Oracle® Communications Diameter Signaling Router

DCA Feature Activation Guide Release 8.5.1 F51116-01

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Oracle Communications Diameter Signaling Router DCA Feature Activation Procedure, Release F51116-01.

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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 DCA feature (or beyond) 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 DCA feature is activated during a planned maintenance window to minimize the impact to network traffic.

This document also provides a procedure to deactivate DCA framework and applications after it has been activated. Refer to Section 6 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 DCA feature is activated at a later time.

1.1 References

- [1] DSR Software Installation and Configuration Procedure 1/2
- [2] DSR C-Class Software Installation and Configuration Procedure 2/2
- [3] DSR Software Upgrade Guide

1.2 Acronyms

An alphabetized list of acronyms used in the document.

Table 1. Acronyms

Acronym	Definition
BNS	Broadband Networking Solutions
DCA	Diameter Custom Applications
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
НА	High Availability
IMI	Internal Management Interface
IP	Internet Protocol
MP	Message Processing or Message Processor
NE	Network Element
NO	Network OAM
NOAM	Network OAM
OAM	Operations, Administration and Maintenance
SSH	Secure Shell
UI	User Interface
VIP	Virtual IP

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Acronym	Definition
VPN	Virtual Private Network
XMI	External Management Interface

1.3 Terminology

Table 2. Terminology

Term	Definition
NOAM	Network Operations and Maintenance
SOAM	System Operations and Maintenance

1.4 General Procedure Step Format

Figure 1 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).

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.

The title box describes the operations to be performed during that step.

Each command that the technician is to enter is in 10 point bold Courier font.

ServerX: Connect to the console of the server using cu on the terminal server/console.

\$\frac{\sqrt{\sqrt{u} - 1 / \dev/\text{ttyS7}}}{\sqrt{\sqrt{v}}}\$

Figure 1. Example of a Procedure Step

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2. Feature Activation Overview

This section lists the required materials and information needed to execute the feature activation. In addition, Table 4 through Table 11 provide estimates of the time required to execute the procedure. These tables can be used to estimate the total time necessary to complete the feature activation. The timing values shown are estimates only – use these tables to plan the timing of the activation, **not** to execute the procedure. The detailed procedure steps to be executed begin in Section 4.

2.1 Definition of Activation for the DCA Feature

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

All software required to run DCA 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.

SL No	DCA	Behavior
1	DCA Framework Activation	Section 5.2.1
2	DCA Application Activation	Section 5.2.2
3	DCA Application Deactivation	Section 6.2.1
4	DCA Framework Deactivation	Section 6.2.2

Table 3. Behavior of DCA Framework and Application Activation and Deactivation

2.2 Feature Activation Overview

2.2.1 Pre-Feature Activation Overview

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

	Elapsed (Hours:Mi			
Procedure	This Step	Cum.	Activity Feature Activation Preparation	
System Topology Check (Procedure 1)	0:10-0:30	0:20-1:00	 Verify network element configuration data Verify system group configuration data 	
Perform Health Check (Procedure 2)	0:01-0:05	0:21-1:05	Verify DSR releaseVerify server statusLog all current alarms	

Table 4. Pre-Feature Activation Overview

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2.2.2 Feature Activation Execution Overview

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

Table 5. DCA Framework Activation Execution Overview

	Elapsed Time (Hours:Minutes)			
Procedure This Step (Cum.	Activity Feature Activation Execution	Impact
Perform Health	0:01-0:05	0:01-0:05	Verify DSR release	None
Check (Procedure 3)			Verify proper DCA state	
(1 Toccdure 3)			Verify server status	
			Log all current alarms	
DCA Framework	0:10-0:30	0:10-0:30 0:11-0:35 •	Log out of NOAM GUI	DCA framework is activated on DSR
Activation (Procedure 4)			SSH to Active NO	
(Frocedure 4)			Change to the feature activation directory	
			Execute the feature activation script	
			Log into active NOAM and SOAM GUI	
			Verify the DCA framework folder	
			Close SSH connections to both NOAMs	

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 6. DCA Application Activation Execution Overview

