

Oracle® Communications

Diameter Signaling Router

Release 5.1/6.0/7.0/7.1

DSR CPA Feature Activation Procedure

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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 Charging Proxy Application (CPA) feature on DSR 5.1/6.0/7.0/7.1 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 CPA feature is activated during a planned maintenance window to minimize the impact to network traffic.

This document also provides a procedure to deactivate CPA after it has been activated. Please see Section 2.3 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 CPA feature is activated at a later time. CPA also requires SBR function for which software is also included in standard installation.

1.2 ACRONYMS

Table 1 Acronyms

BNS	Broadband Networking Solutions
CPA	Charging Proxy Application
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
IPFE	Internet Protocol Front End
MP	Message Processing or Message Processor
NE	Network Element
NO	Network OAM
NOAM	Network OAM
OAM	Operations, Administration and Maintenance
SBR	Session Binding Repository
SSH	Secure Shell
UI	User Interface
VIP	Virtual IP
VPN	Virtual Private Network
XMI	External Management Interface

1.3 GENERAL PROCEDURE STEP FORMAT

Figure 1: Example of a procedure step

illustrates the general format of procedure steps as they appear in this document. 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: Example of a procedure step).

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

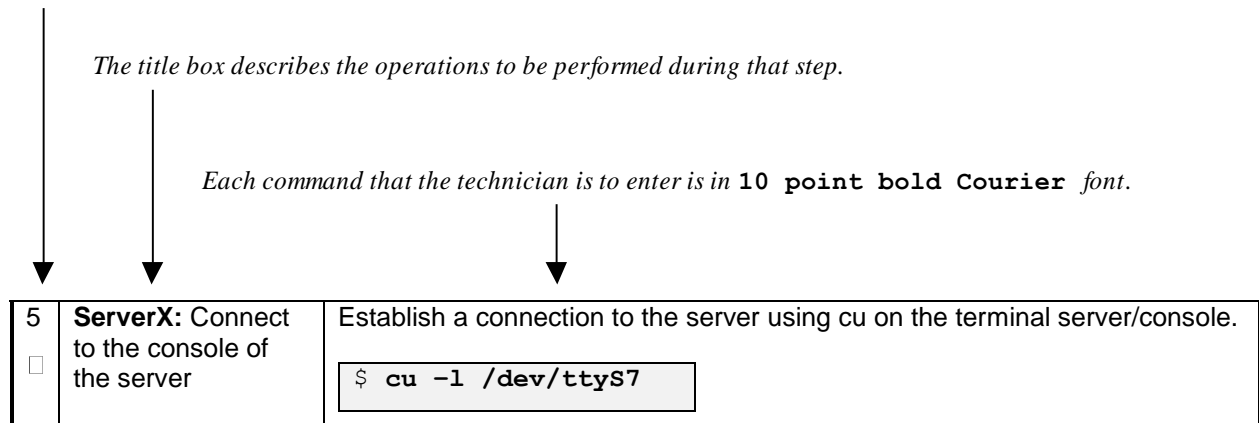


Figure 1: Example of a procedure step

2.0 FEATURE ACTIVATION OVERVIEW

This section lists the required materials and information needed to execute the feature activation. In addition, Table 2: Pre-Feature Activation Overview through Table 7 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 4.0.

2.1 DEFINITION OF ACTIVATION FOR THE CPA FEATURE

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

All software required to run CPA 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 that are already present, to change the behavior of the DSR NE.

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

After feature activation, all selectable CPA-related menu items are present on the OAM GUI, allowing full CPA configuration and provisioning. Specifically, the top-level CPA folder is visible on the Main Menu, and a new entry is added to the **Diameter->Maintenance->Applications** table, showing CPA and its state. After activation, the DA-MP(s) are prepared to act on CPA configuration and provisioning information entered at and replicated from the NO.

Important: Once the CPA feature is activated, it is not automatically enabled. Activation simply means the mechanism for provisioning CPA behavior is in place. The CPA application functions only after CPA has been enabled (via the **Diameter->Maintenance->Applications** screen). CPA should not be enabled until after the appropriate provisioning data has been entered. DSR and CPA provisioning is beyond the scope of this document. Refer to the NOAM GUI Diameter and Charging Proxy Application online help for provisioning instructions.

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.

Table 2: Pre-Feature Activation Overview

Procedure	Elapsed Time (Hours: Minutes)		Activity	Impact
	This Step	Cum.		
			Feature Activation Preparation	
System Topology Check (Procedure 1)	0:00-0:20	0:00-0:20	Step 1: Verify Network Element Configuration data. Step 2: Verify Server Group Configuration data. Step 3: Analyze and plan DA-MP restart sequence.	None
Perform Health Check (Procedure 2)	0:01-0:05	0:21-1:05	Step 1: Verify DSR Release. Step 2: Verify Server status. Step 3: Log all current alarms.	None

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 3: 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	Step 1: Verify DSR Release. Step 2: Verify proper CPA feature state. Step 3: Verify Server status. Step 4: Verify server and server group configurations. Step 5: Log all current alarms.	None
Feature Activation (Procedure 4)	0:10-0:40	0:11-0:45	Step 1: Log out of NOAM GUI. Step 2: SSH to Active NO. Step 3: Log in as admusr Step 4: Change to the feature activation directory. Step 5: Execute the feature activation script. Step 6: Log into SOAM GUI. Step 7: Verify the CPA folder is present.. Step 8: Provision and confirm SBR Subresource Mapping Step 9: Verify Maintenance screen. Step 10: Restart each active DA-MP server. Step 11: Verify Maintenance screen. Step 12: Close SSH connections to NOAM	CPA is activated on DSR

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 4: Post-Feature Activation Overview

Procedure	Elapsed Time (Hours: Minutes)		Activity	Impact
	This Step	Cum.		
			Feature Activation Completion	
Perform Health Check (Procedure 5)	0:01-0:05	0:01-0:05	Step 1: Verify Communication Agent connections. Step 2: Verify Server status. Step 3: Log all current alarms.	CPA has been activated on DSR

2.3 FEATURE DEACTIVATION OVERVIEW

2.3.1 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 5: Pre-Feature Deactivation Overview

Procedure	Elapsed Time (Hours or Minutes)		Activity	Impact
	This Step	Cum.		
			Deactivation Procedures	
Perform Health Check (Procedure 6)	0:01-0:05	0:01-0:05	Step1: Verify DSR Release. Step 2: Verify proper CPA feature state. Step 3: Verify server status. Step 4: Log current alarms.	None.

2.3.2 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 6: Feature Deactivation Overview

Procedure	Elapsed Time (Hours or Minutes)		Activity	Impact
	This Step	Cum.		
			Deactivation Procedures	
Deactivation Setup	0:01-0:20	0:01-0:20	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	0:20-00:50	Step 1: Log out of Active NOAM GUI. Step 3: SSH into active NO. Step 4: Log in as admusr Step 5: Change directory. Step 6: Execute the feature deactivation script. Step 7: Log into NOAM GUI. Step 8: Verify the CPA folder is not present Step 9: Restart each active DA-MP server. Step 10: Verify Maintenance screen. Step 11: Close SSH connections to both NOAMs	CPA is deactivated on DSR.

2.3.3 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 7: Post-Feature Deactivation Overview

Procedure	Elapsed Time (Hours or Minutes)		Activity	Impact
	This Step	Cum.		
			Deactivation Procedures	
Perform Health Check (Procedure 8)	0:01-0:05	0:01-0:05	Step 1: Verify Server status. Step 2: Log all current alarms.	None.


