Oracle® Communications

Diameter Signaling Router

DSR Mediation Feature Activation Procedure

Release 8.2

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ORACLE®

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

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See more information on My Oracle Support (MOS).

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1. Introduction

This document defines the procedure that is executed to activate the Mediation feature on DSR 7.0 (or later) network element (NE). This procedure may be run either 1) As part of a new DSR installation, after the standard installation is complete but before the NE is in service, or 2) on an in-service DSR NE, where the Mediation feature is activated during a planned maintenance window to minimize the impact to network traffic.

This document also provides a procedure to deactivate Mediation after it has been activated. Refer to section 3 for a discussion of deactivation.

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 Mediation feature is activated at a later time.

1.1 Acronyms

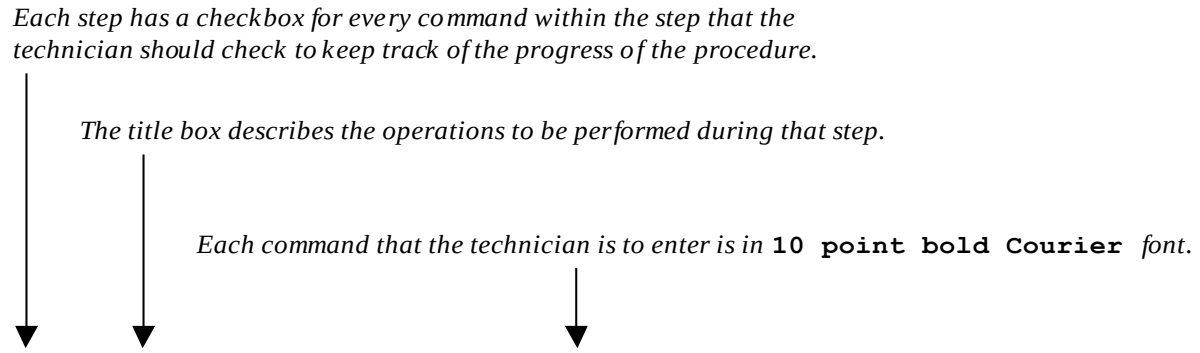
An alphabetized list of acronyms used in the document.

Table 1. Acronyms

Acronym	Definition
BNS	Broadband Networking Solutions
CAPM	Computer-Aided Policy Making
DA-MP	Diameter Agent Message Processor
DB	Database
DSR	Diameter Signaling Router
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
NO	Network OAM
NOAM	Network OAM
OAM	Operations, Administration and Maintenance
SSH	Secure Shell
UI	User Interface
VIP	Virtual IP
VPN	Virtual Private Network
XMI	External Management Interface

1.2 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).



5 ☐	**ServerX**: Connect to the console of the server	Establish a connection to the server using cu on the terminal server/console. `$ cu -l /dev/ttyS7`

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 2 through Table 8 provides 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 Mediation Feature

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

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

Table 2. Behavior of Mediation based on Global_Admin_State and Meta_Administrator_Privilege

Global_Admin_State	Meta_Administrator_Privilege	Behavior
1	1	Mediation folder is shown under Diameter menu. Mediation signaling code evaluates trigger points to see if Mediation rules are to be applied to ingress messages. Rule Template screen is shown under Mediation menu. ***Note:*** Meta_Administrator_Privilege cannot be enabled if Global_Admin_State is disabled.

Global_Admin_ State	Meta_Administrator_ Privilege	Behavior
1	0	Mediation folder is shown under Diameter menu. Mediation signaling code evaluates trigger points to see if Mediation rules are to be applied to ingress messages. Rule Template Screen will not be shown.
0	1	Mediation folder is not shown under Diameter menu. Mediation signaling code does not evaluate trigger points for ingress messages. ***Note:*** This case is not allowed by mediation activation script. However this can be a scenario, when both Global-Admin and Meta-Admin are enabled through activation script, but by deactivation script Global-Admin is disabled.
0	0	Mediation folder is not shown under Diameter menu. Mediation signaling code does not evaluate trigger points for ingress messages.

2.2 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.

Table 3. Pre-Feature Activation Overview

Procedure	Elapsed Time (Hours:Minutes)		Feature Activation Preparation Procedures	Impact
	This Step	Cum.		
Required Material Check	0:10-0:30	0:10-0:30	• Verify all required materials are present • Verify all administration data needed during feature activation	None
System Topology Check (Procedure 1	0:10-0:30	0:20-1:00	• Verify Network Element Configuration data • Verify System Group Configuration data	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

2.3 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)		Feature Activation Execution Procedures	Impact
	This Step	Cum.		
Perform Health Check (Procedure 3)	0:01-0:05	0:01-0:05	• Verify DSR release • Verify proper Mediation state • Verify server status • Log all current alarms	None

Feature Activation (Procedure 4)	0:10-0:30	0:11-0:35	• Log out of NOAM GUI
			• SSH to active NOAM
			• Change to the feature activation directory
			• Execute the feature activation script
			  • For enabling both Global-Admin/Meta-Admin, refer to Procedure 4
			  • For enabling Global-Admin, refer to Procedure 5
			  • For enabling Meta-Admin, refer to Procedure 6
			• Log into Active SOAM GUI.
			• Verify the Mediation folder.
			• Close SSH connections to both NOAMs
				Mediation feature is activated on DSR

2.4 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	Elapsed Time (Hours:Minutes)		Feature Activation Completion Procedures	Impact
	This Step	Cum.		
Perform Health Check (Procedure 7)	0:01-0:05	0:01-0:05	• Verify server status • Log all current alarms	Mediation has been 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

Procedure	Elapsed Time (Hours:Minutes)		Deactivation Preparation Procedures	Impact
	This Step	Cum.		
Perform Health Check (Procedure 8)	0:01-0:05	0:01-0:05	• Verify DSR release. • Verify proper Mediation feature state • Verify server status • Log current alarms	None

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

Procedure	Elapsed Time (Hours:Minutes)		Deactivation Procedures	Impact
	This Step	Cum.		
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 varies.	None

Procedure	Elapsed Time (Hours:Minutes)		Deactivation Procedures	Impact
	This Step	Cum.		

Deactivation (Procedure 9)	0:10-0:20	0:20-0:50	• Log out of active NOAM GUI
			• SSH into active NOAM
			• Change directory
			• Execute the feature deactivation script
			  • For disabling both Global-Admin/Meta-Admin, refer to Procedure 9
			  • For disabling Global-Admin, refer to Procedure 10
			  • For disabling Meta-Admin, refer to Procedure 11
			• Log into active SOAM GUI
			• Verify the Mediation folder
			• Close SSH connections to both NOAMs
				Mediation feature is deactivated on DSR.

