Oracle® Communications Diameter Signaling Router Release 5.1/6.0/7.0/7.1

DSR FABR Feature Activation Procedure **E58664 Revision 02**

August 2015



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See more information on MOS in the Appendix section.

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1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

This document defines the procedure that is executed to activate the Full-Address Based Resolution (FABR) 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 FABR feature is activated during a planned maintenance window to minimize the impact to network traffic.

This document also provides a procedure to deactivate FABR after it has been activated. Please see Section 3.0 for a discussion of deactivation.

Configuration of FABR and ComAgent following successful activation is beyond the scope of this document. After successful activation, the crafts person is expected to configure ComAgent and FABR in that order for proper operation of FABR by following [1].

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

1.2 REFERENCES

[1] Full Address Based Resolution (FABR) User's Guide), E53470

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1.3 ACRONYMS

Table 1. Acronyms

BNS	Broadband Networking Solutions
DA-MP	Diameter Agent Message Processor
DB	Database
DP	Data Processor
DSR	Diameter Signaling Router
FABR	Full-Address Based Resolution
FOA	First Office Application
GUI	Graphical User Interface
HA	High Availability
IMI	Internal Management Interface
IP	Internet Protocol
MP	Message Processing or Message Processor
NE	Network Element
NOAM	Network OAM
OAM	Operations, Administration and Maintenance
SDS	Subscriber Database Server
SOAM	System OAM
SSH	Secure Shell
UI	User Interface
VIP	Virtual IP
VPN	Virtual Private Network
XMI	External Management Interface

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1.4 TERMINOLOGY

Table 2. Terminology

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
SOAM System Operations and Maintenance	

1.5 GENERAL PROCEDURE STEP FORMAT

Where it is necessary to explicitly identify the server 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).

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.

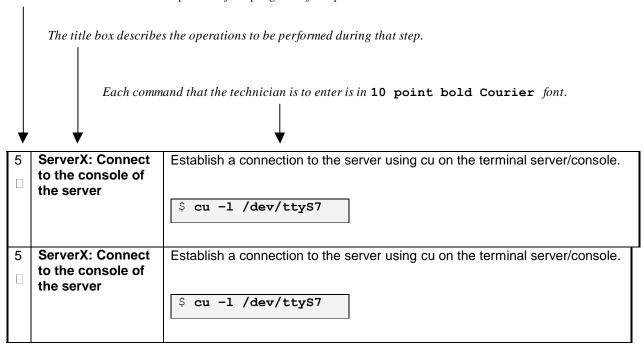


Figure 1. Example of a procedure step

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2.0 FEATURE ACTIVATION OVERVIEW

This section lists the required materials and information needed to execute the feature activation. In addition, Table 3 through Table 8 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 5.0.

2.1 DEFINITION OF ACTIVATION FOR THE FABR FEATURE

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

The main components of a FABR system include the FABR (DSR) application, the subscriber database (hosted by the DP/SDS system that supports one or more DPs), and finally the ComAgent which provides reliable connectivity and load sharing of multiple DP servers from FABR application.

ComAgent is a component which is also used by other features to enable connectivity to servers required by such features. Hence ComAgent, as a component, is not unique to FABR. However certain aspects of this component are utilized by FABR to provide connectivity to the DP servers. Configuration/provisioning of these aspects of ComAgent is beyond the scope of this document. However the activation procedure will initialize the ComAgent component in such a way that it will become possible to further configure/provision this component for use by FABR.

The configuration and setup of the DP/SDS is beyond the scope of this document, the configuration and setup of FABR (DSR) application and ComAgent (on DSR) post activation is beyond the scope of this document.

All software required to run FABR is available by default as part of a DSR release installation or upgrade (This includes the ComAgent libraries and GUI/OAM code required to configure communication with the subscriber database). 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.

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

All ComAgent-related menu items are present on the NOAM GUI, allowing full ComAgent configuration and provisioning. The ComAgent managed objects are under the "Communication Agent" folder on the GUI menu. For the ComAgent, this means that the top level "Communication Agent" folder is visible on the Main Menu, i.e., the ComAgent "Configuration" screens (Remote Servers, Connection Groups, and Routed Services), and the ComAgent "Maintenanence" screens (Connection Status, Routed Services Status, HA Services Status) are visible.

After feature activation, all selectable FABR menu items are present on the SOAM GUI, allowing full FABR configuration and provisioning. Specifically, for FABR application, the top-level FABR folder is visible on the Main Menu, and a new entry is added to the **Diameter->Maintenance->Applications** table, showing FABR and its state. , After successful feature activation, a Connection Group named "DpSvcGroup" will be added, to the Connection Groups screen, a Routed Service named "DpService" will be added to the Routed Services screen and will be mapped to use the "DpSvcGroup" Connection Group at default priority 10.

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After activation:

The DA-MP(s) are prepared to act on FABR and ComAgent configuration and provisioning information entered at and replication from the NOAM (in case of comAgent configuration/ provisioning) and SOAM (in case of FABR configuration/ provisioning).

Important: once the FABR feature is activated, it is not automatically enabled. Activation simply means the mechanism for provisioning FABR behavior is in place. But the DA-MP(s) will act on FABR provisioning information only after FABR has been enabled (via the Diameter->Maintenance->Applications screen). FABR should not be enabled until after the appropriate provisioning data has been entered. FABR provisioning is beyond the scope of this document. Further more, for proper operation of FABR, Communication Agent and FABR application assumes that the Remote Servers IP addresses are routable/reachable. However these networking setup/concerns are beyond the scope of the activation procedure.

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.

Procedure	(Ho	ed Time urs: utes)	Activity	Impact	
	This Step	Cum.	Feature Activation Preparation		
System Topology Check (Procedure 1)	0:00- 0:20	0:00- 0:20	 Verify Network Element Configuration data. Verify System Group Configuration data. Analyze and plan DA-MP restart sequence. 	None	
Perform Health Check (Procedure 2)	0:01- 0:05	0:21- 1:05	Verify DSR Release.Verify Server status.Log all current alarms.	None	

Table 3. Pre-Feature Activation Overview

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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.