3.0 FEATURE ACTIVATION PREPARATION

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

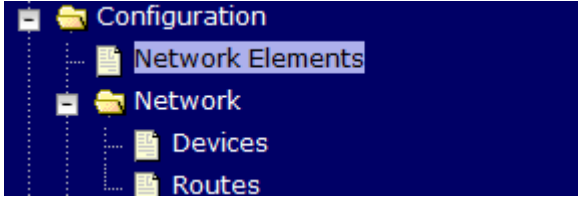

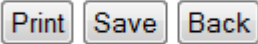
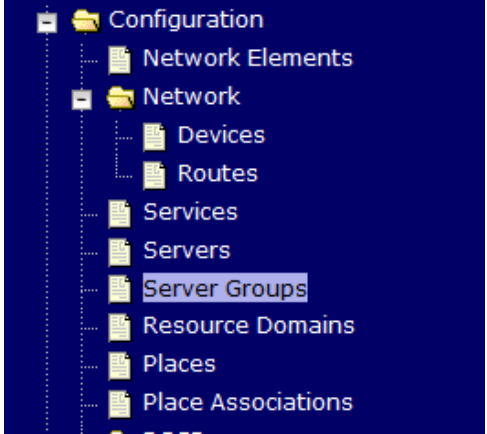

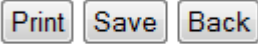
3.1 SYSTEM TOPOLOGY CHECK

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 #	<p>This procedure verifies System Topology.</p> <p>Check off (√) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>If this procedure fails, contact My <i>Oracle</i> Support (MOS), and ask for assistance.</p>	
1 <input type="checkbox"/>	NOAM VIP GUI: Login	<p>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:</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> <code>http://<Primary_NOAM_VIP_IP_Address></code> </div> <p>Login as the <i>guiadmin</i> user:</p> 

Procedure 1: System Topology Check

2 □	NOAM VIP GUI: Verify Network Configuration Data	<p>Navigate to Main Menu -> Configuration -> Network Elements</p>  <p>Click the Report button.</p>  <p>Verify the configuration data is correct for your network. Save or Print this report, keep copies for future reference.</p> 
3 □	NOAM VIP GUI: Verify Server Configuration	<p>Navigate to Main Menu -> Configuration -> Server Groups</p>  <p>Click the Report button.</p>  <p>Verify the configuration data is correct for your network. Save or Print this report, keep copies for future reference.</p> 


Procedure 1: System Topology Check

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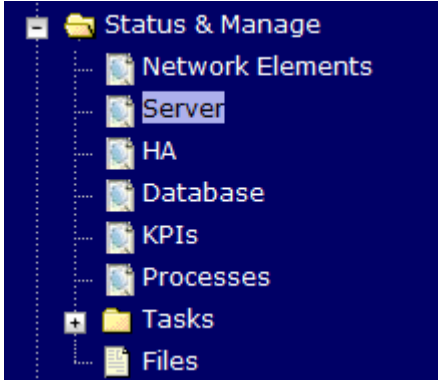
3.2 PERFORM HEALTH CHECK

This procedure is part of feature activation preparation and is used to determine the health and status of the DSR 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 P #	<p>This procedure provides steps to perform needed health checks.</p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>If this procedure fails, contact My <i>Oracle</i> Support (MOS), and ask for assistance.</p>	
<p>1</p> <p><input type="checkbox"/></p>	<p>NOAM VIP GUI: Login</p>	<p>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:</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p><code>http://<Primary_NOAM_VIP_IP_Address></code></p> </div> <p>Login as the <i>guiadmin</i> user:</p> <div style="text-align: center;">  </div>

Procedure 2: Perform Health Check (Feature Activation Preparation)

<p>2</p> <p>☐</p>	<p>NOAM VIP GUI: Verify Server Status</p>	<p>Navigate to Main Menu -> Status & Manage -> Server</p>  <p>Verify all Server Status is Normal (Norm) for: Alarm (Alm), Database (DB), Replication Status, and Processes (Proc).</p> <table border="1" data-bbox="488 842 1349 963"> <thead> <tr> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>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.</p> <p>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.</p>	Appl State	Alm	DB	Reporting Status	Proc	Enabled	Norm	Norm	Norm	Norm	Enabled	Norm	Norm	Norm	Norm	Enabled	Norm	Norm	Norm	Norm	Enabled	Norm	Norm	Norm	Norm
Appl State	Alm	DB	Reporting Status	Proc																							
Enabled	Norm	Norm	Norm	Norm																							
Enabled	Norm	Norm	Norm	Norm																							
Enabled	Norm	Norm	Norm	Norm																							
Enabled	Norm	Norm	Norm	Norm																							

Procedure 2: Perform Health Check (Feature Activation Preparation)

3 <input type="checkbox"/>	NOAM VIP GUI: Log Current Alarms	Navigate to Main Menu -> Alarms & Events -> View Active  <p>Click on the Report button</p> <p><input type="button" value="Export"/> <input type="button" value="Report"/> <input type="button" value="Clear Selections"/></p> <p>Save or Print this report, keep copies for future reference.</p> <p><input type="button" value="Print"/> <input type="button" value="Save"/> <input type="button" value="Back"/></p>
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4.0 FEATURE ACTIVATION

Before feature activation, perform the system health check in **Section 3.2**. 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), and ask for assistance. 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.


4.1 PRE-ACTIVATION PROCEDURES

4.1.1 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 3.2** when preparing for feature activation, but it is repeated here to emphasize that it is being re-executed if **Section 3.2** was performed outside the maintenance window.

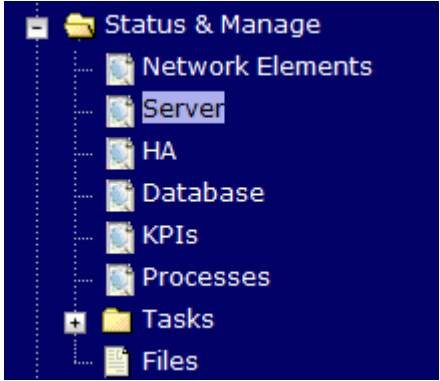
Procedure 3: Perform Health Check (Pre Feature Activation)

S T E P #	<p>This procedure provides steps to perform needed health checks.</p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>If this procedure fails, contact My <i>Oracle</i> Support (MOS), and ask for assistance.</p>	
1 <input type="checkbox"/>	SOAM VIP GUI: Login	<p>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:</p> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 10px auto;"> <p><code>http://<Primary_SOAM_VIP_IP_Address></code></p> </div> <p>Login as the <i>guiadmin</i> user:</p> 
2 <input type="checkbox"/>	SOAM VIP GUI: Verify CPA Folder is not Present	Under Main Menu , verify the CPA folder is NOT present.

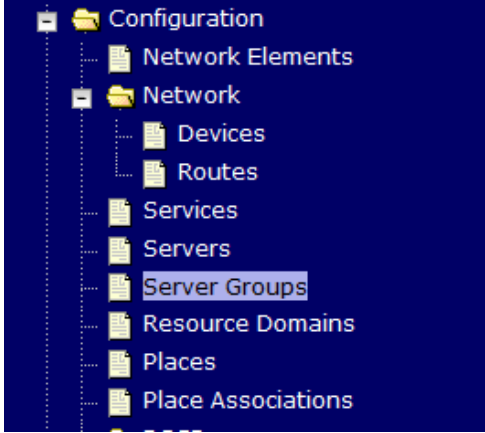

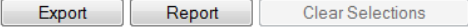
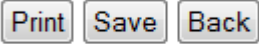
Procedure 3: Perform Health Check (Pre Feature Activation)