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

Procedure	Elapsed Time (Hours:Minutes)		Post Deactivation Procedures	Impact
	This Step	Cum.		
Perform Health Check (Procedure 12)	0:01-0:05	0:01-0:05	• Verify server status • Log all current alarms	None

4. Feature Activation Preparation

Initially, there is a primary – if not singular – planned use case for Mediation feature activation. It is expected that Oracle personnel following this Feature Activation Procedure document will activate the Mediation feature on a customer's DSR NE, define one or more Rule Templates as required for that customer, and then deactivate the Meta-Administrator privilege. Once Oracle personnel define the Rule Templates, customer personnel then use the Rule Set Administrator interface to define the specific Rules that govern mediation actions taken by the DSR.

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

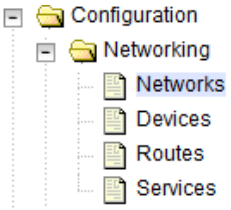
4.1 System Topology Check

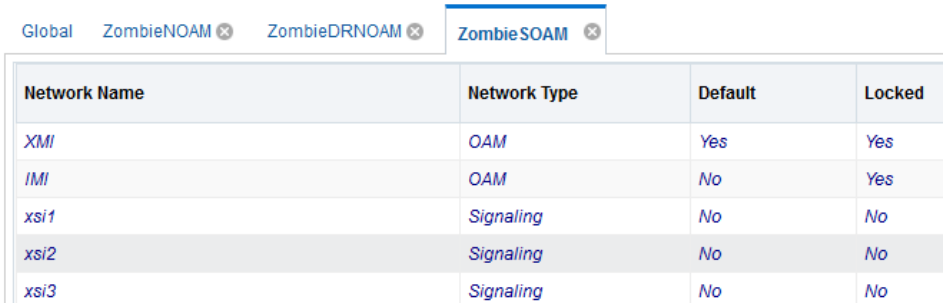
This procedure is part of feature activation preparation and is used to verify the system topology of the DSR network and servers.

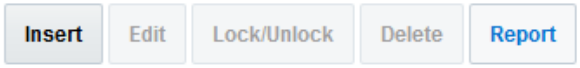
Procedure 1. System Topology Check

S T E P #		
	This procedure verifies system topology. 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.	
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 ***guiadmin*** user:

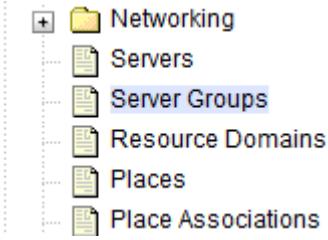
Procedure 1. System Topology Check

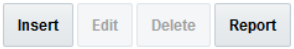
<table>
<tr>
<td>2. ☐</td>
<td>NOAM VIP GUI: Verify network configuration data</td>
<td>
1. Navigate to Configuration -> Networking -> Networks.


2. Select the site network element tab.


3. Click Report.


4. Verify the configuration data is correct for your network.
5. Save or Print this report to keep copies for future reference.

</td>
</tr>
<tr>
<td>3. ☐</td>
<td>NOAM VIP GUI: Verify server configuration</td>
<td>
1. Navigate to Configuration -> Server Groups.


2. Click Report.


3. Verify the configuration data is correct for your network.
4. Save or Print this report to keep copies for future reference.

</td>
</tr>
</table>

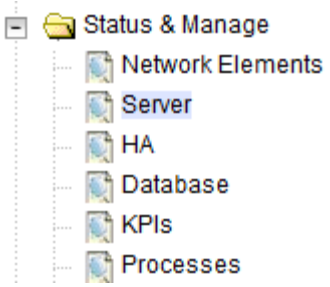
4.2 Perform Health Check

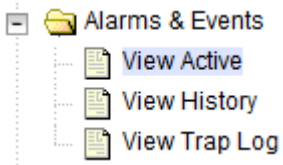
This procedure is part of feature activation preparation and determines the health and status of the DSR release network and servers. This may be executed multiple times, but must also be executed at least once 24-36 hours before the start of the maintenance window in which the feature activation is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

Procedure 2. Perform Health Check (Feature Activation Preparation)

S T E P #		
	This procedure performs 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.	
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 ***guiadmin*** user:

Procedure 2. Perform Health Check (Feature Activation Preparation)

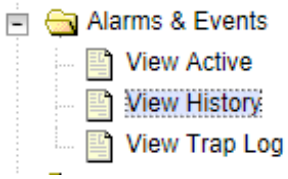
<table>
<tr>
<td>2. ☐</td>
<td>NOAM VIP GUI:
Verify server status</td>
<td>1. Navigate to Status & Manage -> Server.
 

2. Verify all Server Status is Normal (Norm) for:
Replication (Repl), Collection (Coll), Database (DB), High Availability (HA), and Processes (Proc).
<table>
<tr><th>Appl State</th><th>Alm</th><th>DB</th><th>Reporting Status</th><th>Proc</th></tr>
<tr><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr>
<tr><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr>
<tr><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr>
<tr><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr>
</table>
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.</td>
</tr>
<tr>
<td>3. ☐</td>
<td>NOAM VIP GUI:
Log current alarms</td>
<td>1. Navigate to Alarms & Events -> View Active.
 

2. Click Report.

3. Save or Print this report to keep copies for future reference.
</td>
</tr>
</table>

Procedure 2. Perform Health Check (Feature Activation Preparation)

4. ☐	**NOAM VIP GUI**: Log current alarms	1. Navigate to **Alarms & Events -> View History**.  2. Click **Report**. 3. **Save** or **Print** this report to keep copies for future reference.

5. Feature Activation

Before feature activation, perform the system health check in section 4.2. This check ensures 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.

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 checkbox must 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.