Table 4. Feature Activation Execution Overview

Procedure	Elapsed Time (Hours: Minutes)		Activity	Impact
	This Step	Cum.	Feature Activation Execution	
Perform Health Check (Procedure 3)	0:01- 0:05	0:01- 0:05	 Verify DSR Release. Verify proper FABR feature state. Verify Server status. Log all current alarms. 	None
Feature Activation (Procedure 4)	0:10- 0:40	0:11- 0:50	Log out of NOAM/SOAM GUI. SSH to Active NOAM. Log in as admusr. Change directory to /usr/TKLC/dsr/prod/maint/loaders/. Execute the feature activation script. Log into SOAM GUI Verify the FABR Folder. Verify Maintenance screen. Log into NOAM GUI. Restart each active DA-MP server. Verify Maintenance screen. Close SSH connections to NOAM.	FABR is activated

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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

Procedure	(Ho	d Time urs: utes)	Activity	Impact
	This Step	Cum.	Feature Activation Completion	
Perform Health Check (Procedure 5)	0:01- 0:05	0:01- 0:05	Verify Server status.Log all current alarms.	FABR has been activated on DSR

3.0 FEATURE DEACTIVATION OVERVIEW

3.1.1 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

Procedure	(Hou	ed Time irs or utes)	Activity	Impact
	This Step	Cum.	Deactivation Procedures	
Perform Health	0:01-	0:01-	Verify DSR Release.	
Check (Procedure 6)	0:05	0:05	Verify proper FABR feature state.Verify server status.Log current alarms.	None

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3.1.2 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

Procedure	(Hou	ed Time ers or utes)	Activity	Impact
	This Step	Cum.	Deactivation Procedures	
Deactivation Setup	0:10- 0:30	0:10- 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
Deactivation (Procedure 7)	00:10- 00:40	0:20- 1:15	Log out of Active NOAM/SOAM GUI. SSH into active NOAM. Log in as admusr Change directory to /usr/TKLC/dsr/prod/maint/loaders/ Execute the feature deactivation script. Log into NOAM Or SOAM GUI Verify the FABR folder. Log into NOAM GUI Restart each active DA-MP server. Verify Maintenance screen.	FABR is deactivated

3.1.3 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

Procedure	(Hou	ed Time irs or utes)	Activity	Impact
	This Step	Cum.	Deactivation Procedures	
Perform Health Check (Procedure 8)	0:01- 0:05	0:01- 0:05	Verify Server status.Log all current alarms.	None

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4.0 FEATURE ACTIVATION PREPARATION

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

4.1 SYSTEM TOPOLOGY CHECK

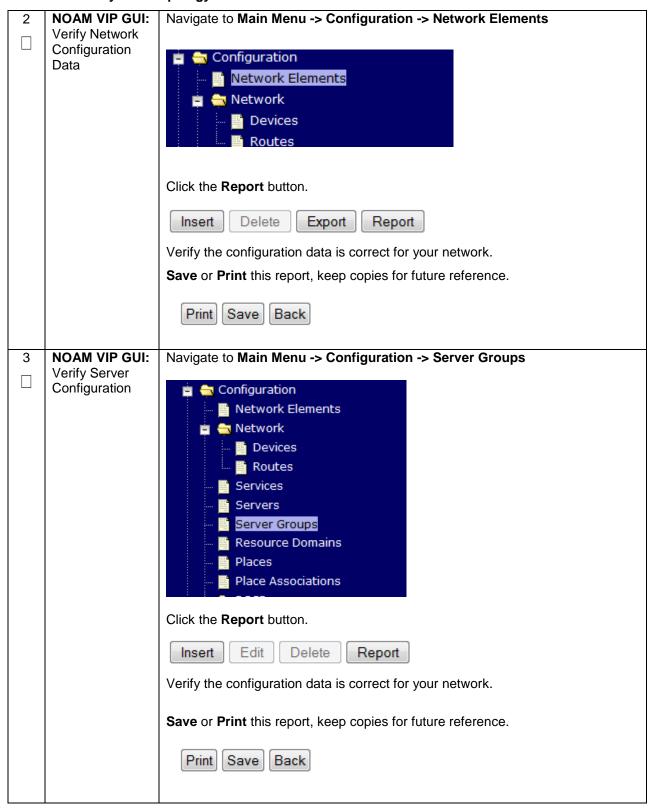
This procedure is part of feature activation preparation and is used to verify the system topology of the DSR network and servers.

Procedure 1: System Topology Check

S T E	This procedure ve	This procedure verifies System Topology.					
P #	Check off (√) each step number.	Check off $(\sqrt{)}$ each step as it is completed. Boxes have been provided for this purpose under each tep number.					
	·	ails, contact My <i>Oracle</i> Support (MOS), and ask for assistance.					
1	NOAM VIP GUI: Login	Establish a GUI session on the NOAM server by using the VIP IP address of the NOAM server. Open the web browser and enter a URL of: http:// <primary_noam_vip_ip_address> Login as the guiadmin user: Cracle System Login Fri Mar 20 12:29:52 2015 EDT Log In Enter your username and password to log in Username: guiadmin Password: Change password Log In Unauthorized access is prohibited. This Oracle System Login. Unauthorized access is prohibited. This Oracle system requires the use of Microsoft Internet Explorer 8.0, 9.0, or 10.0 with support for JavaScript and cookies. Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.</primary_noam_vip_ip_address>					

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Procedure 1: System Topology Check



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Procedure 1: System Topology Check

4	Analyze and plan DA-MP	Analyze system topology and plan for any DA-MPs which will be out-of-service during the feature activation sequence.
	restart 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.

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4.2 PERFORM HEALTH CHECK

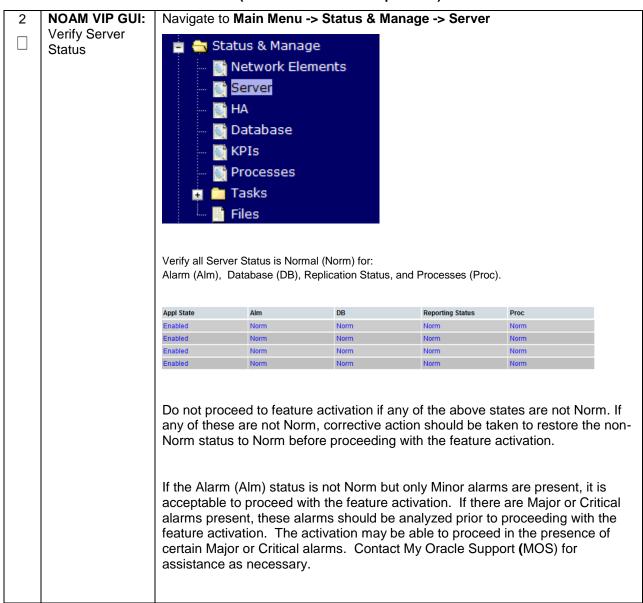
This procedure is part of feature activation preparation and is used to determine the health and status of the DSR release network and servers. This may be executed multiple times but must also be executed at least once within the time frame of 24-36 hours prior to the start of the maintenance window in which the feature activation will take place.