3 <input type="checkbox"/>	NOAM VIP GUI: Login	<p>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:</p> <div data-bbox="492 373 1346 415" style="border: 1px solid black; padding: 2px;"><code>http://<Primary_NOAM_VIP_IP_Address></code></div> <p>Login as the <i>guiadmin</i> user:</p> <div data-bbox="565 506 1349 1094" style="text-align: center;"><p>The screenshot shows the Oracle System Login page. At the top is the Oracle logo in red. Below it, the text 'Oracle System Login' is displayed on the left, and the date 'Fri Mar 20 12:29:52 2015 EDT' is on the right. A central box titled 'Log In' contains the instruction 'Enter your username and password to log in'. Below this are two input fields: 'Username: guiadmin' and 'Password: ●●●●●●'. There is a checkbox for 'Change password' and a 'Log In' button. At the bottom of the page, there is a welcome message and a disclaimer: '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.'</p></div>
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Procedure 3: Perform Health Check (Pre Feature Activation)

<p>4</p> <p>☐</p>	<p>NOAM VIP GUI: Verify Server Status</p>	<p>Navigate to Main Menu -> Status & Manage -> Server</p>  <p>Verify all Server Status is Normal (Norm) for: Alarm (Alm), Database (DB), Replication Status, and Processes (Proc).</p> <table border="1" data-bbox="488 879 1351 1003"> <thead> <tr> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <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> </tbody> </table> <p>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.</p> <p>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.</p>	Appl State	Alm	DB	Reporting Status	Proc	Enabled	Norm	Norm	Norm	Norm	Enabled	Norm	Norm	Norm	Norm	Enabled	Norm	Norm	Norm	Norm	Enabled	Norm	Norm	Norm	Norm
Appl State	Alm	DB	Reporting Status	Proc																							
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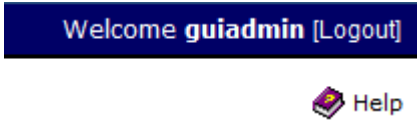
Procedure 3: Perform Health Check (Pre Feature Activation)

<p>5</p> <p>☐</p>	<p>NOAM VIP GUI: Verify Server Configuration</p>	<p>Navigate to Main Menu -> Configuration -> Server Groups</p>  <p>Verify SBR and optional IPFE servers and server groups have been provisioned. If provisioning is required refer to the NOAM GUI online help for provisioning instructions.</p> <p>Note: At least 1 SBR server and SBR server group must be provisioned for CPA to function properly.</p>
<p>6</p> <p>☐</p>	<p>NOAM VIP GUI: Log Current Alarms</p>	<p>Navigate to Main Menu -> Alarms & Events -> View Active</p>  <p>Click on the Report button</p>  <p>Save or Print this report, keep copies for future reference.</p> 

4.2 ACTIVATION PROCEDURES

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


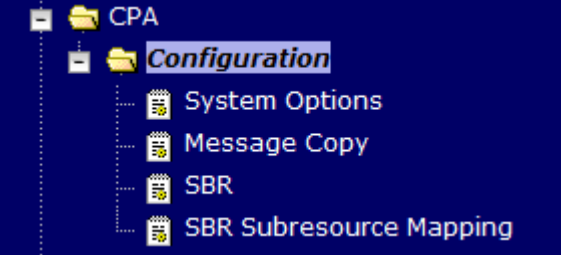
Procedure 4: Feature Activation

S T E P #	<p>This procedure provides steps to Activate CPA.</p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>If this procedure fails, contact My <i>Oracle</i> Support (MOS), and ask for assistance.</p>	
1 <input type="checkbox"/>	NOAM/SOAM VIP GUI: Logout	<p>Logout of any active NOAM and/or SOAM GUI Sessions:</p> 
2 <input type="checkbox"/>	NOAM VIP: Establish an SSH session	Establish an SSH session to the NOAM VIP. Login as admusr .
3 <input type="checkbox"/>	NOAM VIP: Navigate to the Feature Activation Directory	<p>Navigate to the feature activation directory by executing the following command:</p> <pre style="border: 1px solid black; padding: 2px;">\$ cd /usr/TKLC/dsr/prod/maint/loaders/</pre>

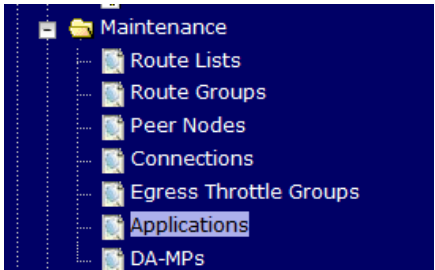
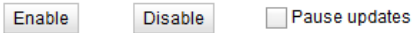
Procedure 4: Feature Activation

<p>4</p> <p><input type="checkbox"/></p>	<p>NOAM VIP: Execute the Feature Activation Script</p>	<p>Run the feature activation script by executing the following command:</p> <pre>\$./featureActivateDeactivate</pre> <p>Choose Activate</p> <pre>You want to Activate or Deactivate the Feature : 1.Activate 2.Deactivate Enter your choice : █</pre> <p>Choose CPA</p> <pre>List of Feature you can Activate : 1.CPA 2.RBAR 3.FABR 4.Mediation 5.LoadGen 6.GLA 7.MAP Interworking Enter the choice : █</pre> <p>Choose the SOAM site for which the application will be activated: Note: As an alternative, you can also activate on all SOAM sites:</p> <pre>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 : █</pre> <p>Refer to Section 7.1.1 for output Example.</p>
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Procedure 4: Feature Activation

<p>5</p> <p><input type="checkbox"/></p>	<p>Active SOAM GUI: Login</p>	<p>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:</p> <div data-bbox="492 373 1346 415" style="border: 1px solid black; padding: 2px;"> <p><code>http://<Active_SOAM_IP_Address></code></p> </div> <p>Login as the <i>guiadmin</i> user:</p> <div data-bbox="565 506 1349 1094" style="text-align: center;">  <p>The screenshot shows the Oracle System Login interface. At the top is the Oracle logo in red. Below it is the text 'Oracle System Login' and the date 'Fri Mar 20 12:29:52 2015 EDT'. A central box titled 'Log In' contains the instruction 'Enter your username and password to log in'. It features a 'Username' field with 'guiadmin' entered, a 'Password' field with masked characters, a 'Change password' checkbox, and a 'Log In' button. Below the box, it says 'Welcome to the Oracle System Login.' and '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.' At the bottom, it includes a trademark notice: 'Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.'</p> </div>
<p>6</p> <p><input type="checkbox"/></p>	<p>Active SOAM GUI: Verify the CPA Folder is Visible</p>	<p>Locate and verify the CPA folder from Main Menu is visible and the configuration folder items are present</p> <div data-bbox="492 1234 1049 1486" style="background-color: #000080; color: white; padding: 10px;">  <p>The screenshot shows a dark blue menu with yellow folder icons. The top level is 'CPA', which is expanded to show a 'Configuration' folder. Under 'Configuration', there are four items: 'System Options', 'Message Copy', 'SBR', and 'SBR Subresource Mapping', each with a document icon.</p> </div>

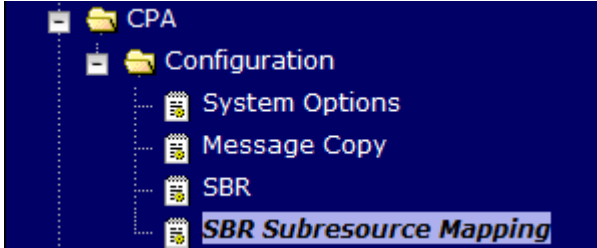
Procedure 4: Feature Activation

<p>7</p> <p><input type="checkbox"/></p>	<p>Active SOAM GUI: Verify Application Maintenance Screen is Visible</p>	<p>Navigate to Main Menu -> Diameter -> Maintenance -> Applications</p>  <p>Verify CPA status is uninitialized. The following data should be displayed:</p> <p>Admin State = Disabled Operational State = Unk Operational Reason = Unk Congestion Level = Unk</p> <p>Click the Enable Button if needed</p> 
<p>8</p> <p><input type="checkbox"/></p>	<p>Standby SOAM GUI: Repeat Verification Steps</p>	<p>Repeat Steps 5-7 for the Standby SOAM</p> <p>Note: If the verifications for the standby SOAM differ from the Active SOAM, stop and contact My Oracle Support (MOS)</p>
<p>9</p> <p><input type="checkbox"/></p>	<p>Spare SOAM GUI: Verify and Activate</p>	<p>Repeat Steps 5-7 for any spare SOAMs present.</p> <p>For DSR 5.1, 6.0, and 7.0, you will have to run the following command to activate CPA on each spare SOAM:</p> <p>Note: For DSR 7.1, skip this step.</p> <pre style="border: 1px solid black; padding: 5px;">\$ cd /usr/TKLC/dsr/prod/maint/loaders/activate \$./load.cpaActivateB sourced</pre>