	Elapsed Time (Hours:Minutes)			
Procedure	This Step	Cum.	Activity Feature Activation Execution	Impact
DCA Application	0:10-0:30	0:11-0:35	Log out of NOAM GUI	DCA
Activation (Procedure 5)		•	SSH to active NO	application is activated on
(Change to the feature activation directory	DSR
			Execute the feature activation script	
			Log into active NOAM and SOAM GUI	
			Verify the DCA application folder	
			Close SSH connections to both NOAMs	

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2.2.3 Post-Feature Activation Overview

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

Table 7. Post-Feature Activation Overview

Elapsed T (Hours:Min			Activity Feature Activation	
Procedure	This Step	Cum.	Execution	Impact
Perform Health Check (Procedure 7)	0:01-0:05	0:01-0:05	Verify Server statusLog all current alarms	DCA has been activated on DSR

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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 8. Pre-Feature Deactivation Overview

Elapsed Time (Hours:Minute			Activity Feature Activation	
Procedure	This Step	Cum.	Execution	Impact
Perform Health	0:01- 0:05	0:01-0:05	Verify DSR release	None
Check (Procedure 8)			Verify proper DCA state	
(Frocedure o)			Verify server status	
			Log current alarms	

3.2 Feature Deactivation Execution Overview

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

Table 9. DCA Application Deactivation Overview

	Elapsed Time (Hours:Minutes)			
Procedure	Procedure This Step Cum.		Activity Feature Activation Execution	Impact
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
Deactivation	00:10-00:20	0:20-0:50	Log out of active NOAM GUI	DCA
(Procedure 9)			SSH into active NO	application is
			Change directory	deactivated
			Execute the feature deactivation script	on DSR.
			Log into active NOAM and SOAM GUI	
			Verify the DCA application folder	
			Close SSH connections to both NOAMs	

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Table 10. DCA Framework Deactivation Overview

	Elapsed Time (Hours:Minutes)			
Procedure	This Step	Cum.	Activity Feature Activation Execution	Impact
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
Deactivation	00:10-00:20	:20 0:20-0:50	Log out of active NOAM GUI	DCA
(Procedure 10)			SSH into active NO	framework is deactivated
			Change directory	on DSR
			Execute the feature deactivation script	
			Log into active NOAM and SOAM GUI	
			Verify the DCA folder	
			Close SSH connections to NOAM	

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 11. Post-Feature Deactivation Overview

	Elapsed Time (Hours:Minutes)		
Procedure	This Step Cum.		Activity Feature Activation Execution
Perform Health Check (Procedure 11)	0:01-0:05	0:01-0:05	Verify server status.Log all current alarms.

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4. Feature Activation Preparation

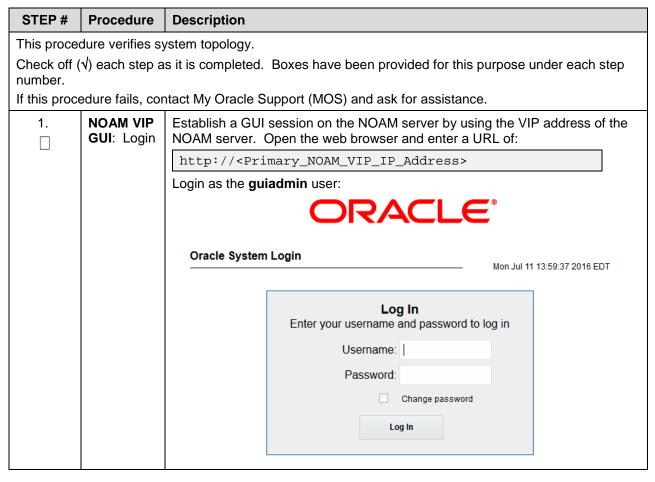
It is expected that Oracle personnel following this Feature Activation Procedure document will activate the DCA framework first on a customer's DSR, then activate the DCA application as required for that customer.