Procedure 2: Perform Health Check (Feature Activation Preparation)

S T E	This procedure provides steps to perform needed health checks.					
P #	Check off $(\sqrt{)}$ each step as it is completed. Boxes have been provided for this purpose under each step number.					
	If this procedure fa	ails, contact My Oracle Support (MOS), and ask for assistance.				
	NOAM VIP GUI: Login	Establish a GUI session on the NOAM server by using the VIP IP address of the NOAM server. Open the web browser and enter a URL of: http:// <primary_noam_vip_ip_address> Login as the guiadmin user: Cracle System Login Fri Mar 20 12:29:52 2015 EDT Log In Enter your username and password to log in Username: guiadmin Password: Change password Log In Username: guiadmin Password: Othen guiadmin Password: Change password Log In Unauthorized access is prohibited. This Oracle system requires the use of Microsoft Internet Explorer 8.0, 9.0, or 10.0 with support for JavaScript and cookies. Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of Oracle Corporation and/or its affiliates.</primary_noam_vip_ip_address>				
		Change password Log In Welcome to the Oracle System Login. Unauthorized access is prohibited. This Oracle system requires the use of Microsoft Internet Explorer 8.0, 9.0, or 10.0 with support for JavaScript and cookies. Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates.				

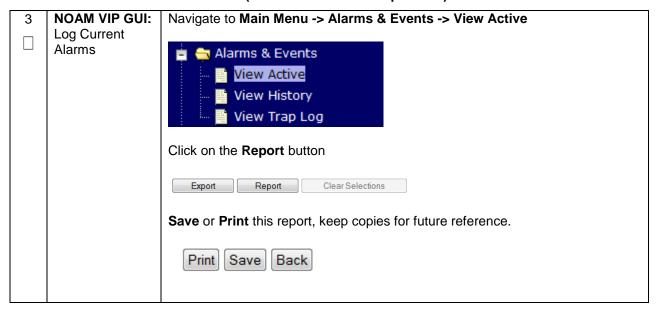
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Procedure 2: Perform Health Check (Feature Activation Preparation)



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Procedure 2: Perform Health Check (Feature Activation Preparation)



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5.0 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.

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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 reexecuted if Section 4.2 was performed outside the maintenance window.

Procedure 3: Perform Health Check (Pre Feature Activation)

S	This procedure pro	provides steps to perform needed health checks.				
E P #	Check off (√) each step number.	f ($$) each step as it is completed. Boxes have been provided for this purpose under each ber.				
	If this procedure fa	ails, 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 IP address of the SOAM server. Open the web browser and enter a URL of: http:// <primary_soam_vip_ip_address> Login as the guiadmin user: Cracle System Login Fri Mar 20 12:29:52 2015 EDT Log In Enter your username and password to log in Username: guiadmin Password: Change password Log In Username: guiadmin Password: Change password Unauthorized access is prohibited. This Oracle system requires the use of Microsoft Internet Explorer 8.0, 9.0, or 10.0 with support for JavaScript and cookies.</primary_soam_vip_ip_address>				
		Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.				
2	NOAM VIP GUI: Verify FABR Folder is not Present	Under Main Menu , verify the FABR folder is NOT present.				

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Procedure 3: Perform Health Check (Pre Feature Activation)

3	NOAM VIP GUI:				
	Login	Establish a GUI session on the NOAM server by using the VIP IP address of the			
		NOAM server. Open the web browser and enter a URL of:			
		http:///Primary NOAM VID ID Address			
		http:// <primary_noam_vip_ip_address></primary_noam_vip_ip_address>			
		Login as the <i>guiadmin</i> user:			
		Login as the guidantin user.			
		ORACLE"			
		CIRACLE			
		Oracle System Login Fri Mar 20 12:29:52 2015 EDT			
		Log In			
		Enter your username and password to log in			
		Username: guiadmin			
		Password: ••••••			
		☐ Change password			
		Log In			
		Welcome to the Oracle System Login.			
		Unauthorized access is prohibited. This Oracle system requires the use of Microsoft Internet Explorer 8.0, 9.0, or			
		10.0 with support for JavaScript and cookies.			
		Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.			
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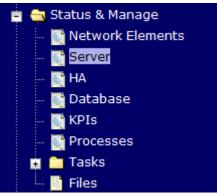
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Procedure 3: Perform Health Check (Pre Feature Activation)

4 NOAM VIP GUI: Naviga

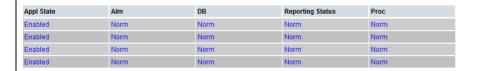
Status

Navigate to Main Menu -> Status & Manage -> Server



Verify all Server Status is Normal (Norm) for:

Alarm (Alm), Database (DB), Replication Status, and Processes (Proc).

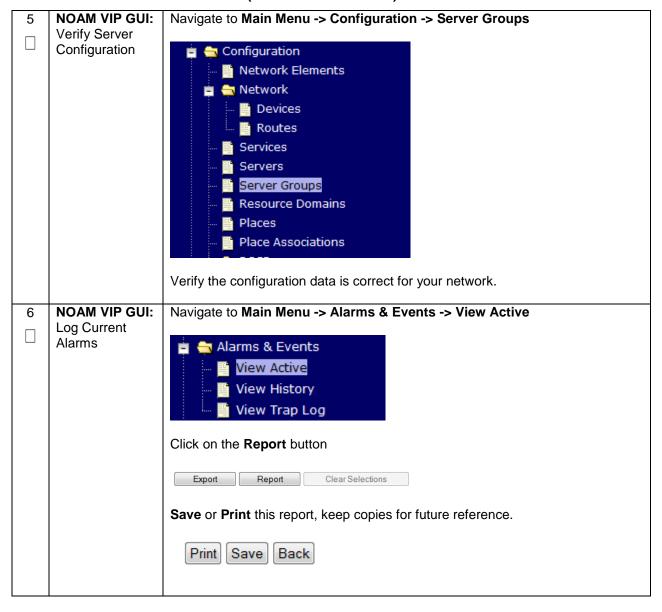


Do not proceed to feature activation if any of the above states are not Norm. If any of these are not Norm, corrective action should be taken to restore the non-Norm status to Norm before proceeding with the feature activation.