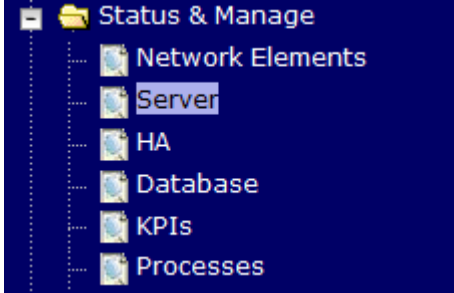
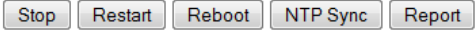
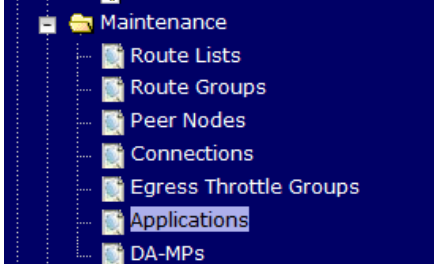
Procedure 4: Feature Activation

10 <input type="checkbox"/>	SOAM VIP GUI: Login	<p>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:</p> <div data-bbox="490 373 1344 415" style="border: 1px solid black; padding: 2px;"><code>http://<Primary_SOAM_VIP_IP_Address></code></div> <p>Login as the <i>guiadmin</i> user:</p> <div data-bbox="565 506 1351 1094" style="text-align: center;"></div>
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Procedure 4: Feature Activation

<p>11</p> <p>□</p>	<p>SOAM VIP GUI: Provision and confirm SBR Subresource Mapping</p>	<p>Navigate to Main Menu -> CPA -> Configuration > SBR Subresource Mapping</p>  <p>The SBR Subresource Mapping screen is shown.</p> <p>Verify the mapping configuration. Subresources must be numbered sequentially, starting with 0 and incremented by 1.</p> <p>Main Menu: CPA -> Configuration -> SBR Subresource Mapping</p> <table border="1" data-bbox="488 800 1430 982"> <thead> <tr> <th colspan="3">Section Dedicated to Server Group [SBRSG]</th> </tr> <tr> <th>Attribute</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>SBR Server Group Name</td> <td>SBRSG</td> <td>SBR Server Group Name</td> </tr> <tr> <td>Resource Name</td> <td>CSBR</td> <td>Resource Name</td> </tr> <tr> <td>Subresource Id</td> <td>0</td> <td>Subresource Id. Must be in sequence. Range [Not Hosted, 0-5]</td> </tr> </tbody> </table> <p><i>After applying this mapping, it can only be changed by de-activating and re-activating the CPA application!</i></p> <p style="text-align: right;">(Apply) (Cancel)</p> <p>Click Apply.</p> <p>Note: A warning displays saying that this screen can be edited only once.</p> <p>Note: The update will be rejected if subresources are not numbered sequentially starting with 0.</p> <p>Click Confirm to apply your changes.</p> <p>Once the changes are confirmed, this pane and the configurations for the SBR on the Configuration > Server Groups screen will be read only. If you need to reconfigure subresources or SBR server groups, My Oracle Support (MOS).</p>	Section Dedicated to Server Group [SBRSG]			Attribute	Value	Description	SBR Server Group Name	SBRSG	SBR Server Group Name	Resource Name	CSBR	Resource Name	Subresource Id	0	Subresource Id. Must be in sequence. Range [Not Hosted, 0-5]
Section Dedicated to Server Group [SBRSG]																	
Attribute	Value	Description															
SBR Server Group Name	SBRSG	SBR Server Group Name															
Resource Name	CSBR	Resource Name															
Subresource Id	0	Subresource Id. Must be in sequence. Range [Not Hosted, 0-5]															

Procedure 4: Feature Activation


<p>12</p> <p><input type="checkbox"/></p>	<p>SOAM VIP GUI: Restart DA-MPs</p>	<p>Multiple iterations of this step may be executed during the feature activation procedure. This is dependent on the number of DA-MP servers within your system. Make a written record of the number of times the step was performed. It is recommended that no more than 50% of the DA-MPs be restarted at once.</p> <p>Navigate to Main Menu -> Status & Manage -> Server</p>  <p>Select the desired DA-MPs, you can use 'Ctrl' to select multiple DA-MPs at once.</p> <p>Click the Restart button.</p>  <p>Verify the Server changes to the Err state and wait until it returns to the Enabled/Norm state.</p> <p>Repeat for the additional DA-MPs.</p>
<p>13</p> <p><input type="checkbox"/></p>	<p>Active SOAM GUI: Verify Application Maintenance Screen is Visible</p>	<p>Navigate to Main Menu -> Diameter -> Maintenance -> Applications</p>  <p>Verify CPA status is initialized. The following data should be displayed:</p> <p>Admin State = Enabled Operational State = Available Operational Reason = Normal Congestion Level = Normal</p>

4.3 POST-ACTIVATION PROCEDURES

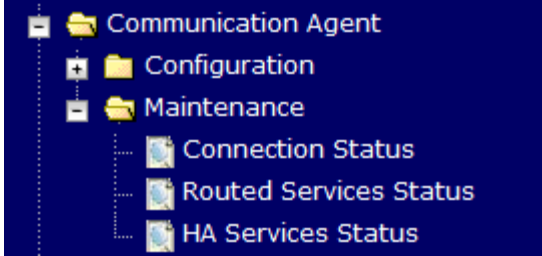
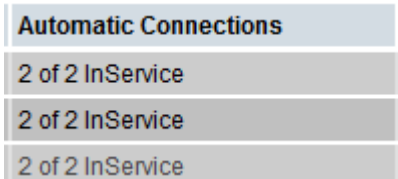
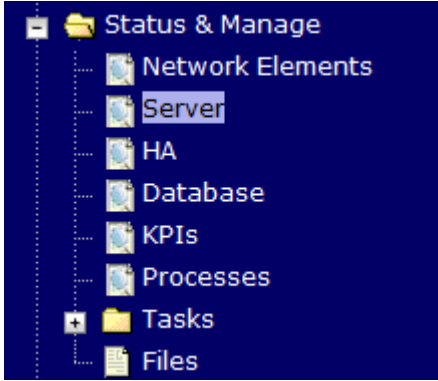
4.3.1 Perform Health Check

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


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

S T E P #	<p>This procedure performs a post activation Health Check.</p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>If this procedure fails, contact My <i>Oracle</i> Support (MOS), and ask for assistance.</p>
1 <input type="checkbox"/>	<p>NOAM VIP GUI: Login</p> <p>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:</p> <div data-bbox="493 957 1346 995" style="border: 1px solid black; padding: 2px;"><p><code>http://<Primary_NOAM_VIP_IP_Address></code></p></div> <p>Login as the guiadmin user:</p> <div data-bbox="483 1087 1435 1688" style="text-align: center;"></div>

