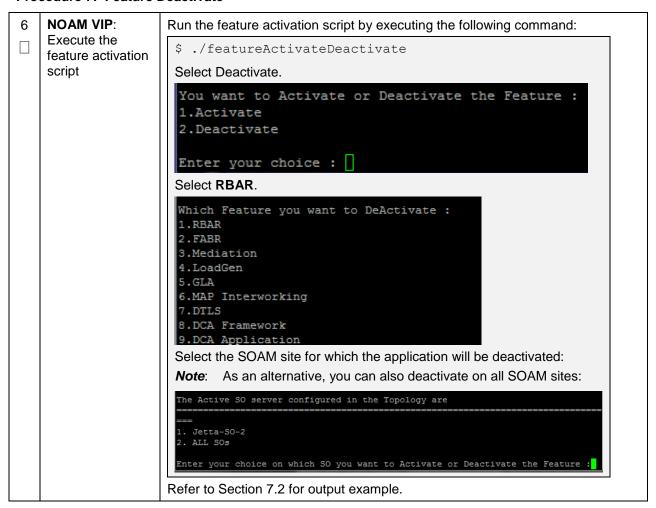
Procedure 7: Feature Deactivate

S	This procedure dea	activates RBAR.
Т		step as it is completed. Boxes have been provided for this purpose under each
Е	step number.	
Р	If this procedure fa	ils, contact My Oracle Support (MOS) and ask for assistance.
#		
1 □	SOAM VIP GUI: Login	Establish a GUI session on the SOAM server by using the VIP address of the SOAM server. Open the web browser and enter a URL of:
		http:// <primary_soam_vip_ip_address></primary_soam_vip_ip_address>
		Login as the <i>guiadmin</i> user:
		Oracle System Login Log In Enter your username and password to log in Username: Password: Change password Log In Welcome to the Oracle System Login.

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2	Active SOAM	Navigate to Diameter -> Maintenance -> Applications .
	GUI: Disable	□ 🔁 Diameter
	RBAR application	
		☐ 🦕 Maintenance
		Route Lists
		Route Groups
		Peer Nodes
		Connections
		— \iint Egress Throttle Groups
		- Machine Applications
		→ 👸 DA-MPs
		Peer Discovery
		Signaling Firewall
		Traffic Throttle Points
		Traffic Throttle Groups
		Select the RBAR applications to disable.
		Click Disable .
		Enable Disable Pause updates
		Click OK to confirm.
		Click OR to commit.
		Table Description: Applications Table
		Application Name MP Server Admin State Operational Operational Peacen Congestion Time of Lect Undate
		Hostname Hostname Status Operational Reason Level
		RBAR OahuMp Disabled Unavailable Shut Down Normal 2016-Sep-14 13:47:39 EDT
3	NOAM/SOAM	Logout of any active NOAM and/or SOAM GUI sessions:
3	VIP GUI: Logout	
	VII GOI. Logout	Pause Updates Help Logged in Account guiadmin 💌 Log Out
		Tue Aug 16 10:13:52 2016 EDT
4	NOAM VIP:	Establish an SSH session to the NOAM VIP. Login as admusr.
	Establish an SSH	
	session	
5	NOAM VIP:	Navigate to the feature activation directory by executing the following command:
_	Navigate to the	
	feature activation	\$ cd /usr/TKLC/dsr/prod/maint/loaders/
1		
	directory	