If the Alarm (Alm) status is not Norm but only Minor alarms are present, it is acceptable to proceed with the feature activation. If there are Major or Critical alarms present, these alarms should be analyzed prior to proceeding with the feature activation. The activation may be able to proceed in the presence of certain Major or Critical alarms. Contact My *Oracle* Support (MOS) for assistance as necessary.

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Procedure 3: Perform Health Check (Pre Feature Activation)



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5.1.2 Activation Procedures

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

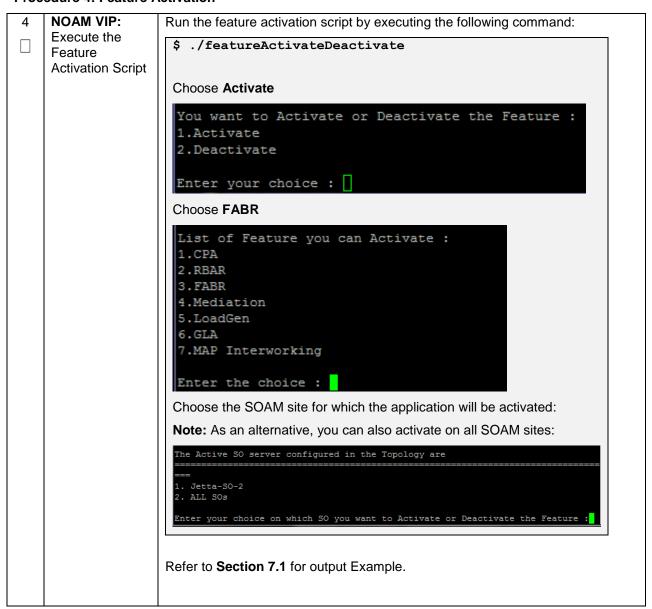
5.1.3 Feature Activation

Detailed steps for FABR feature activation are given in the procedure below.

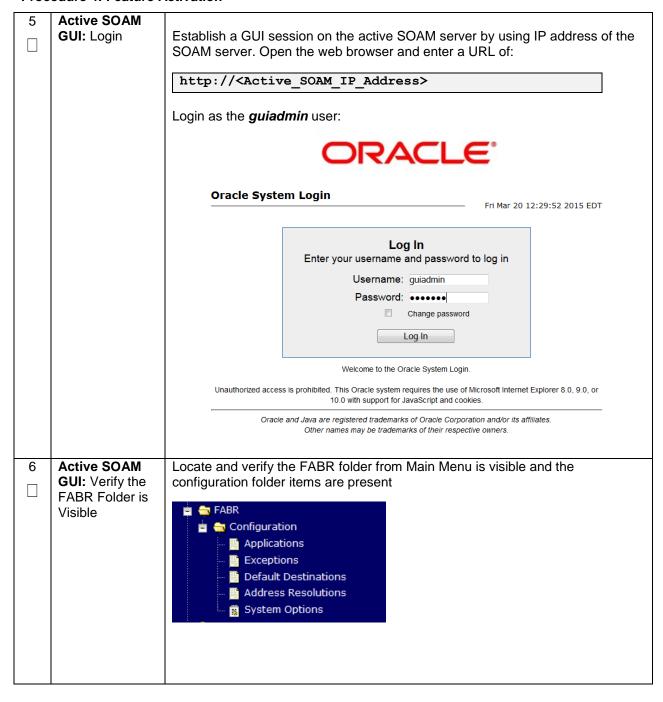
Procedure 4: Feature Activation

S T E P	This procedure provides steps to Activate FABR. Check off (1) each step as it is completed. Boxes have been provided for this purpose under each								
#	step number.								
	If this procedure fa	ails, 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:							
		Welcome guiadmin [Logout]							
		⊘ Help							
2	NOAM VIP:	Establish an SSH session to the NOAM VIP. Login as admusr.							
	Establish an SSH session								
3	NOAM VIP:	Navigate to the feature activation directory by executing the following command:							
	Navigate to the Feature	\$ cd /usr/TKLC/dsr/prod/maint/loaders/							
	Activation								
	Directory								

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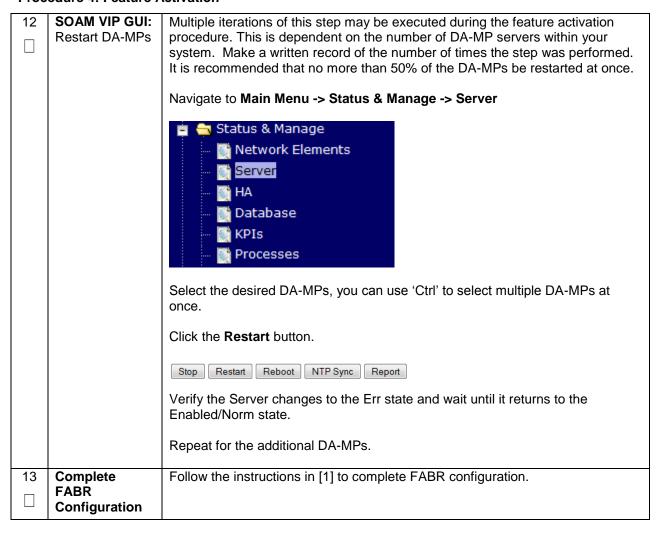
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7	Active SOAM GUI: Verify	Verify the FABR Application is present in the Application Status screen						
	Application Maintenance Navigate to Main Menu -> Diameter -> Maintenance -> Applications.				olications.			
	Screen is Visible	FABR	Jetta- DAMP-1	Disabled	Unk	Unk	Unk	Unk
		FABR	Jetta-DS-M	IP Disabled	Unk	Unk	Unk	Unk
		Verify FABR status is uninitialized. The following data should be displayed: Admin State = Disabled Operational State = Unk Operational Reason = Unk Congestion Level = Unk Select the the MP servers on which FABR is present, use [Ctrl] to select multiple servers at once. Click the Enable button Enable Disable Pause updates Note: If ComAgent remote server DP connections have not already been setup, you will receive the following Status after enabling:						
		FABR	Jetta- DAMP-2	Enabled	Unavailable	DP Service: Down	Normal	2015-May-27 10:11:20 EDT
		FABR	Jetta- DAMP-1	Enabled	Unavailable	DP Service: Down	Normal	2015-May-27 10:11:20 EDT
		Note: If not connections	-	one so, f	ollow [1] to	o configure tl	ne neede	ed ComAgent
8	Standby SOAM	Repeat Step	os 5-7 for	the Stan	dby SOAI	M		
	GUI: Repeat Verification Steps		verificatio	ns for the	e standby	SOAM differ	from the	e Active SOAM,
9	Spare SOAM GUI: Verify and	Repeat Step	os 5-7 for	any spa	re SOAMs	present.		
	Activate	For DSR 5.1 activate FAE				to run the fo	ollowing	command to
		Note: For D	SR 7.1, s	kip this s	tep.			
		\$ cd /118	r/ሞKT.C/	dsr/pr	od/maint	:/loaders/	/active	te
		\$./load		_			200114	