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

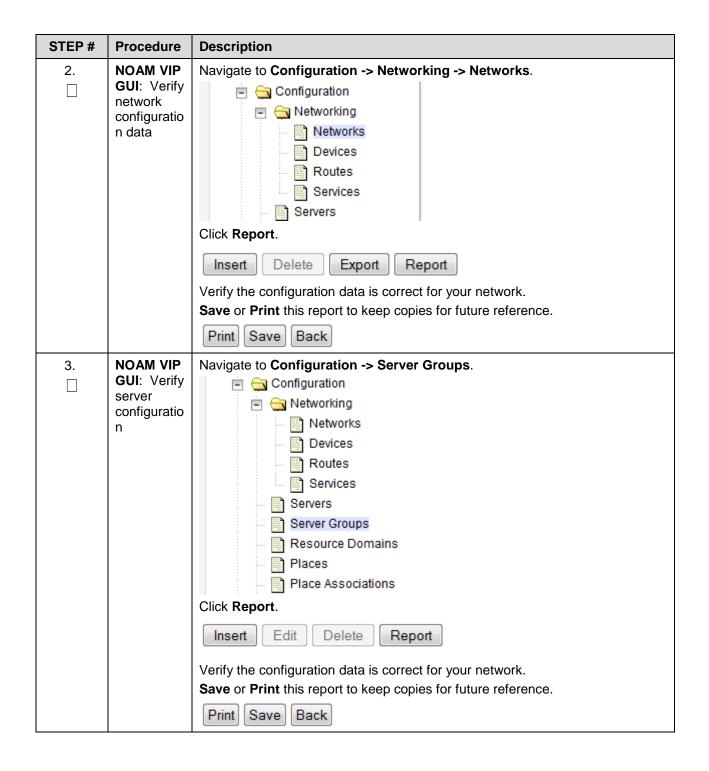
4.1 System Topology Check

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



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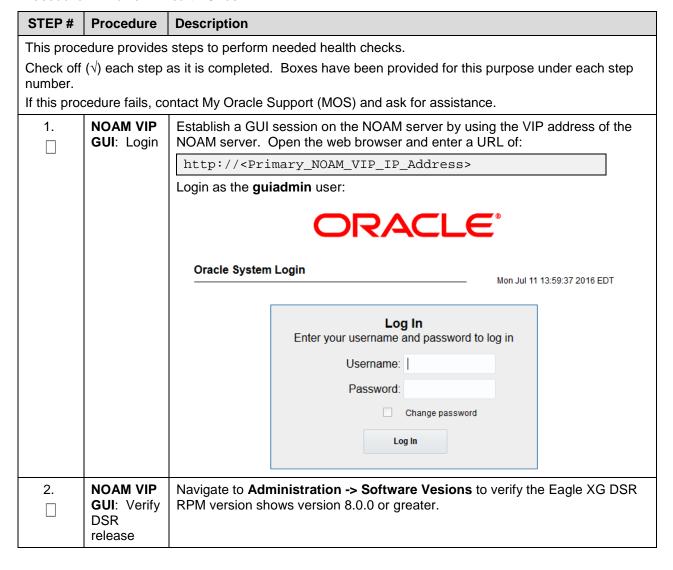


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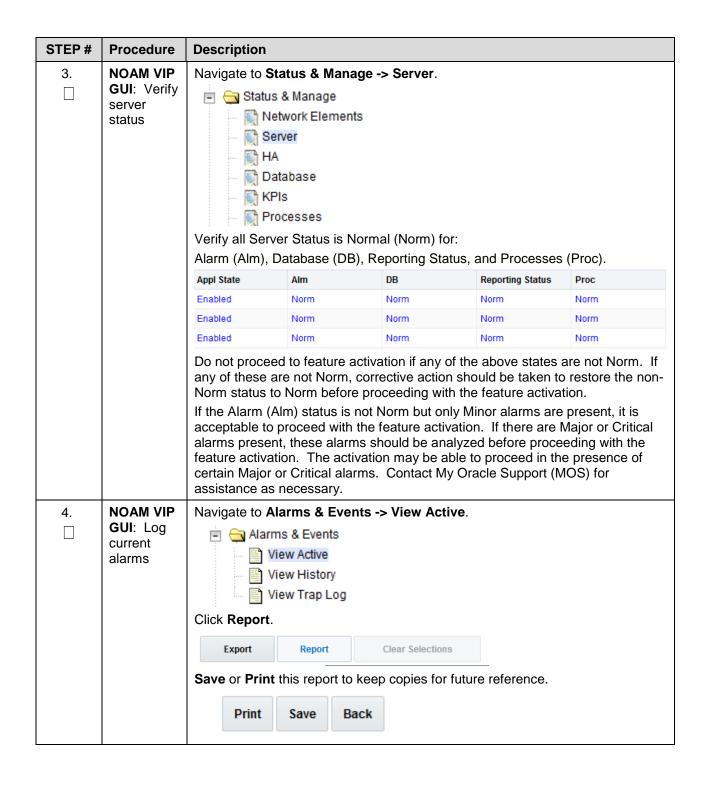
4.2 Perform Health Check