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

<p>2</p> <p><input type="checkbox"/></p>	<p>NOAM VIP GUI: Verify Communication Agent Status</p>	<p>Navigate to Main Menu -> Communication Agent -> Maintenance -> Connection Status</p>  <p>For each server name displayed, verify that the Automatic Connections field displays: X of X InService – where X is the number of peer server connections.</p>  <p>Note: If all connections are not InService contact My Oracle Support (MOS)</p>																									
<p>3</p> <p><input type="checkbox"/></p>	<p>NOAM VIP GUI: Verify Server Status</p>	<p>Navigate to Main Menu -> Status & Manage -> Server</p>  <p>Verify all Server Status is Normal (Norm) for: Alarm (Alm), Database (DB), Reporting Status, and Processes (Proc).</p> <table border="1" data-bbox="488 1646 1351 1768"> <thead> <tr> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <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> </tbody> </table>	Appl State	Alm	DB	Reporting Status	Proc	Enabled	Norm	Norm	Norm	Norm	Enabled	Norm	Norm	Norm	Norm	Enabled	Norm	Norm	Norm	Norm	Enabled	Norm	Norm	Norm	Norm
Appl State	Alm	DB	Reporting Status	Proc																							
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Procedure 5: Perform Health Check (Post-Feature Activation)

4 <input type="checkbox"/>	NOAM VIP GUI: Log Current Alarms	<p>Navigate to Main Menu -> Alarms & Events -> View Active</p>  <p>Click on the Report button</p> <p><input type="button" value="Export"/> <input type="button" value="Report"/> <input type="button" value="Clear Selections"/></p> <p>Save or Print this report, keep copies for future reference.</p> <p><input type="button" value="Print"/> <input type="button" value="Save"/> <input type="button" value="Back"/></p> <p>Compare this alarm report with those gathered in the pre-activation procedures. Contact My Oracle Support (MOS) if needed.</p>
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5.0 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 CPA application, deactivation will have no impact on the system. The deactivation procedure will cause all the CPA related configuration data (including the SBR Subresource Mapping configuration data and Application Routing Rules using CPA) to be removed. The crafts person must ensure that this is acceptable.

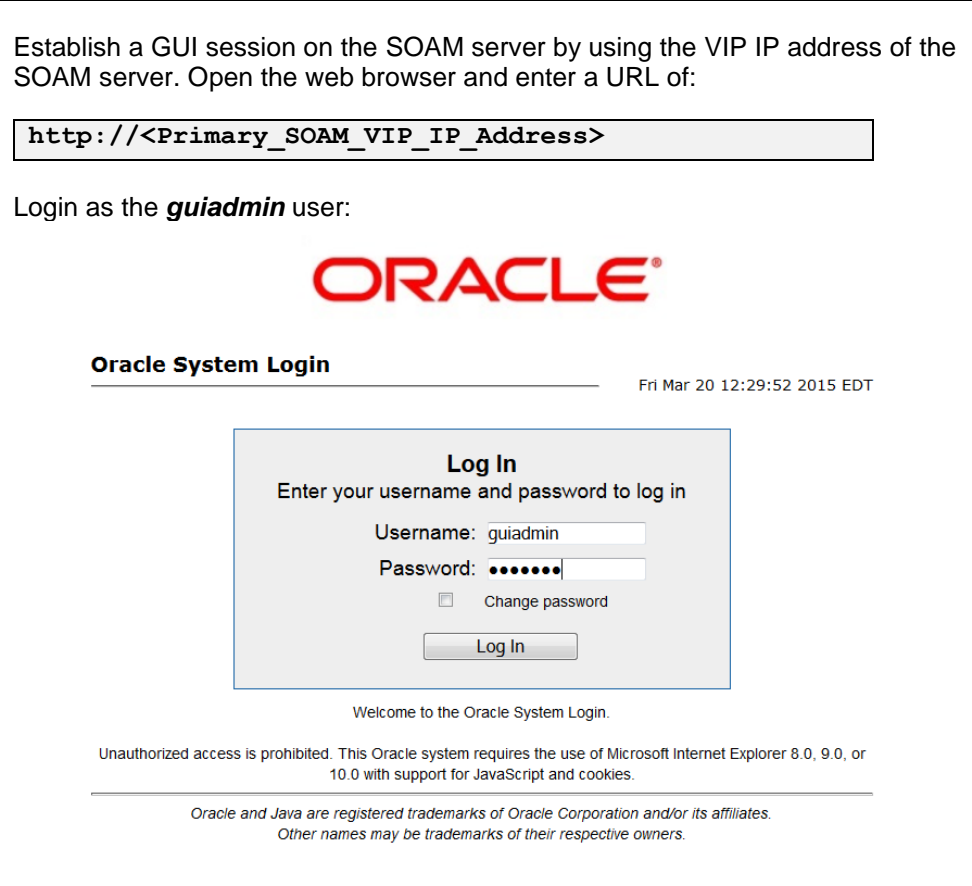
5.1 PRE-DEACTIVATION PROCEDURES

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

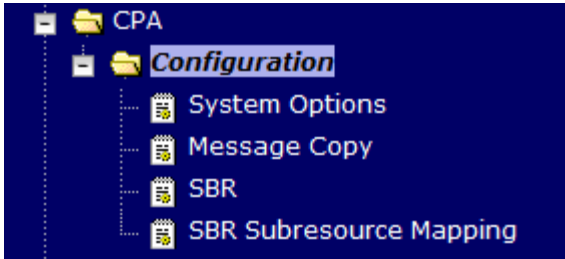

5.1.1 Perform Health Check

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

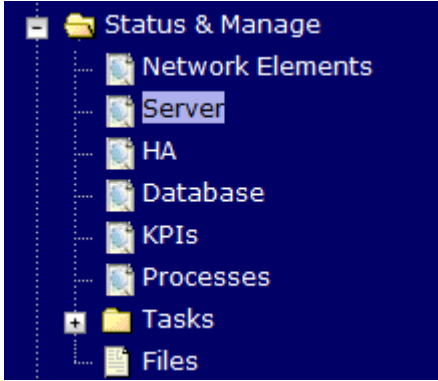

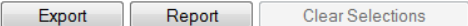

Procedure 6: Perform Health Check (Pre-Feature Deactivation)

S T E P #	<p>This procedure performs a Health Check.</p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>If this procedure fails, contact My <i>Oracle</i> Support (MOS), and ask for assistance.</p>	
1 <input type="checkbox"/>	SOAM VIP GUI: Login	<p>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:</p> <div style="border: 1px solid black; padding: 2px; margin: 10px 0;"> <p><code>http://<Primary_SOAM_VIP_IP_Address></code></p> </div> <p>Login as the <i>guiadmin</i> user:</p> <div style="text-align: center;">  </div>

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

<p>2</p> <p><input type="checkbox"/></p>	<p>SOAM VIP GUI: Verify the CPA Folder is Visible</p>	<p>Locate and verify the CPA folder from Main Menu is visible and the configuration folder items are present</p>  <p>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.</p>
<p>3</p> <p><input type="checkbox"/></p>	<p>NOAM VIP GUI: Login</p>	<p>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:</p> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 10px auto;"> <p><code>http://<Primary_NOAM_VIP_IP_Address></code></p> </div> <p>Login as the <i>guiadmin</i> user:</p> 

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


<p>4</p> <p>□</p>	<p>NOAM VIP GUI: Verify Server Status</p>	<p>Navigate to Main Menu -> Status & Manage -> Server</p>  <p>Verify all Server Status is Normal (Norm) for: Alarm (Alm), Database (DB), Replication Status, and Processes (Proc).</p> <table border="1" data-bbox="488 877 1349 1003"> <thead> <tr> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <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> </tbody> </table>	Appl State	Alm	DB	Reporting Status	Proc	Enabled	Norm	Norm	Norm	Norm	Enabled	Norm	Norm	Norm	Norm	Enabled	Norm	Norm	Norm	Norm	Enabled	Norm	Norm	Norm	Norm
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<p>5</p> <p>□</p>	<p>NOAM VIP GUI: Log Current Alarms</p>	<p>Navigate to Main Menu -> Alarms & Events -> View Active</p>  <p>Click on the Report button</p>  <p>Save or Print this report, keep copies for future reference.</p>  <p>Compare this alarm report with those gathered in the pre-activation procedures. Contact My Oracle Support (MOS) if needed.</p>																									