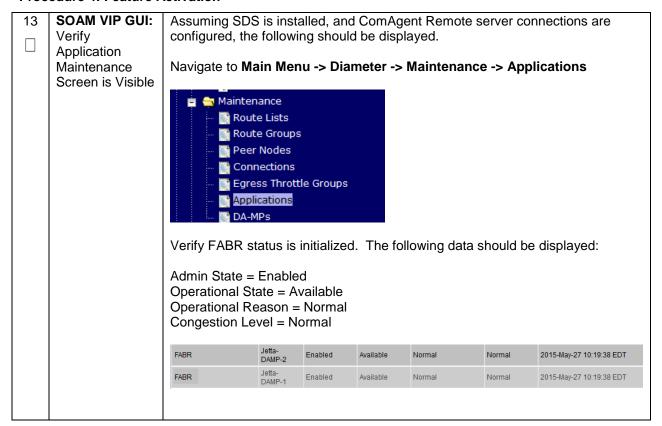
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10	SOAM VIP GUI:				
	Login	Establish a GUI session on the SOAM server by using the VIP IP address of the SOAM server. Open the web browser and enter a URL of:			
		http:// <primary_soam_vip_ip_address></primary_soam_vip_ip_address>			
		Login as the <i>guiadmin</i> user:			
		ORACLE"			
		Oracle System Login			
		Log In			
		Enter your username and password to log in			
		Username: guiadmin			
		Password: ••••••			
		☐ Change password			
		Log In			
		Log III			
		Welcome to the Oracle System Login.			
		Unauthorized access is prohibited. This Oracle system requires the use of Microsoft Internet Explorer 8.0, 9.0, or			
		10.0 with support for JavaScript and cookies.			
		Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates.			
		Other names may be trademarks of their respective owners.			

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5.2 POST-ACTIVATION PROCEDURES

5.2.1 Perform Health Check

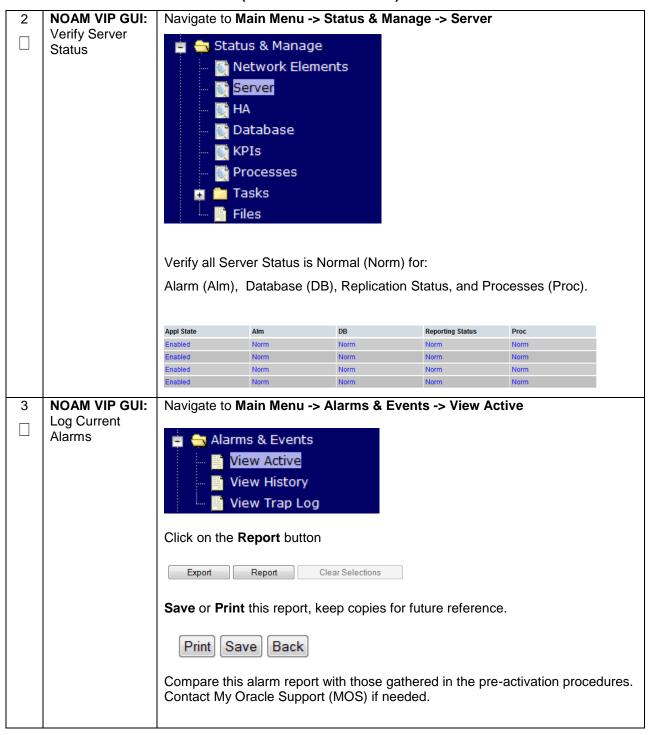
This procedure is used to determine the health and status of the DSR release network and servers.

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

S T E	This procedure pe	This procedure performs a post activation Health Check.					
P #	Check off (√) each step number.	Check off $(\sqrt{)}$ each step as it is completed. Boxes have been provided for this purpose under each step number.					
	·	If this procedure fails, contact My <i>Oracle</i> Support (MOS), and ask for assistance.					
1	NOAM VIP GUI: Login	Establish a GUI session on the NOAM server by using the VIP IP 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					
		Fri Mar 20 12:29:52 2015 EDT					
		l as la					
		Log In Enter your username and password to log in					
		Username: guiadmin					
		Password:					
		Change password					
		Log In					
		Welcome to the Oracle System Login.					
		Unauthorized access is prohibited. This Oracle system requires the use of Microsoft Internet Explorer 8.0, 9.0, or 10.0 with support for JavaScript and cookies.					
		Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.					

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



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6.0 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 FABR application, it will have no impact on the system and does not need to be deactivated. The deactivation procedure will cause all the FABR related configuration data (including the ComAgent DP service related configuration and Application Routing Rules using FABR) to be removed. The crafts person must ensure that this is acceptable.

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.

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6.2 DEACTIVATION PROCEDURES

6.2.1 Feature Deactivation

This section provides the detailed steps of the FABR de-activation procedures.