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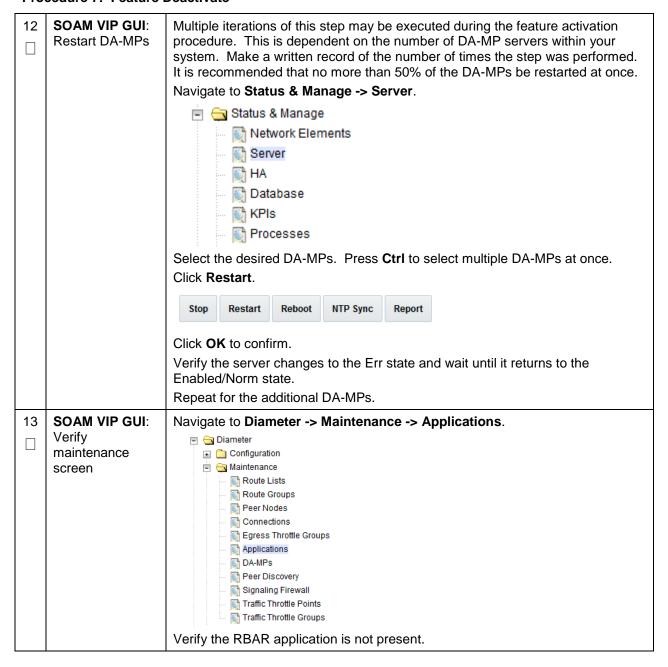
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7 □	Active SOAM GUI: Login	Establish a GUI session on the active SOAM server by using IP address of the SOAM server. Open the web browser and enter a URL of:	
		http:// <active_soam_ip_address></active_soam_ip_address>	
		Login as the <i>guiadmin</i> user:	
		ORACLE	
		Oracle System Login Mon Jul 11 13:59:37 2016 EDT	
		Log In Enter your username and password to log in	
		Username:	
		Password:	
		Change password	
		Log In	
		Welcome to the Oracle System Login.	
		This application is designed to work with most modern HTML5 compliant browsers and uses both JavaScript and cookies. Please refer to the <u>Oracle Software Web Browser Support Policy</u> for details.	
		Unauthorized access is prohibited.	
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		Copyright © 2010, 2016, <u>Oracle</u> and/or its affiliates. All rights reserved.	
8	Active SOAM GUI: Verify the RBAR folder is not visible	Verify the RBAR folder is not visible under Main Menu.	
9	Standby SOAM	Repeat steps 7-8 for the standby SOAM.	
	GUI : Repeat verification steps	Note : If the verifications for the standby SOAM differ from the active SOAM, stop and contact My Oracle Support (MOS).	
10	Spare SOAM	Repeat steps 7-8 for any spare SOAMs present.	
	GUI : Verify and deactivate	Note : If the verifications for the standby SOAM differ from the active SOAM, stop and contact My Oracle Support (MOS).	

11	SOAM VIP GUI: Login	Establish a GUI session on the SOAM server by using the VIP address of the SOAM server. Open the web browser and enter a URL of:		
		http:// <primary_soam_vip_ip_address></primary_soam_vip_ip_address>		
		Login as the <i>guiadmin</i> user:		
		ORACLE°		
		Oracle System Login Mon Jul 11 13:59:37 2016 EDT		
		Log In Enter your username and password to log in		
		Username:		
		Password: Change password		
		Log In		
		Welcome to the Oracle System Login.		
		This application is designed to work with most modern HTML5 compliant browsers and uses both JavaScript and cookies. Please refer to the Oracle Software Web Browser Support Policy for details.		
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Procedure 7: Feature Deactivate



6.3 Post-Deactivation Procedures

To complete a deactivation, complete the Post-Deactivation by following the procedures in this chapter.

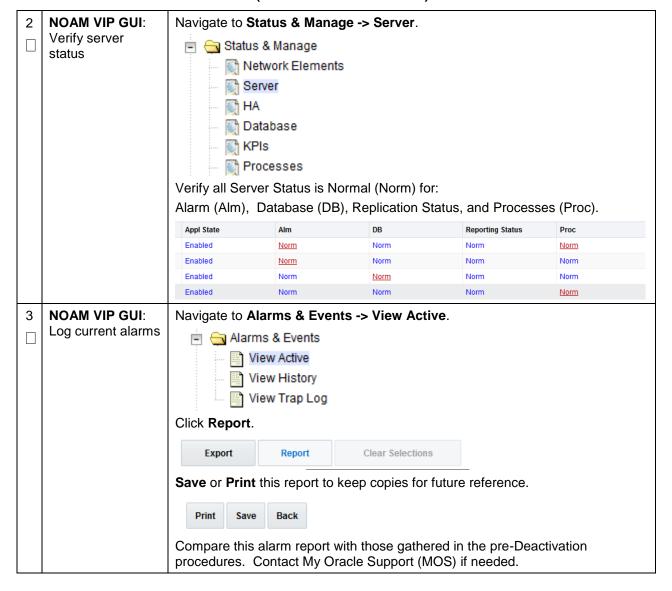
6.3.1 Perform Health Check

This procedure is used to determine the health and status of the network and servers.