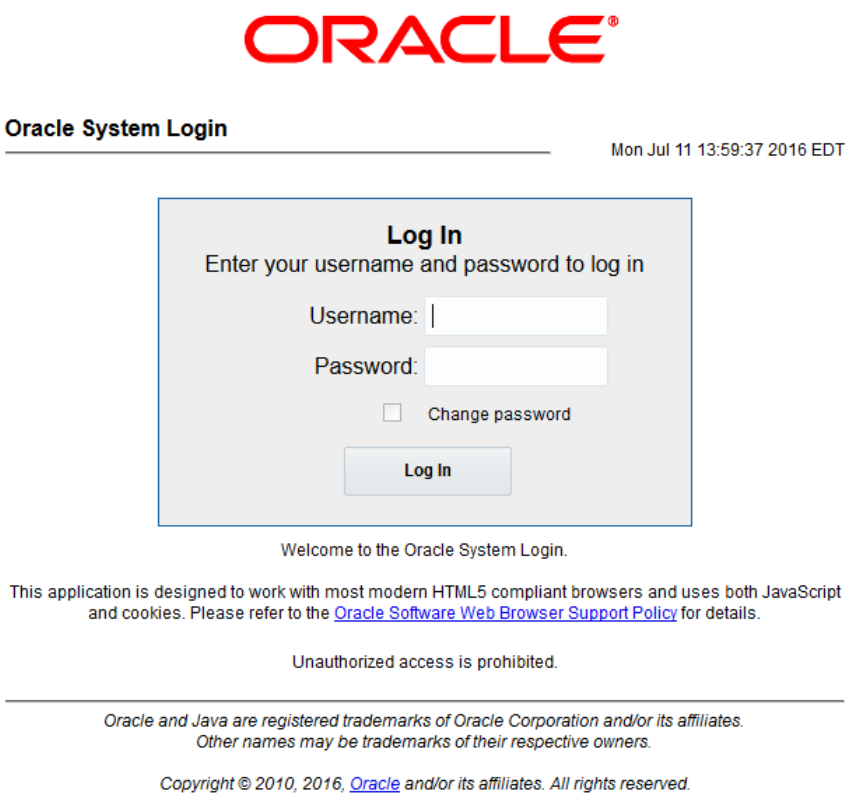
5.1 Pre-Activation Procedures

5.1.1 Perform Health Check

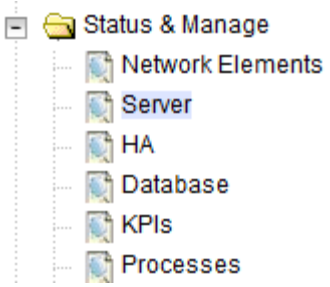
This procedure determines the health and status of the network and servers. This must be executed at the start of every maintenance window.

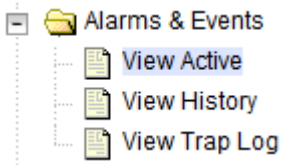
Note: The following Health Check procedure is the same as the Health Check procedure described in section 4.2 when preparing for feature activation, but it is repeated here to emphasize that it is being re-executed if section 4.2 was performed outside the maintenance window.

Procedure 3. Perform Health Check (Pre Feature Activation)

S T E P #	This procedure performs 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.	
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>` Login as the ***guiadmin*** user: 
2. ☐	**NOAM VIP GUI**: Verify Mediation folder is not present	Under **Main Menu**, verify the Mediation folder is NOT present on NOAM and SOAM (3-tiered).

Procedure 3. Perform Health Check (Pre Feature Activation)

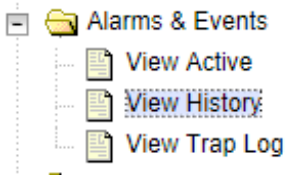
<table>
<tr>
<td>3. ☐</td>
<td>NOAM VIP GUI:
Verify server status</td>
<td>1. Navigate to Status & Manage -> Server.
 

2. Verify all Server Status is Normal (Norm) for:
Replication (Repl), Collection (Coll), Database (DB), High Availability (HA), and Processes (Proc).
<table>
<tr><th>Appl State</th><th>Alm</th><th>DB</th><th>Reporting Status</th><th>Proc</th></tr>
<tr><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr>
<tr><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr>
<tr><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr>
<tr><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr>
</table>
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.</td>
</tr>
<tr>
<td>4. ☐</td>
<td>NOAM VIP GUI:
Log current alarms</td>
<td>1. Navigate to Alarms & Events -> View Active.
 

2. Click Report.

3. Save or Print this report to keep copies for future reference.
</td>
</tr>
</table>

Procedure 3. Perform Health Check (Pre Feature Activation)

5. ☐	**NOAM VIP GUI**: Log current alarms	1. Navigate to **Alarms & Events -> View History**.  2. Click **Report**. 3. **Save** or **Print** this report to keep copies for future reference.

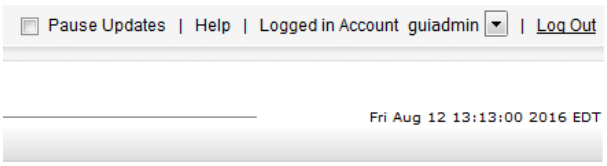
5.2 Activation Procedures

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

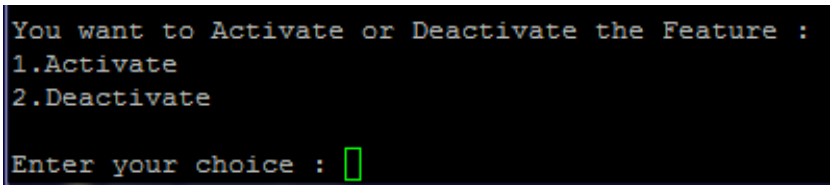
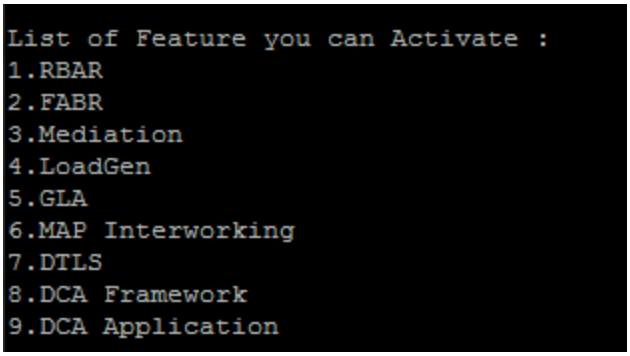
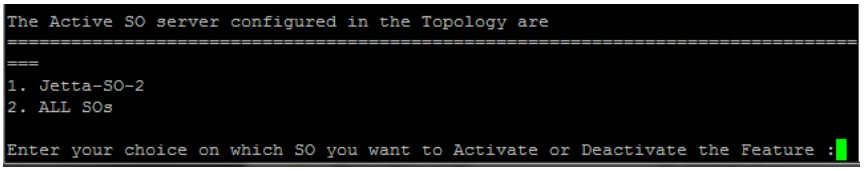
5.2.1 Feature Activation (Global-Admin/Meta-Admin)

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

Procedure 4. Feature Activation (Global-Admin/Meta-Admin)

S T E P #	This procedure activates Mediation. 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.	
1. ☐	**NOAM/SOAM VIP GUI**: Logout	Logout of any active NOAM and/or SOAM GUI sessions: 
2. ☐	**NOAM VIP**: Establish an SSH session to active NOAM	Login as ***admusr***. `# ssh <active NOAM XMI IP address>`
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/`

Procedure 4. Feature Activation (Global-Admin/Meta-Admin)

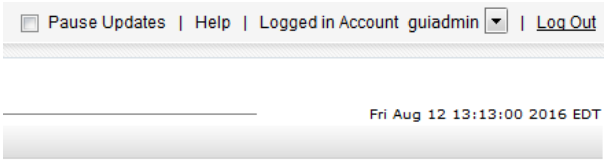
4. ☐	**NOAM VIP**: Execute the feature activation script	1. Run the feature activation script by executing the following command: `$ ./featureActivateDeactivate` 2. Select **Activate**.  3. Select **Mediation**.  4. Select **Global Admin**. 5. Select **Meta Admin**. 6. Select the SOAM site for which the application will be activated: ***Note:*** As an alternative, for 3-tiered architecture, you can also activate on all SOAM sites:  Refer to Section 7.1 for output example.