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

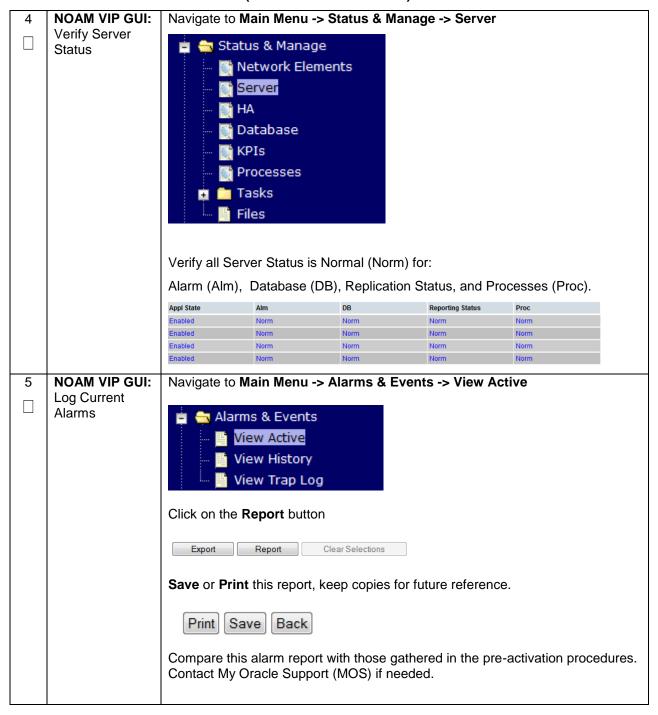
5 T E P #	This procedure performs a Health Check. Check off (√) each step as it is completed. Boxes have been provided for this purpose under each step number. If this procedure fails, contact My <i>Oracle</i> Support (MOS), and ask for assistance.				
1	SOAM VIP GUI: Login	Establish a GUI session on the SOAM server by using the VIP IP address of the SOAM server. Open the web browser and enter a URL of: http:// <primary_soam_vip_ip_address> Login as the guiadmin user: Cracle System Login Enter your username and password to log in Username: guiadmin Password: Change password Log In Unauthorized access is prohibited. This Oracle system requires the use of Microsoft Internet Explorer 8.0, 9.0, or 10.0 with support for JavaScript and cookles. Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.</primary_soam_vip_ip_address>			

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

2	SOAM VIP GUI:	Locate and verify the FABR folder from Main Menu is visible and the
	Verify the FABR	configuration folder items are present
	Folder is Visible	
		📮 😋 FABR
		📋 😋 Configuration
		Applications
		Exceptions
		- Default Destinations
		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.
3	NOAM VIP GUI:	
3	Login	Establish a GUI session on the NOAM server by using the VIP IP address of the
	Login	NOAM server. Open the web browser and enter a URL of:
		They am estited open the mest stemest and enter a extent
		http:// <primary_noam_vip_ip_address></primary_noam_vip_ip_address>
		Login as the <i>guiadmin</i> user:
		ORACLE"
		Oracle System Login
		Fri Mar 20 12:29:52 2015 EDT
		Log In
		Enter your username and password to log in
		Username: guiadmin
		Password:
		☐ Change password
		Landa
		Log In
		Welcome to the Oracle System Login.
		Unauthorized access is prohibited. This Oracle system requires the use of Microsoft Internet Explorer 8.0, 9.0, or 10.0 with support for JavaScript and cookies.
		Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.
		,

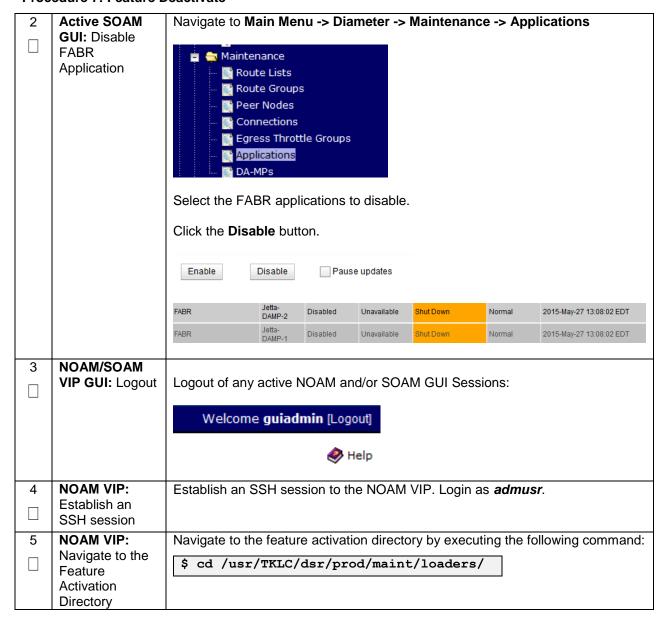
Procedure 6: Perform Health Check (Pre-Feature Deactivation)



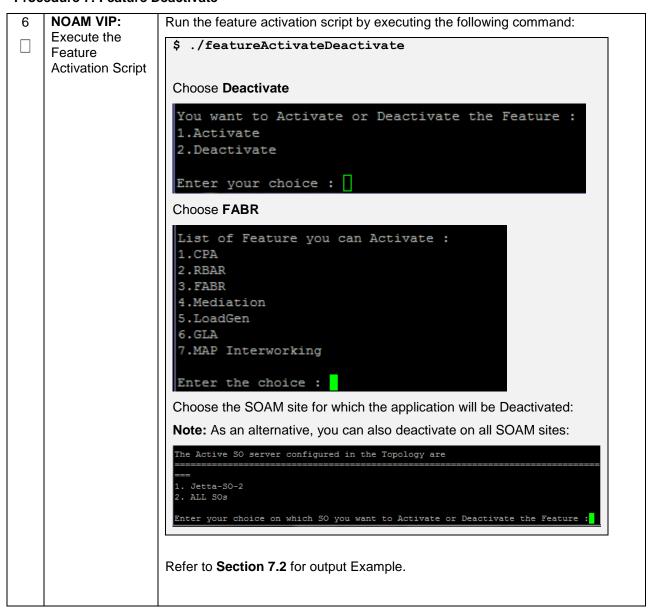
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S T E	This procedure provides steps to Activate FABR.			
P #	Check off $(\sqrt{)}$ each step as it is completed. Boxes have been provided for this purpose under each step number.			
	If this procedure fa	ails, contact My Oracle Support (MOS), and ask for assistance.		
1	SOAM VIP GUI: Login	Establish a GUI session on the SOAM server by using the VIP IP address of the SOAM server. Open the web browser and enter a URL of: http:// <primary_soam_vip_ip_address> Login as the guiadmin user: Cracle System Login Enter your username and password to log in Username: guiadmin Password: Change password Log In Unauthorized access is prohibited. This Oracle system requires the use of Microsoft Internet Explorer 8.0, 9.0, or 10.0 with support for JavaScript and cookies. Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of Oracle Corporation and/or its affiliates.</primary_soam_vip_ip_address>		