6.0 FEATURE DEACTIVATION

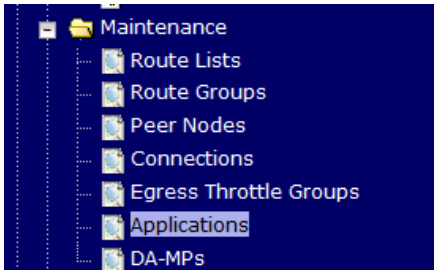
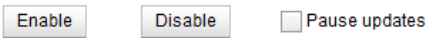
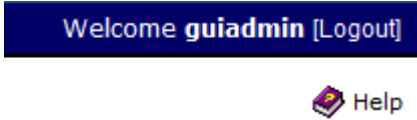
6.1 FEATURE DEACTIVATION

Detailed steps are given in the procedure below

Procedure 7: Feature Deactivation

S T E P #	<p>This procedure provides steps to Deactivate CPA.</p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>If this procedure fails, contact My <i>Oracle</i> Support (MOS), and ask for assistance.</p>
1 <input type="checkbox"/>	<p>SOAM VIP GUI: Login</p> <p>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:</p> <div data-bbox="492 842 1346 884" style="border: 1px solid black; padding: 2px;"><p><code>http://<Primary_SOAM_VIP_IP_Address></code></p></div> <p>Login as the <i>guiadmin</i> user:</p> <div data-bbox="565 976 1349 1564" style="text-align: center;"></div> <p>Welcome to the Oracle System Login.</p> <p>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.</p> <p><small>Oracle and Java are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.</small></p>

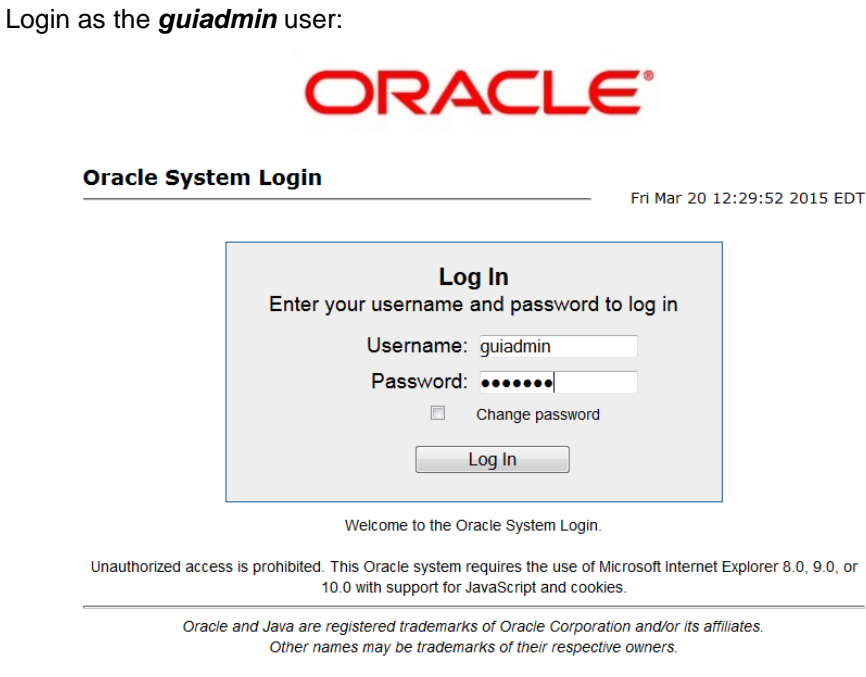
Procedure 7: Feature Deactivation

<p>2</p> <p><input type="checkbox"/></p>	<p>Active SOAM GUI: Disable CPA Application</p>	<p>Navigate to Main Menu -> Diameter -> Maintenance -> Applications</p>  <p>Select the CPA applications to disable.</p> <table border="1" data-bbox="488 667 1430 762"> <thead> <tr> <th>DSR Application Name</th> <th>MP Server Hostname</th> <th>Admin State</th> <th>Operational Status</th> <th>Operational Reason</th> <th>Congestion Level</th> <th>Time of Last Update</th> </tr> </thead> <tbody> <tr> <td>CPA</td> <td>HPC02-MP1</td> <td>Enabled</td> <td>Available</td> <td>Normal</td> <td>Normal</td> <td>2015-May-22 05:32:44 EDT</td> </tr> <tr> <td>CPA</td> <td>HPC02-MP2</td> <td>Enabled</td> <td>Available</td> <td>Normal</td> <td>Normal</td> <td>2015-May-22 05:32:45 EDT</td> </tr> </tbody> </table> <p>Click the Disable button.</p>  <p>The following application state should appear:</p> <table border="1" data-bbox="488 1016 1430 1110"> <thead> <tr> <th>DSR Application Name</th> <th>MP Server Hostname</th> <th>Admin State</th> <th>Operational Status</th> <th>Operational Reason</th> <th>Congestion Level</th> <th>Time of Last Update</th> </tr> </thead> <tbody> <tr> <td>CPA</td> <td>HPC02-MP1</td> <td>Disabled</td> <td>Unavailable</td> <td>Shut Down</td> <td>Normal</td> <td>2015-May-26 10:00:27 EDT</td> </tr> <tr> <td>CPA</td> <td>HPC02-MP2</td> <td>Disabled</td> <td>Unavailable</td> <td>Shut Down</td> <td>Normal</td> <td>2015-May-26 10:00:27 EDT</td> </tr> </tbody> </table>	DSR Application Name	MP Server Hostname	Admin State	Operational Status	Operational Reason	Congestion Level	Time of Last Update	CPA	HPC02-MP1	Enabled	Available	Normal	Normal	2015-May-22 05:32:44 EDT	CPA	HPC02-MP2	Enabled	Available	Normal	Normal	2015-May-22 05:32:45 EDT	DSR Application Name	MP Server Hostname	Admin State	Operational Status	Operational Reason	Congestion Level	Time of Last Update	CPA	HPC02-MP1	Disabled	Unavailable	Shut Down	Normal	2015-May-26 10:00:27 EDT	CPA	HPC02-MP2	Disabled	Unavailable	Shut Down	Normal	2015-May-26 10:00:27 EDT
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CPA	HPC02-MP2	Disabled	Unavailable	Shut Down	Normal	2015-May-26 10:00:27 EDT																																						
<p>3</p> <p><input type="checkbox"/></p>	<p>NOAM/SOAM VIP GUI: Logout</p>	<p>Logout of any active NOAM and/or SOAM GUI Sessions:</p> 																																										
<p>4</p> <p><input type="checkbox"/></p>	<p>NOAM VIP: Establish an SSH session</p>	<p>Establish an SSH session to the NOAM VIP. Login as admusr.</p>																																										
<p>5</p> <p><input type="checkbox"/></p>	<p>NOAM VIP: Navigate to the Feature Activation Directory</p>	<p>Navigate to the feature activation directory by executing the following command:</p> <pre style="border: 1px solid black; padding: 5px;">\$ cd /usr/TKLC/dsr/prod/maint/loaders/</pre>																																										

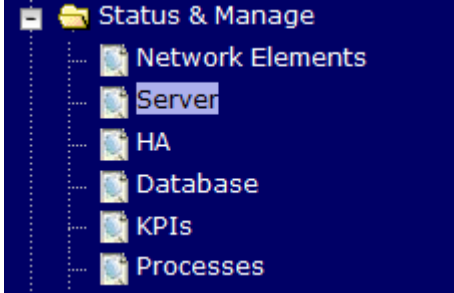
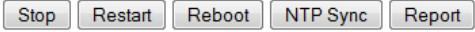
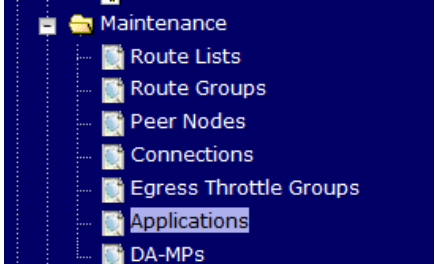
Procedure 7: Feature Deactivation