Procedure 4. Feature Activation (Global-Admin/Meta-Admin)

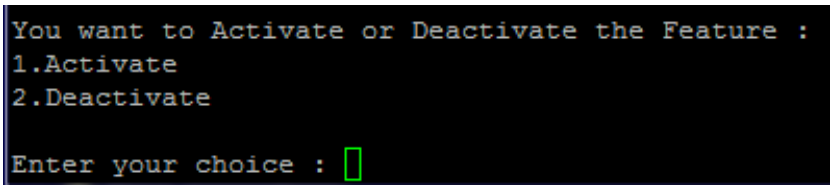
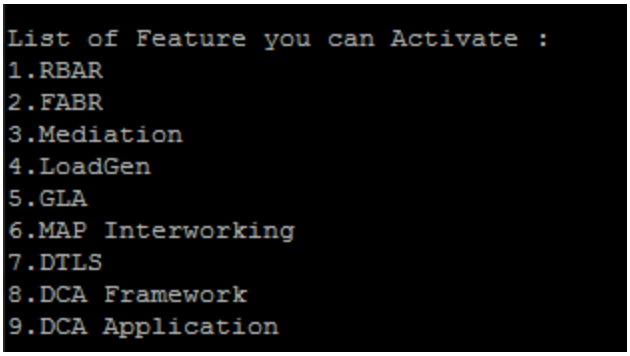
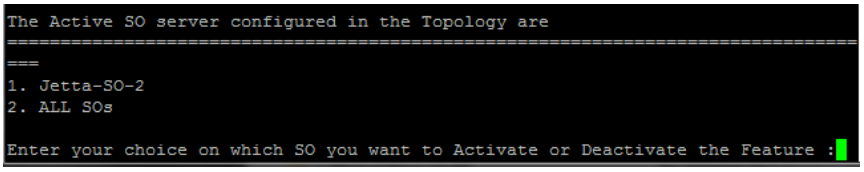
5. ☐	**Active SOAM GUI**: Login	Establish a GUI session on the active SOAM server by using IP address of the SOAM server. Open the web browser and enter a URL of: `http://<Active_SOAM_IP_Address>` Login as the ***guiadmin*** user:
6. ☐	**Active SOAM GUI**: Verify the Mediation folder is visible	Locate and verify the Mediation folder from Main Menu is visible and the Rule Templates menu item is present.
7. ☐	Log out of the active NOAM login shells and close the SSH connections	1. Log out of the active OAM login shell. `# exit` 2. Close the SSH connections.

5.2.2 Feature Activation (Global-Admin)

Procedure 5. Feature Activation (Global-Admin)

S T E P #	This procedure activates Mediation. 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.	
1. ☐	**NOAM/SOAM VIP GUI**: Logout	Logout of any active NOAM and/or SOAM GUI sessions: 
2. ☐	**NOAM VIP**: Establish an SSH session to active NOAM	Login as ***admusr***. `# ssh <active NOAM XMI IP address>`
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/`

Procedure 5. Feature Activation (Global-Admin)

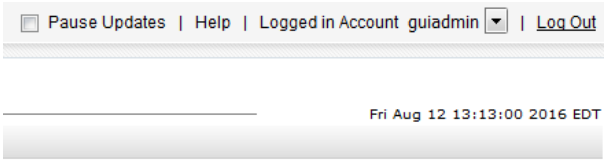
4. ☐	**NOAM VIP**: Execute the feature activation script	1. Run the feature activation script by executing the following command: `$ ./featureActivateDeactivate` 2. Select **Activate**.  3. Select **Mediation**.  4. Select **Global Admin**. 5. Select the SOAM site for which the application will be activated: ***Note:*** As an alternative, for 3-tiered architecture, you can also activate on all SOAM sites:  Refer to Section 7.1 for output example.

Procedure 5. Feature Activation (Global-Admin)

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>` Login as the ***guiadmin*** user:
6. ☐	**Active SOAM GUI**: Verify the Mediation folder is visible	Locate and verify the Mediation folder from Main Menu is visible and the Rule Templates menu item is present.
7. ☐	Log out of the active NOAM login shells and close the SSH connections	1. Log out of the active OAM login shell. `# exit` 2. Close the SSH connections.

5.2.3 Feature Activation (Meta-Admin)

Procedure 6. Feature Activation (Meta-Admin)

S T E P #	This procedure activates Mediation. 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.	
1. ☐	**NOAM/SOAM VIP GUI**: Logout	Logout of any active NOAM and/or SOAM GUI sessions: 
2. ☐	**NOAM VIP**: Establish an SSH session to active NOAM	Login as ***admusr***. `# ssh <active NOAM XMI IP address>`
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/`

Procedure 6. Feature Activation (Meta-Admin)

4. ☐	**NOAM VIP**: Execute the feature activation script	1. Run the feature activation script by executing the following command:
		`$ ./featureActivateDeactivate`
		2. Select **Activate**.
		`You want to Activate or Deactivate the Feature :`
		`1.Activate`
		`2.Deactivate`
		`Enter your choice :`
		3. Select **Mediation**.
		`List of Feature you can Activate :`
		`1.RBAR`
		`2.FABR`
		`3.Mediation`
		`4.LoadGen`
		`5.GLA`
		`6.MAP Interworking`
		`7.DTLS`
		`8.DCA Framework`
		`9.DCA Application`
		4. Select **Meta Admin**.
		5. Select the SOAM site for which the application will be activated:
		Note: As an alternative, for 3-tiered architecture, you can also activate on all SOAM sites:
		`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 :`
		Refer to Section 7.1 for output example.