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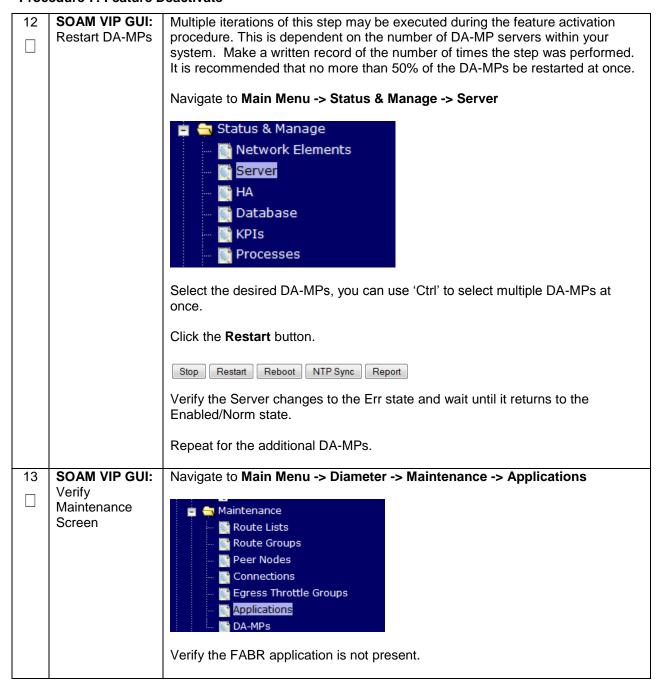
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7	Active SOAM GUI: Login	Establish a GUI session on the active SOAM server by using IP address of the SOAM server. Open the web browser and enter a URL of: http:// <active_soam_ip_address> Login as the guiadmin user:</active_soam_ip_address>
		Oracle System Login Fri Mar 20 12:29:52 2015 EDT
		Log In Enter your username and password to log in Username: guiadmin Password: •••••• Change password Log In Welcome to the Oracle System Login. Unauthorized access is prohibited. This Oracle system requires the use of Microsoft Internet Explorer 8.0, 9.0, or 10.0 with support for JavaScript and cookies. Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.
8	Active SOAM GUI: Verify the FABR Folder is not visible	Verify the FABR folder is not visible under Main Menu.
9	Standby SOAM GUI: Repeat Verification Steps	Repeat Steps 7-8 for the Standby SOAM Note: If the verifications for the standby SOAM differ from the Active SOAM, stop and contact My Oracle Support (MOS)
10	Spare SOAM GUI: Verify and Deactivate	Repeat Steps 7-8 for any spare SOAMs present. For DSR 5.1, 6.0, and 7.0, you will have to run the following command to Deactivate FABR on each spare SOAM:
		Note: For DSR 7.1, skip this step. \$ cd /usr/TKLC/dsr/prod/maint/loaders/deactivate \$./load.fabrDeactivateBsourced

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SOAM VIP GUI:	
Login	Establish a GUI session on the SOAM server by using the VIP IP 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:
	CIEACLE
	Oracle System Login Fri Mar 20 12:29:52 2015 EDT
	Log In Enter your username and password to log in
	Username: guiadmin
	Password: ••••••
	☐ Change password
	Log In
	Welcome to the Oracle System Login.
	Unauthorized access is prohibited. This Oracle system requires the use of Microsoft Internet Explorer 8.0, 9.0, or 10.0 with support for JavaScript and cookies.
	Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.
	Login

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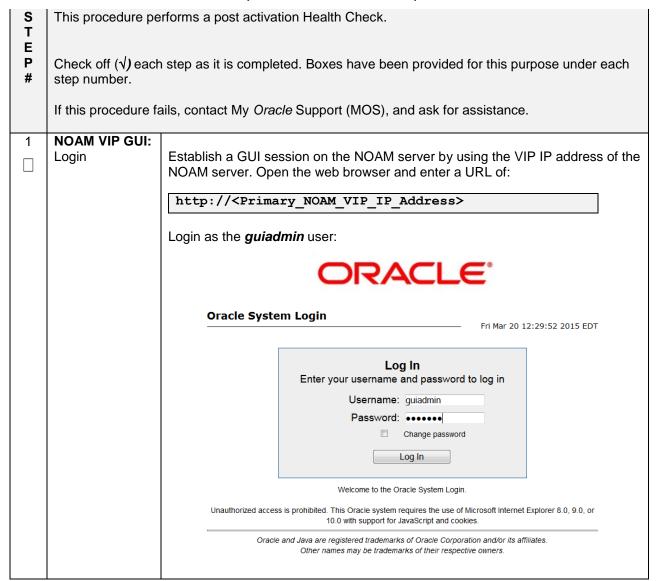
6.3 POST-DEACTIVATION PROCEDURES

To complete a deactivation, complete the Post-Deactivation procedure below.

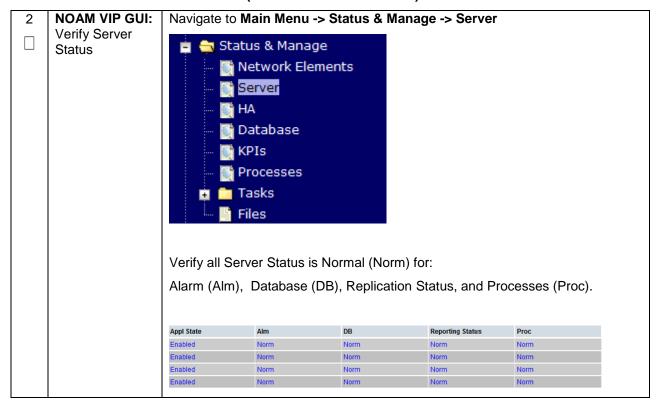
6.3.1 Perform Health Check

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

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

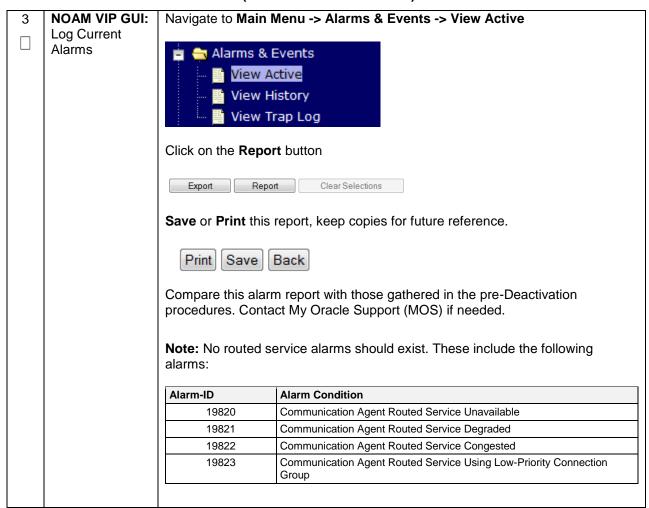


Procedure 8: Perform Health Check (Post-Feature Deactivation)