<p>6</p> <p><input type="checkbox"/></p>	<p>NOAM VIP: Execute the Feature Activation Script</p>	<p>Run the feature activation script by executing the following command:</p> <pre>\$./featureActivateDeactivate</pre> <p>Choose Deactivate</p> <pre>You want to Activate or Deactivate the Feature : 1.Activate 2.Deactivate Enter your choice : █</pre> <p>Choose CPA</p> <pre>List of Feature you can Activate : 1.CPA 2.RBAR 3.FABR 4.Mediation 5.LoadGen 6.GLA 7.MAP Interworking Enter the choice : █</pre> <p>Choose the SOAM site for which the application will be Deactivated: Note: As an alternative, you can also deactivate on all SOAM sites:</p> <pre>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 : █</pre> <p>Refer to Section 7.1.2 for output Example.</p>
--	---	---

Procedure 7: Feature Deactivation

<p>7 <input type="checkbox"/></p>	<p>Active SOAM GUI: Login</p>	<p>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:</p> <pre style="border: 1px solid black; padding: 5px;">http://<Active_SOAM_IP_Address></pre> <p>Login as the <i>guiadmin</i> user:</p> 
<p>8 <input type="checkbox"/></p>	<p>Active SOAM GUI: Verify the CPA Folder</p>	<p>Verify the CPA folder is not visible.</p>
<p>9 <input type="checkbox"/></p>	<p>Standby SOAM GUI: Repeat Verification Steps</p>	<p>Repeat Steps 7-8 for the Standby SOAM</p> <p>Note: If the verifications for the standby SOAM differ from the Active SOAM, stop and contact My Oracle Support (MOS)</p>
<p>10 <input type="checkbox"/></p>	<p>Spare SOAM GUI: Verify and Activate</p>	<p>Repeat Steps 7-8 for any spare SOAMs present.</p> <p>For DSR 5.1, 6.0, and 7.0, you will have to run the following command to Deactivate CPA on each spare SOAM:</p> <p>Note: For DSR 7.1, skip this step.</p> <pre style="border: 1px solid black; padding: 5px;">\$ cd /usr/TKLC/dsr/prod/maint/loaders/deactivate \$./load.cpaDeactivateB sourced</pre>

Procedure 7: Feature Deactivation

<p>11</p> <p><input type="checkbox"/></p>	<p>SOAM VIP GUI: Restart DA-MPs</p>	<p>Multiple iterations of this step may be executed during the feature activation procedure. This is dependent on the number of DA-MP servers within your system. Make a written record of the number of times the step was performed. It is recommended that no more than 50% of the DA-MPs be restarted at once.</p> <p>Navigate to Main Menu -> Status & Manage -> Server</p>  <p>Select the desired DA-MPs, you can use 'Ctrl' to select multiple DA-MPs at once.</p> <p>Click the Restart button.</p>  <p>Verify the Server changes to the Err state and wait until it returns to the Enabled/Norm state.</p> <p>Repeat for the additional DA-MPs.</p>
<p>12</p> <p><input type="checkbox"/></p>	<p>SOAM VIP GUI: Verify Maintenance Screen</p>	<p>Navigate to Main Menu -> Diameter -> Maintenance -> Applications</p>  <p>Verify the CPA application is not present.</p>


6.2 POST-DEACTIVATION PROCEDURES

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

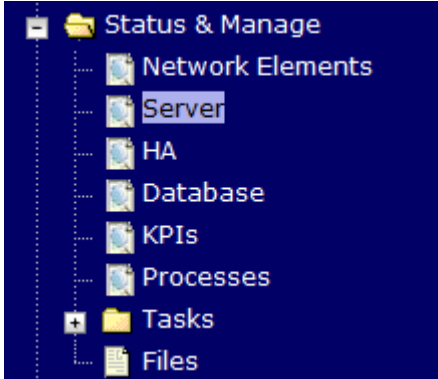

6.2.1 Perform Health Check

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

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

S T E P #	<p>This procedure performs a post activation Health Check.</p> <p>Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.</p> <p>If this procedure fails, contact My <i>Oracle</i> Support (MOS), and ask for assistance.</p>
1 <input type="checkbox"/>	<p>NOAM VIP GUI: Login</p> <p>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:</p> <div data-bbox="490 972 1346 1014" style="border: 1px solid black; padding: 2px;"><code>http://<Primary_NOAM_VIP_IP_Address></code></div> <p>Login as the <i>guiadmin</i> user:</p> <div data-bbox="483 1102 1349 1696"></div>

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

<p>3</p> <p>□</p>	<p>NOAM VIP GUI: Verify Server Status</p>	<p>Navigate to Main Menu -> Status & Manage -> Server</p>  <p>Verify all Server Status is Normal (Norm) for: Alarm (Alm), Database (DB), Replication Status, and Processes (Proc).</p> <table border="1" data-bbox="488 877 1349 1003"> <thead> <tr> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <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> </tbody> </table>	Appl State	Alm	DB	Reporting Status	Proc	Enabled	Norm	Norm	Norm	Norm	Enabled	Norm	Norm	Norm	Norm	Enabled	Norm	Norm	Norm	Norm	Enabled	Norm	Norm	Norm	Norm
Appl State	Alm	DB	Reporting Status	Proc																							
Enabled	Norm	Norm	Norm	Norm																							
Enabled	Norm	Norm	Norm	Norm																							
Enabled	Norm	Norm	Norm	Norm																							
Enabled	Norm	Norm	Norm	Norm																							
<p>4</p> <p>□</p>	<p>NOAM VIP GUI: Log Current Alarms</p>	<p>Navigate to Main Menu -> Alarms & Events -> View Active</p>  <p>Click on the Report button</p> <p><input type="button" value="Export"/> <input type="button" value="Report"/> <input type="button" value="Clear Selections"/></p> <p>Save or Print this report, keep copies for future reference.</p> <p><input type="button" value="Print"/> <input type="button" value="Save"/> <input type="button" value="Back"/></p> <p>Compare this alarm report with those gathered in the pre-Deactivation procedures. Contact My Oracle Support (MOS) if needed.</p>																									

7.0 ENGINEERING NOTES

7.1.1 SAMPLE OUTPUT OF ACTIVATION ON ACTIVE NOAM

```
Run script to Activate cpa 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.cpaActivateAsourced script on HPC02-NO2
=====

Add CPA KPI group to table
KPIVisibility
=====

KPI_Group=CPA
Visibility=VIS_SO
=====

Add CPA Measurement groups to
table MeasVisibility
=====

Meas_Group=CPA Performance
Visibility=VIS_SO
=====

Meas_Group=CPA Exception
Visibility=VIS_SO
=====

Meas_Group=CPA Session DB
Visibility=VIS_SO
=====

Add CPA GUI permission group to
table app_permission_groups
=====

_appid=17
group_id=8000
group_name=CPA Configuration Permissions
=====

KPI_Group=SBR
Visibility=VIS_SO
=====

Meas_Group=SBR Performance
Visibility=VIS_SO
=====

Meas_Group=SBR Exception
Visibility=VIS_SO
=====

Starting to Execute the Loaders on Standby server
=====

Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.cpaActivateAsourced script on HPC02-NO1
=====

Add CPA GUI permission group to
table app_permission_groups
=====

_appid=17
```

```

group_id=8000
group_name=CPA Configuration Permissions
=====
KPI_Group=SBR
Visibility=VIS_SO
=====
Meas_Group=SBR Performance
Visibility=VIS_SO
=====
Meas_Group=SBR Exception
Visibility=VIS_SO
=====

The Active SO server configured in the Topology are
=====
1. HPC02-SO2
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 : HPC02-SO2
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.cpaActivateB sourced script on HPC02-SO2
=====
Current server is HA ACTIVE
=====
Add CPA to DsrApplication table.
If already present, no update
will occur
=====
id=5
name=CPA
unavailableAction=SendAnswer
avpInsertion=No
shutdownMode=Graceful
shutdownTimer=5
resultCode=3004
vendorId=0
errorString=CPA Unavailable
resExhResultCode=3004
resExhVendorId=0
resExhErrorString=DSR Generated Answer
routeListId=65535
realm=
fqdn=
mcl=0
=====
Add Common CPA DSR Application
measurements to table MeasRptGroup
=====
repgrp=DSR Application Exception
measid=10704
subgrp=
=====
repgrp=DSR Application Exception
measid=10705
subgrp=
=====
repgrp=DSR Application Performance
measid=10700
subgrp=
=====
repgrp=DSR Application Performance
measid=10701