Procedure 6. Feature Activation (Meta-Admin)

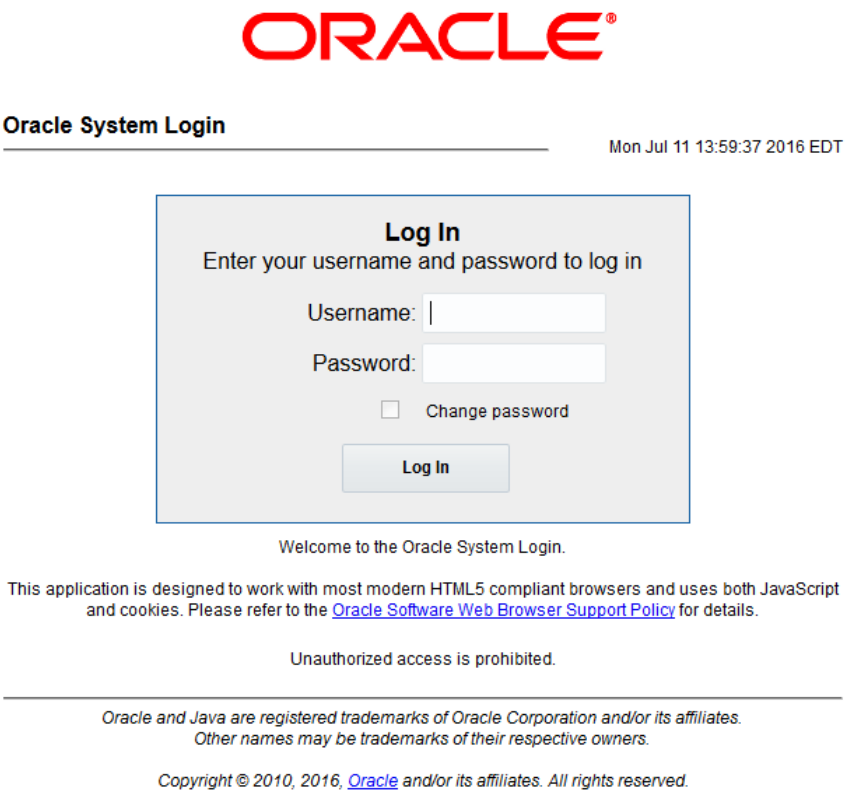
5. ☐	**Active SOAM GUI**: Login	Establish a GUI session on the active SOAM server by using IP address of the SOAM server. Open the web browser and enter a URL of: `http://<Active_SOAM_IP_Address>` Login as the ***guiadmin*** user:
6. ☐	**Active SOAM GUI**: Verify the Mediation folder is visible	Locate and verify the Mediation folder from Main Menu is visible and the Rule Templates menu item is present.
7. ☐	Log out of the active NOAM login shells and close the SSH connections	1. Log out of the active OAM login shell. `# exit` 2. Close the SSH connections.

5.3 Post-Activation Procedures

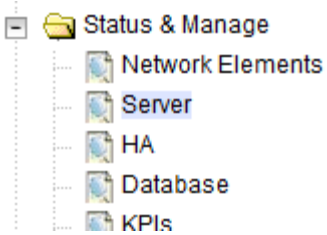
5.3.1 Perform Health Check

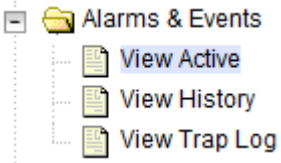
This procedure determines the health and status of the DSR release network and servers.

Procedure 7. Perform Health Check (Post-Feature Activation)

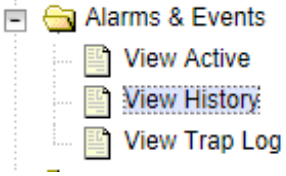
S T E P #		
	This procedure performs a post activation health check. Check off (√) each step as it is completed. Boxes have been provided for this purpose under each step number. If this procedure fails, contact My Oracle Support (MOS) and ask for assistance.	
1. ☐	**NOAM VIP GUI**: Login	Establish a 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 ***guiadmin*** user: 

Procedure 7. Perform Health Check (Post-Feature Activation)

<table>
<tr><td>2. ☐</td><td>NOAM VIP GUI: Verify server status</td><td>1. Navigate to Status & Manage -> Server.
 

2. Verify all Server Status is Normal (Norm) for:
Replication (Repl), Collection (Coll), Database (DB), High Availability (HA), and Processes (Proc).
</td></tr>
<tr><td>3. ☐</td><td>NOAM VIP GUI: Log current alarms</td><td>1. Navigate to Alarms & Events -> View Active.
 

2. Click Report.

3. Save or Print this report to keep copies for future reference.
</td></tr>
<tr><td>4. ☐</td><td>NOAM VIP GUI: Log current alarms</td><td>1. Navigate to Alarms & Events -> View History.
 

2. Click Report.

3. Save or Print this report to keep copies for future reference.
</td></tr>
<tr><td>5. ☐</td><td>Compare reports</td><td>Compare the logged alarms with those logged from before the feature activation. If there are any new alarms present, those new alarms should be analyzed to verify they did not result from a problem with the feature activation. Contact my Oracle Support (MOS) if nessesary.</td></tr>
</table>

6. Feature Deactivation

Initially, there is a primary – if not singular – planned use case for Mediation feature activation. It is expected that Oracle personnel following this Feature Activation document activate the Mediation feature on a customer's DSR NE, define one or more Rule Templates as required for that customer, and then deactivate the Meta-Administrator privilege. Once Oracle personnel define the Rule Templates, customer personnel then use the Rule Set Administrator interface to define the specific rules that govern mediation actions taken by the DSR.

This use case requires that there be a Mediation deactivation procedure with different privilege, which is defined in the following sections.

6.1 Pre-Deactivation Procedures

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

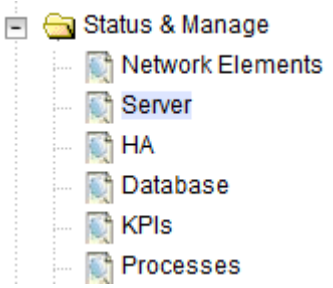
6.1.1 Perform Health Check

This procedure determines the health and status of the DSR network and servers.

Procedure 8. Perform Health Check (Pre-Feature Deactivation)

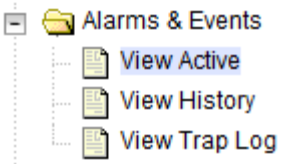
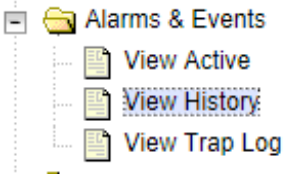
S T E P #	This procedure performs a health check. Check off (√) each step as it is completed. Boxes have been provided for this purpose under each step number. If this procedure fails, contact My Oracle Support (MOS) and ask for assistance.	
1. ☐	**SOAM VIP GUI**: Login	Establish a GUI session on the 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>` Login as the ***guiadmin*** user:

Procedure 8. Perform Health Check (Pre-Feature Deactivation)

<table>
<tr>
<td>2. ☐</td>
<td>NOAM VIP GUI: Verify Mediation state</td>
<td>1. Under Main Menu, verify the Mediation folder is present on NOAM and SOAM (3-tiered).
2. Depending on your activation, verify Global Admin, or Rule Templates if Meta Admin is activated.
Note: There is no need to complete this deactivation procedure if you are trying to deactivate:
• Meta Admin and the Rule Templates menu item is not present
• Global Admin and the Mediation folder is not present</td>
</tr>
<tr>
<td>3. ☐</td>
<td>NOAM VIP GUI: Verify server status</td>
<td>1. Navigate to Status & Manage -> Server.
 