Procedure 8: Perform Health Check (Post-Feature Deactivation)

S	This procedure perf	forms a post activation health check.
T	Check off (√) each s	step as it is completed. Boxes have been provided for this purpose under each
Ε	step number.	
Р	If this procedure fail	ls, contact My Oracle Support (MOS) and ask for assistance.
#		
1	NOAM VIP GUI: Login	Establish a GUI session on the NOAM server by using the VIP address of the NOAM server. Open the web browser and enter a URL of:
		http:// <primary_noam_vip_ip_address></primary_noam_vip_ip_address>
		Login as the <i>guiadmin</i> user:
		ORACLE
		Oracle System Login Mon Jul 11 13:59:37 2016 EDT
		Log In Enter your username and password to log in Username: Password: Change password Log In Welcome to the Oracle System Login. This application is designed to work with most modern HTML5 compliant browsers and uses both JavaScript and cookies. Please refer to the Oracle Software Web Browser Support Policy for details.
		Unauthorized access is prohibited.
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		Copyright © 2010, 2010, <u>Oracle</u> and/Orito allitidies. All rights reserved.

Procedure 8: Perform Health Check (Post-Feature Deactivation)



7. Engineering Notes

<u>FIPS integrity verification test failed</u>: You may see 'FIPs integrity verification test failed' message displayed during the activation/Deactivation output, this message is expected and harmless.

7.1 Sample Output of Activation (Active NOAM)

Run script to activate RBAR feature:
======================================
Execution of Activation/Deactivation Process Starts
Starting Activation/Deactivation process
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.rbarActivateAsourced script on NO1
Add RBAR KPI group
KPI Group=RBAR

Visibility=VIS_SO
- 11
Add RBAR Measurement groups
Mark Court Address Baselation Baselana
Meas_Group=Address Resolution Performance
Visibility=VIS_SO
Meas_Group=Address Resolution Exception
Visibility=VIS_SO
Add RBAR GUI Configuration Permissions.
appid=17
group_id=7000
group_name=RBAR Configuration Permissions
Starting to Execute the Loaders on Mate server
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.rbarActivateAsourced script on NO2

```
_____
FIPS integrity verification test failed.
KPI Group=RBAR
Visibility=VIS SO
_____
Meas Group=Address Resolution Performance
Visibility=VIS SO
_____
Meas Group=Address Resolution Exception
Visibility=VIS SO
______
Add RBAR GUI Configuration Permissions.
______
appid=17
group id=7000
group name=RBAR Configuration Permissions
_____
FIPS integrity verification test failed.
______
The Active SO server configured in the Topology are
______
1. SO1
2. ALL SOs
Enter your choice on which SO you want to Activate or Deactivate the Feature :1
______
This is a 3 Tier Setup , So run the B sourced loaders on SO server : SO1
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.rbarActivateBsourced script
on SO1
FIPS integrity verification test failed.
______
Current server is HA ACTIVE
______
Add RBAR to DsrApplication. If already present, do not update - display a
warning instead
_____
Verify that RBAR is in the table
id=3
name=RBAR
unavailableAction=ContinueRouting
```

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```
avpInsertion=Yes
shutdownMode=Forced
shutdownTimer=0
resultCode=3002
vendorId=0
errorString=RBAR Unavailable
resExhResultCode=3004
resExhVendorId=0
resExhErrorString=RBAR Resource Exhausted
routeListId=-1
realm=
fqdn=
mcl=0
______
Add Common DSR Application measurements for RBAR.
______
repgrp=DSR Application Exception
measid=10302
subgrp=
_____
repgrp=DSR Application Exception
measid=10303
subgrp=
_____
repgrp=DSR Application Performance
measid=10300
subgrp=
_____
repgrp=DSR Application Performance
measid=10301
subgrp=
_____
repgrp=DSR Application Performance
measid=10304
subgrp=
_____
repgrp=DSR Application Performance
measid=10305
subgrp=
```