```

```

subgrp=
=====
repgrp=DSR Application Performance
measid=10702
subgrp=
=====
repgrp=DSR Application Performance
measid=10703
subgrp=
=====
repgrp=DSR Application Performance
measid=10706
subgrp=
=====
repgrp=DSR Application Performance
measid=10707
subgrp=
=====
repgrp=DSR Application Performance
measid=10708
subgrp=
=====
repgrp=DSR Application Performance
measid=10709
subgrp=
=====
repgrp=DSR Application Performance
measid=10745
subgrp=
=====
repgrp=DSR Application Performance
measid=10746
subgrp=
=====
Add CPA GUI permission group to
table app_permission_groups
=====
_appid=17
group_id=8000
group_name=CPA Configuration Permissions
=====
=====
Executing the Loaders and Clearing Cache on Standby SO servers.
=====
Starting to Execute the Loaders on Standby server
=====
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.cpaActivateB sourced script on HPC02-S01
=====
Current server is HA STANDBY
=====
Add Common CPA DSR Application
measurements to table MeasRptGroup
=====
repgrp=DSR Application Exception
measid=10704
subgrp=
=====
repgrp=DSR Application Exception
measid=10705
subgrp=
=====
repgrp=DSR Application Performance

```

```

measid=10700
subgrp=
=====
repgrp=DSR Application Performance
measid=10701
subgrp=
=====
repgrp=DSR Application Performance
measid=10702
subgrp=
=====
repgrp=DSR Application Performance
measid=10703
subgrp=
=====
repgrp=DSR Application Performance
measid=10706
subgrp=
=====
repgrp=DSR Application Performance
measid=10707
subgrp=
=====
repgrp=DSR Application Performance
measid=10708
subgrp=
=====
repgrp=DSR Application Performance
measid=10709
subgrp=
=====
repgrp=DSR Application Performance
measid=10745
subgrp=
=====
repgrp=DSR Application Performance
measid=10746
subgrp=
=====
Add CPA GUI permission group to
table app_permission_groups
=====
_appid=17
group_id=8000
group_name=CPA Configuration Permissions
=====
=====
Do you want to activate/deactivate this feature on another System OAM Server[Y/N] : n
[admsr@HPC02-NO2 loaders]$

```

7.1.2 SAMPLE OUTOUT OF DEACTIVATION ON ACTIVE NOAM

```
Enter your choice : 1

Run script to Deactivate cpa 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. HPC02-SO2
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 HPC02-SO2
=====
CPA is activated on HPC02-SO2
=====

Executing /usr/TKLC/dsr/prod/maint/loaders/deactivate/load.cpaDeactivateAsourced
script on HPC02-SO2
=====

Removing CPA KPI group from
table KPIVisibility
=====
=== deleted 1 records ===
=====

Removing CPA Measurement Groups
from table MeasVisibility
=====
=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===
=====

Verifying CPA KPI group has been deleted from table KPIVisibility
=====

Verifying CPA Measurement Groups have been deleted from table MeasVisibility
=====

Removing CPA GUI permissions
from table app_permission_groups
=====
=== deleted 1 records ===
=====

Removing CPA GUI permissions
from table app_permission_groups
=====
=== deleted 0 records ===
=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===
=====
===
```


Starting to Execute the Loaders on Standby server

=====
===
Executing /usr/TKLC/dsr/prod/maint/loaders/deactivate/load.cpaDeactivateAsourced
script on HPC02-N01
=====

=====
Verifying CPA KPI group has been deleted from table KPIVisibility
=====

=====
Verifying CPA Measurement Groups have been deleted from table MeasVisibility
=====

=====
Removing CPA GUI permissions
from table app_permission_groups
=====

=== deleted 1 records ===
=====

=====
Removing CPA GUI permissions
from table app_permission_groups
=====

=== deleted 0 records ===
=====

=====
This is a 3 Tier Setup , So run the B sourced loaders on SO server : HPC02-S02
Executing /usr/TKLC/dsr/prod/maint/loaders/deactivate/load.cpaDeactivateB sourced script on HPC02-S02
=====

=====
Current server is HA ACTIVE
=====

=====
paramName=CpaNumSubResources
paramValue=0
=====

=====
paramName=CpaSbrForUnavailable
paramValue=1
=====

=====
Removing all ART rules pointing
to CPA in table AppRouteRule
=====

=====
Removing Rule appRuleId=5 from the AppRuleCondition Table
=====

=== deleted 6 records ===
=== deleted 1 records ===
=====

=====
Removing CPA from the
DsrApplicationPerMp table
=====

=== deleted 3 records ===
=====

=====
Removing CPA from the
DsrApplication table
=====

=== deleted 1 records ===
=====

=====
Removing CPA DSR Application
measurements from table MeasRptGroup
=====

=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===
=====

```
=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===

=====
Verifying CPA data has been deleted. No db data will be displayed
if successful
=====
=====

Verifying CPA ART data has been deleted from table AppRouteRule
Verifying dsrAppId=5 [CPA] has been removed from the DsrApplicationPerMp Table
Verifying CPA has been removed from the DsrApplication Table
Verifying CPA GUI permissions have been deleted from table app_permission_groups
_appid=17
group_id=8000
group_name=CPA Configuration Permissions
=====

Verifying CPA DSR Application measurements have been deleted from table MeasRptGroup
VERIFICATION COMPLETE
=====

=====
Removing CPA GUI permissions
from table app_permission_groups
=====

=== deleted 1 records ===
=== deleted 1 records ===

=====
Executing the Loaders and Clearing Cache on Standby SO servers.
=====
=====

Starting to Execute the Loaders on Standby server
=====

Executing /usr/TKLC/dsr/prod/maint/loaders/deactivate/load.cpaDeactivateB sourced script on HPC02-S01
=====

=====
Current server is HA STANDBY
=====

Removing CPA DSR Application
measurements from table MeasRptGroup
=====

=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===
=== deleted 1 records ===

=====
Verifying CPA data has been deleted. No db data will be displayed
if successful
=====
=====

Verifying CPA ART data has been deleted from table AppRouteRule
Verifying dsrAppId=5 [CPA] has been removed from the DsrApplicationPerMp Table
Verifying CPA has been removed from the DsrApplication Table
Verifying CPA GUI permissions have been deleted from table app_permission_groups
_appid=17
group_id=8000
group_name=CPA Configuration Permissions
```

```
=====
Verifying CPA DSR Application measurements have been deleted from table MeasRptGroup
VERIFICATION COMPLETE
=====

Removing CPA GUI permissions
from table app_permission_groups
=====

=== deleted 1 records ===
=== deleted 1 records ===
=====
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, there are multiple layers of menu 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.