2. Verify all Server Status is Normal (Norm) for:
Replication (Repl), Collection (Coll), Database (DB), High Availability (HA), and Processes (Proc).
<table>
<tr><th>Appl State</th><th>Alm</th><th>DB</th><th>Reporting Status</th><th>Proc</th></tr>
<tr><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr>
<tr><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr>
<tr><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr>
<tr><td>Enabled</td><td>Norm</td><td>Norm</td><td>Norm</td><td>Norm</td></tr>
</table>
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.</td>
</tr>
</table>

Procedure 8. Perform Health Check (Pre-Feature Deactivation)

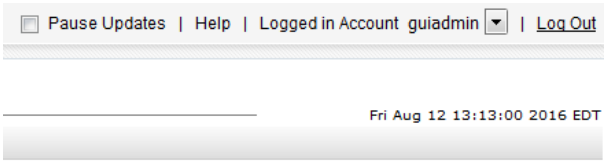
4. ☐	**NOAM VIP GUI**: Log current alarms	1. Navigate to **Alarms & Events -> View Active**.  2. Click **Report**. 3. **Save** or **Print** this report to keep copies for future reference.
5. ☐	**NOAM VIP GUI**: Log current alarms	1. Navigate to **Alarms & Events -> View History**.  2. Click **Report**. 3. **Save** or **Print** this report to keep copies for future reference.

6.2 Deactivation Procedures

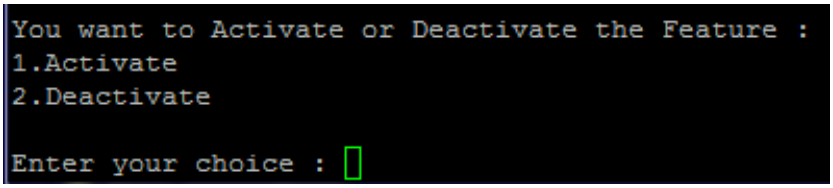
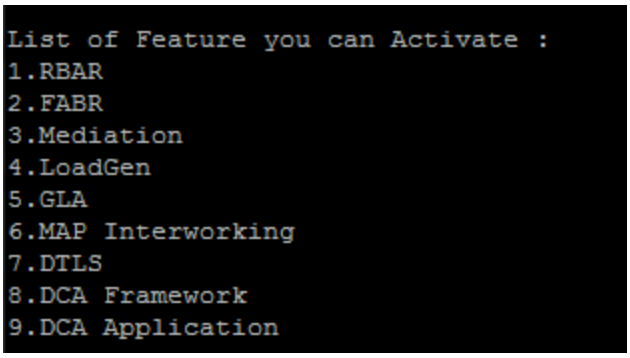
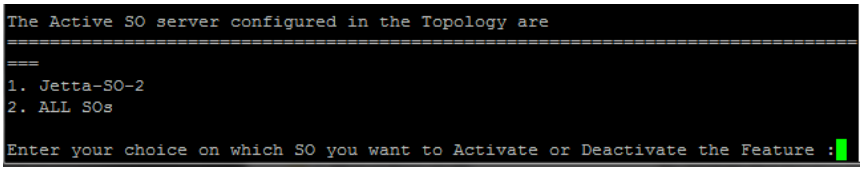
6.2.1 Feature Deactivation (Global-Admin/Meta-Admin)

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

Procedure 9. Feature Deactivation (Global-Admin/Meta-Admin)

S T E P #	This procedure deactivates Mediation. 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.	
1. ☐	**NOAM/SOAM VIP GUI**: Logout	Logout of any active NOAM and/or SOAM GUI sessions: 

Procedure 9. Feature Deactivation (Global-Admin/Meta-Admin)

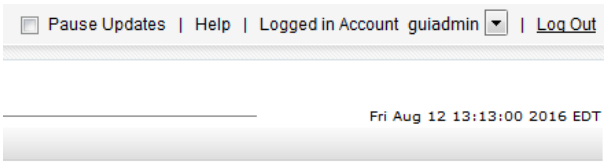
2. ☐	**NOAM VIP**: Establish an SSH session to active NOAM	Login as ***admusr***. `# ssh <active NOAM XMI IP address>`
3. ☐	**NOAM VIP**: Navigate to the feature activation directory	Navigate to the feature activation directory by executing the following command: `# cd /usr/TKLC/dsr/prod/maint/loaders/`
4. ☐	**NOAM VIP**: Execute the feature activation script	1. Run the feature activation script by executing the following command: `$ ./featureActivateDeactivate` 2. Select **Deactivate**.  3. Select **Mediation**.  4. Select **Global Admin**. 5. Select **Meta Admin**. 6. Select the SOAM site for which the application will be activated: ***Note:*** As an alternative, for 3-tiered architecture, you can also activate on all SOAM sites:  Refer to Section 7.1 for output example.

Procedure 9. Feature Deactivation (Global-Admin/Meta-Admin)

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>` Login as the ***guiadmin*** user:
6. ☐	**Active SOAM GUI**: Verify the Mediation folder is no longer visible	Verify the Mediation folder on the Main Menu has disappeared.
7. ☐	Log out of the active NOAM login shells and close the SSH connections	1. Log out of the active OAM login shell. `# exit` 2. Close the SSH connections.

6.2.2 Feature Deactivation (Global-Admin)

Procedure 10. Feature Deactivation (Global-Admin)

S T E P #	This procedure deactivates Mediation. 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.	
1. ☐	**NOAM/SOAM VIP GUI**: Logout	Logout of any active NOAM and/or SOAM GUI sessions: 
2. ☐	**NOAM VIP**: Establish an SSH session to active NOAM	Login as ***admusr***. `# ssh <active NOAM XMI IP address>`
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/`

Procedure 10. Feature Deactivation (Global-Admin)

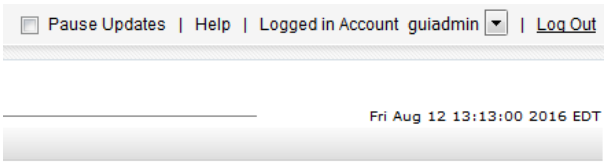
4. ☐	**NOAM VIP**: Execute the feature activation script	1. Run the feature activation script by executing the following command:
		`$ ./featureActivateDeactivate`
		2. Select **Deactivate**.
		`You want to Activate or Deactivate the Feature :`
		`1.Activate`
		`2.Deactivate`
		`Enter your choice :`
		3. Select **Mediation**.
		`List of Feature you can Activate :`
		`1.RBAR`
		`2.FABR`
		`3.Mediation`
		`4.LoadGen`
		`5.GLA`
		`6.MAP Interworking`
		`7.DTLS`
		`8.DCA Framework`
		`9.DCA Application`
		4. Select **Global Admin**.
		5. Select the SOAM site for which the application will be activated:
		Note: As an alternative, for 3-tiered architecture, you can also activate on all SOAM sites:
		`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 :`
		Refer to Section 7.1 for output example.