```
_____
repgrp=DSR Application Performance
measid=10350
subgrp=
______
Add RBAR GUI Configuration Permissions.
______
_appid=17
group id=7000
group name=RBAR Configuration Permissions
_____
FIPS integrity verification test failed.
______
Executing the Loaders and Clearing Cache on Standby SO servers.
______
Starting to Execute the Loaders on Mate server
______
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.rbarActivateBsourced script
on SO2
______
FIPS integrity verification test failed.
______
Current server is HA STANDBY
______
Verify that RBAR is in the table
id=3
name=RBAR
unavailableAction=ContinueRouting
avpInsertion=Yes
shutdownMode=Forced
shutdownTimer=0
resultCode=3002
vendorId=0
errorString=RBAR Unavailable
resExhResultCode=3004
resExhVendorId=0
resExhErrorString=RBAR Resource Exhausted
routeListId=-1
realm=
```

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```
fqdn=
mcl=0
_____
Add Common DSR Application measurements for RBAR.
______
repgrp=DSR Application Exception
measid=10302
subgrp=
repgrp=DSR Application Exception
measid=10303
subgrp=
_____
repgrp=DSR Application Performance
measid=10300
subgrp=
_____
repgrp=DSR Application Performance
measid=10301
subgrp=
_____
repgrp=DSR Application Performance
measid=10304
subgrp=
_____
repgrp=DSR Application Performance
measid=10305
subgrp=
_____
repgrp=DSR Application Performance
measid=10350
subgrp=
______
Add RBAR GUI Configuration Permissions.
______
_appid=17
group id=7000
group_name=RBAR Configuration Permissions
______
```

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```
FIPS integrity verification test failed.

------

Do you want to activate/deactivate this feature on another System OAM Server[Y/N] : n

[admusr@NO1 loaders]$
```

7.2 Sample Output of De-Activation (Active NOAM)

Run script to deactivate RBAR feature:
======================================
Execution of Activation/Deactivation Process Starts
Starting Activation/Deactivation process
The Active SO server configured in the Topology are
1. SO1
2. ALL SOS
Enter your choice on which SO you want to Activate or Deactivate the Feature :1
Verifying feature is activated or not on SO1
FIPS integrity verification test failed.
RBAR is activated on SO1
Executing /usr/TKLC/dsr/prod/maint/loaders/deactivate/load.rbarDeactivateAsourced script on NO1
=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===
Removing RBAR GUI permissions.
=== deleted 1 records ===
Starting to Execute the Loaders on Mate server
Executing /usr/TKLC/dsr/prod/maint/loaders/deactivate/load.rbarDeactivateAsourced script on NO2

```
_____
FIPS integrity verification test failed.
_____
Removing RBAR GUI permissions.
______
 === deleted 1 records ===
FIPS integrity verification test failed.
This is a 3 Tier Setup , So run the B sourced loaders on SO server : SO1
Executing /usr/TKLC/dsr/prod/maint/loaders/deactivate/load.rbarDeactivateBsourced
script on SO1
FIPS integrity verification test failed.
______
Current server is HA ACTIVE
______
 === deleted 0 records ===
______
Verify there are no dsrAppId=3 [RBAR] entries
_____
 id priority
                       name
                                   action ansResultCode
errorMessage vendorId dsrAppId appRouteTableId gxPrimeRequest
birthTime
             mcl
             Gx_ART_Rule
                                RouteToAppl
                                             0
0
                     No 05/18/2015 16:28:13.000
      6
27
 === deleted 2 records ===
______
Verify dsrAppId=3 [RBAR] are not present in the DsrApplicationPerMp table
______
 === deleted 1 records ===
_______
Verify RBAR is not present in the DsrApplication table
______
 === deleted 1 records ===
 === deleted 1 records ===
```

```
Removing RBAR GUI permissions.
______
=== deleted 1 records ===
FIPS integrity verification test failed.
______
Executing the Loaders and Clearing Cache on Standby SO servers.
______
Starting to Execute the Loaders on Mate server
Executing /usr/TKLC/dsr/prod/maint/loaders/deactivate/load.rbarDeactivateBsourced
script on SO2
______
FIPS integrity verification test failed.
______
Current server is HA STANDBY
______
Verify there are no dsrAppId=3 [RBAR] entries
______
 id priority
                        name
                                   action ansResultCode
errorMessage vendorId dsrAppId appRouteTableId gxPrimeRequest
birthTime
              mcl
                    Gx ART Rule
                                              0
      1
                                RouteToAppl
                      No 05/18/2015 16:28:13.000
Ω
     6
27
______
Verify dsrAppId=3 [RBAR] are not present in the DsrApplicationPerMp table
_____
Verify RBAR is not present in the DsrApplication table
_____
 === deleted 1 records ===
 === deleted 1 records ===
______
Removing RBAR GUI permissions.
______
=== deleted 1 records ===
FIPS integrity verification test failed.
```

Do you want to activate/deactivate this feature on another System OAM Server[Y/N]: n

Appendix A. 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 are 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.