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



7.0 ENGINEERING NOTES

<u>FIPS integrity verification test failed:</u> In DSR 7.1+, 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 fabr Feature
======================================
The same of American Constitution December 2011
Execution of Activation/Deactivation Process Starts
Starting Activation/Deactivation process
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.fabrActivateAsourced script on Jetta-NO-2 id=13
name=DPService
preDefined=No editableOnGui=Yes
birthTime=12/31/1969 19:00:00.000
id=0
name=DPSvcGroup
preDefined=No ===================================
Add DP Service and Connection group mapping.
routedServiceId=13
<pre>connGroupId=0 priority=10</pre>
Add FABR KPI group
KPI_Group=FABR Visibility=VIS SO
violatity_via_oo
Add FABR Measurement groups
Aut Fals Medicinent groups
Meas_Group=Full Address Resolution Performance Visibility=VIS_SO ===================================
Add FABR GUI Configuration Permissions.
_appid=17 group id=7051
group_name=FABR Configuration Permissions
=======================================
Starting to Execute the Loaders on Mate server
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.fabrActivateAsourced script on Jetta-NO-1
FIPS integrity verification test failed.
id=13 name=DPService
preDefined=No
editableOnGui=Yes birthTime=12/31/1969 19:00:00.000
id=0
name=DPSvcGroup preDefined=No
routedServiceId=13
connGroupId=0
priority=10 ===================================
KPI_Group=FABR
Visibility=VIS_SO

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```
Meas_Group=Full Address Resolution Performance
Visibility=VIS SO
Meas Group=Full Address Resolution Exception
Visibility=VIS_SO
Add FABR GUI Configuration Permissions.
group_id=7051
group_name=FABR Configuration Permissions
FIPS integrity verification test failed.
The Active SO server configured in the Topology are
1. Jetta-SO-2
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 : {\tt Jetta-SO-2}
Current server is HA ACTIVE
FABR Feature is Already Activated
FIPS integrity verification test failed.
Executing the Loaders and Clearing Cache on Standby SO servers.
Starting to Execute the Loaders on Mate server
{\tt Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.fabrActivateBsourced script on Jetta-SO-1}
FIPS integrity verification test failed.
Current server is HA STANDBY
id=4
name=FABR
unavailableAction=ContinueRouting
avpInsertion=Yes
shutdownMode=Forced
shutdownTimer=0
resultCode=3002
vendorId=0
errorString=FABR Unavailable
resExhResultCode=3004
resExhVendorId=0
resExhErrorString=FABR Resource Exhausted
routeListId=-1
fqdn=
mcl=0
Add Common DSR Application measurements for FABR.
repgrp=DSR Application Exception
measid=10602
subgrp=
repgrp=DSR Application Exception
measid=10603
subgrp=
\begin{array}{ll} {\tt repgrp=DSR~Application~Performance} \\ {\tt measid=10600} \end{array}
repgrp=DSR Application Performance
measid=10601
subgrp=
repgrp=DSR Application Performance
measid=10604
subgrp=
repgrp=DSR Application Performance
measid=10605
subgrp=
repgrp=DSR Application Performance
measid=10660
subgrp=
Add FABR GUI Configuration Permissions.
```

7.2 SAMPLE OUTPUT OF DEACTIVATION (ACTIVE NOAM)

```
Run script to Deactivate fabr Feature
                     =====S-T-A-R-T====
Execution of Activation/Deactivation Process Starts
Starting Activation/Deactivation process....
The Active SO server configured in the Topology are
1. Jetta-SO-2
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 Jetta-SO-2
FIPS integrity verification test failed.
FABR is activated on Jetta-SO-2
Executing /usr/TKLC/dsr/prod/maint/loaders/deactivate/load.fabrDeactivateAsourced script on Jetta-NO-2
Hiding FABR KPI group and Measurement Groups
 === deleted 1 records ===
Hiding FABR measurement groups
 === deleted 1 records ===
=== deleted 1 records ===
Removing DP Service COM Agent Loader Entries
Log path: /var/TKLC/db/filemgmt/dpservice_deactivate.log
Since remote servers are not deleted on FABR Deactivation, operator should
manually delete all the remote server entries from configuration.
Removing FABR GUI permissions.
 === deleted 1 records ===
Starting to Execute the Loaders on Mate server
{\tt Executing /usr/TKLC/dsr/prod/maint/loaders/deactivate/load.fabr Deactivate Asourced script on Jetta-NO-1}
FIPS integrity verification test failed.
Removing FABR GUI permissions.
FIPS integrity verification test failed.
This is a 3 Tier Setup , So run the B sourced loaders on SO server : {\tt Jetta-SO-2}
Executing /usr/TKLC/dsr/prod/maint/loaders/deactivate/load.fabrDeactivateBsourced script on Jetta-SO-2
FIPS integrity verification test failed.
Current server is HA ACTIVE
Removing all ART rules pointing to FABR
 === deleted 0 records ===
Removing applicationId=4(FABR) from the DSR Application Per Mp Table
Removing FABR from the DSR Application Table
```

```
Removing common DSR Application measurements for FABR
  === deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===
  === deleted 1 records ===
 === deleted 1 records ===
=== deleted 1 records ===
Removing FABR GUI permissions.
  === deleted 1 records ===
FIPS integrity verification test failed.
Executing the Loaders and Clearing Cache on Standby {\tt SO} servers.
Starting to Execute the Loaders on Mate server
Executing /usr/TKLC/dsr/prod/maint/loaders/deactivate/load.fabrDeactivateBsourced script on Jetta-SO-1
FIPS integrity verification test failed.
Current server is HA STANDBY
_____
Removing common DSR Application measurements for FABR
  === deleted 1 records ===
  === deleted 1 records ===
 === deleted 1 records ===
=== deleted 1 records ===
 === deleted 1 records ===
=== deleted 1 records ===
 === deleted 1 records ===
Removing FABR 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
```

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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, there are multiple layers of menus selections. Make the selections in the sequence shown below on the Support telephone menu:

- 1. For the first set of menu options, select 2, "New Service Request". You will hear another set of menu options.
- 2. In this set of menu options, select 3, "Hardware, Networking and Solaris Operating System Support". A third set of menu options begins.
- 3. In the third set of options, select 2, "Non-technical issue". Then you will be connected to a live agent who can assist you with MOS registration and provide Support Identifiers. Simply mention you are a Tekelec Customer new to MOS.

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