Procedure 10. Feature Deactivation (Global-Admin)

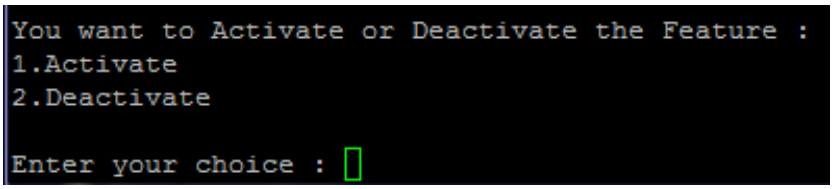
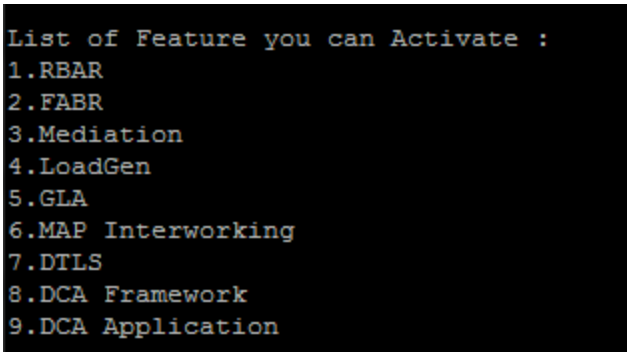
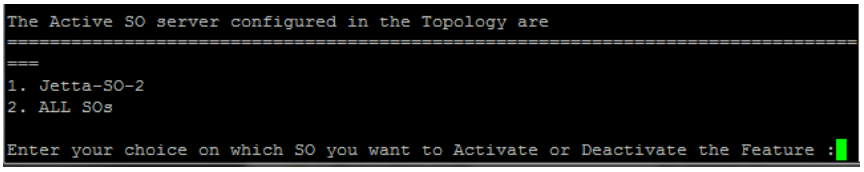
5. ☐	**Active SOAM GUI**: Login	Establish a GUI session on the active SOAM server by using IP address of the SOAM server. Open the web browser and enter a URL of: `http://<Active_SOAM_IP_Address>` Login as the ***guiadmin*** user:
6. ☐	**Active SOAM GUI**: Verify the Mediation folder is no longer visible	Verify the Mediation folder on the Main Menu has disappeared.
7. ☐	Log out of the active NOAM login shells and close the SSH connections	1. Log out of the active OAM login shell. `# exit` 2. Close the SSH connections.

6.2.3 Feature Deactivation (Meta-Admin)

Procedure 11. Feature Deactivation (Meta-Admin)

S T E P #	This procedure deactivates Mediation. 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.	
1. ☐	**NOAM/SOAM VIP GUI**: Logout	Logout of any active NOAM and/or SOAM GUI sessions: 
2. ☐	**NOAM VIP**: Establish an SSH session to active NOAM	Login as ***admusr***. `# ssh <active NOAM XMI IP address>`
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/`

Procedure 11. Feature Deactivation (Meta-Admin)

4. ☐	**NOAM VIP**: Execute the feature activation script	1. Run the feature activation script by executing the following command: `$ ./featureActivateDeactivate` 2. Select **Deactivate**.  3. Select **Mediation**.  4. Select **Meta Admin**. 5. Select the SOAM site for which the application will be activated: ***Note:*** As an alternative, for 3-tiered architecture, you can also activate on all SOAM sites:  Refer to Section 7.1 for output example.

Procedure 11. Feature Deactivation (Meta-Admin)

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>` Login as the ***guiadmin*** user:
6. ☐	**Active SOAM GUI**: Verify the Mediation folder is no longer visible	Verify the Mediation folder on the Main Menu has disappeared.
7. ☐	Log out of the active NOAM login shells and close the SSH connections	1. Log out of the active OAM login shell. `# exit` 2. Close the SSH connections.

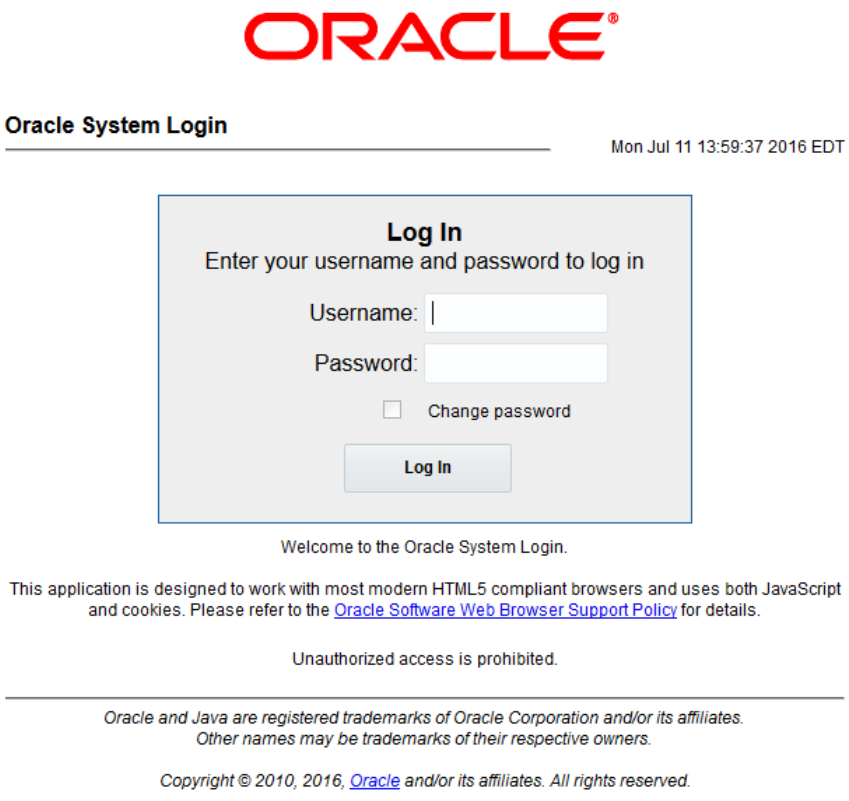
6.3 Post-Deactivation Procedures

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

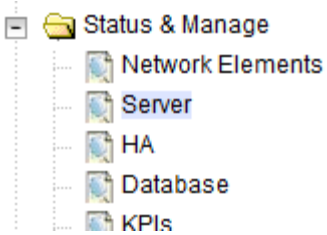
6.3.1 Perform Health Check

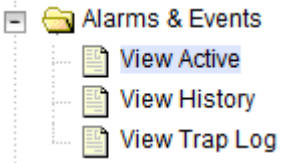
This procedure determines the health and status of the network and servers.

Procedure 12. Perform Health Check (Post-Feature Deactivation)

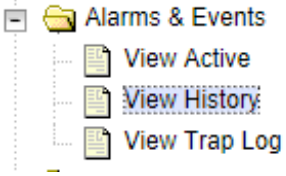
S T E P #	This procedure performs a post activation health check. Check off (√) each step as it is completed. Boxes have been provided for this purpose under each step number. If this procedure fails, contact My Oracle Support (MOS) and ask for assistance.	
1. ☐	**NOAM VIP GUI**: Login	Establish a GUI 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 ***guiadmin*** user: 

Procedure 12. Perform Health Check (Post-Feature Deactivation)

<table>
<tr><td>2. ☐</td><td>NOAM VIP GUI: Verify server status</td><td>1. Navigate to Status & Manage -> Server.
 

2. Verify all Server Status is Normal (Norm) for:
Replication (Repl), Collection (Coll), Database (DB), High Availability (HA), and Processes (Proc).
</td></tr>
<tr><td>3. ☐</td><td>NOAM VIP GUI: Log current alarms</td><td>1. Navigate to Alarms & Events -> View Active.
 

2. Click Report.

3. Save or Print this report to keep copies for future reference.
</td></tr>
<tr><td>4. ☐</td><td>NOAM VIP GUI: Log current alarms</td><td>1. Navigate to Alarms & Events -> View History.
 

2. Click Report.

3. Save or Print this report to keep copies for future reference.
</td></tr>
<tr><td>5. ☐</td><td>Compare reports</td><td>Compare the logged alarms with those logged from before the feature activation. If there are any new alarms present, those new alarms should be analyzed to verify they did not result from a problem with the feature activation. Contact my Oracle Support (MOS) if nessesary.</td></tr>
</table>

7. Engineering Notes

FIPS integrity verification test failed: 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 Mediation feature:
[admusr@RDU03NO-Server loaders]$ ./featureActivateDeactivate
Wed Nov  8 01:07:03 EST 2017::Starting featureActivateDeactivate main...
Start the Automation script , To run the Feature Activation/DeActivation on Active NO.
You want to Activate or Deactivate the Feature :
1.Activate
2.Deactivate
Enter your choice : 1
List of Feature you can Activate :
1.RBAR
2.FABR
3.Mediation
4.LoadGen
5.GLA
6.MAP Interworking
7.DTLS
8.DCA Framework
9.DCA Application
Enter the choice : 3
If you want to activate mediation then provide the option that you want to enable:
1.Global Admin
2.Meta Admin
3.Global Admin & Meta_Admin
Enter your choice : 3
Run script to Activate mediation Feature
============================S-T-A-R-T=====================================
Execution of Activation/Deactivation Process Starts
==============================================================================
Starting Activation/Deactivation process....
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.mediationActivateAsourced
script on RDU03NO-Server
================================
Add CAPM KPI group to table
KPIVisibility
```

```
==================================
Add CAPM Measurement groups to
table MeasVisibility
================================================================================
There is no Standby NOAMP server configured in the Topology
================================================================================
The Active SO server configured in the Topology are
================================================================================
1. RDU03SO-Server
2. ALL SOs
Enter your choice on which SO you want to Activate or Deactivate the Feature :2
Activate/Deactivate mediation on all SOs configured in the Topology
================================================================================
This is a 3 Tier Setup , So run the B sourced loaders on SO server : RDU03SO-Server
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.mediationActivateBsourced
script
with both Global_Admin_State and Meta_Administrator_Privilege for mediation on
RDU03SO-Server
FIPS integrity verification test failed.
==============================================
Mediation Activation Output
==============================================
  === changed 1 records ===
==============================================
Global-Admin-State successfully enabled.
==============================================
  === changed 1 records ===
======================================================
Mediation Meta-Administrator successfully activated.
======================================================
FIPS integrity verification test failed.
================================================================================
Executing the Loaders and Clearing Cache on Standby SO servers.
================================================================================
There is no Standby/Spare SOAMP server configured in the Topology
================================================================================
[admusr@RDU03NO-Server loaders]$
```

7.2 Sample Output of Deactivation (Active NOAM)

```
[admusr@RDU03NO-Server loaders]$ ./featureActivateDeactivate
Wed Nov  8 01:06:15 EST 2017::Starting featureActivateDeactivate main...
Start the Automation script , To run the Feature Activation/DeActivation on Active NO.
You want to Activate or Deactivate the Feature :
1.Activate
2.Deactivate
Enter your choice : 2
Which Feature you want to DeActivate :
1.RBAR
2.FABR
3.Mediation
4.LoadGen
5.GLA
6.MAP Interworking
7.DTLS
8.DCA Framework
9.DCA Application
Enter your choice : 3
If you want to deactivate mediation then provide the Input Flag :
1.Global Admin
2.Meta Admin
3.Global Admin & Meta Admin
Enter your choice : 3
Run script to Deactivate mediation 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. RDU03SO-Server
2. ALL SOs
Enter your choice on which SO you want to Activate or Deactivate the Feature :2
Verifying feature is activated or not on RDU03SO-Server
FIPS integrity verification test failed.
==================================================================================
MEDIATION is activated on RDU03SO-Server with Global and Meta Admin Privileges
==================================================================================
```

```
Executing /usr/TKLC/dsr/prod/maint/loaders/deactivate/load.mediationDeactivateAsourced
script on RDU03NO-Server
================================
Removing CAPM KPI group from
table KPIVisibility
================================
  === deleted 1 records ===
================================
Removing CAPM Measurement Groups
from table MeasVisibility
================================
  === deleted 1 records ===
================================================================================
There is no Mate NOAMP server configured in the Topology
================================================================================
Activate/Deactivate mediation on all SOs configured in the Topology
================================================================================
This is a 3 Tier Setup , So run the B sourced loaders on SO server : RDU03SO-Server
Executing /usr/TKLC/dsr/prod/maint/loaders/deactivate/load.mediationDeactivateBsourced
script
with both Global_Admin_State and Meta_Administrator_Privilege for mediation on
RDU03SO-Server
FIPS integrity verification test failed.
============================================
Mediation Deactivation Output
============================================
  === changed 1 records ===
========================================================
Mediation Meta-Administrator successfully deactivated.
========================================================
  === changed 1 records ===
==========================================
Global-Admin-State successfully disabled.
==========================================
FIPS integrity verification test failed.
================================================================================
Executing the Loaders and Clearing Cache on Standby SO servers.
================================================================================
There is no Standby/Spare SOAMP server configured in the Topology
================================================================================
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.