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

Procedure 2: Perform Health Check



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

5.1 Pre-Activation Procedure — Perform Health Check

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

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

Procedure 3: Perform Health Check (Pre-Feature Activation)

		STEP#	Procedure	Description
--	--	-------	-----------	-------------

This procedure performs needed health checks.

Check off $(\sqrt{})$ each step as it is completed. Boxes have been provided for this purpose under each step number.

If this procedure fails, contact My Oracle Support (MOS) and ask for assistance.

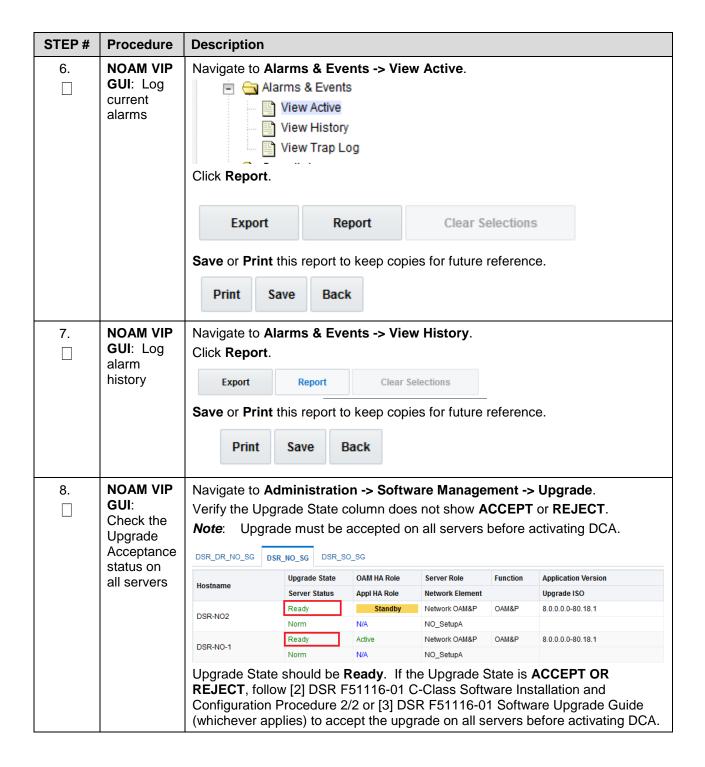
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STEP#	Procedure	Description					
1.	NOAM VIP GUI: Login	Establish a GUI session on the NOAM server by using the VIP address of the NOAM server. Open the web browser and enter a URL of:					
		http:// <primary_noam_vip_ip_address></primary_noam_vip_ip_address>					
		Login as the guiadmin user:					
		ORACLE					
		Oracle System Login Mon Jul 11 13:59:37 2016 EDT					
		Log In Enter your username and password to log in Username: Password: Change password Log In Welcome to the Oracle System Login. This application is designed to work with most modern HTML5 compliant browsers and uses both JavaScript and cookies. Please refer to the Oracle Software Web Browser Support Policy for details.					
2.	NOAM (2- Tiered) VIP GUI: Verify DCA Framework folder is not present	Under Main Menu -> Diameter, verify the DCA Framework folder is NOT present.					
3.	SOAM (3- Tiered) VIP GUI: Verify DCA Framework folder is not present	Under Main Menu -> Diameter , verify the DCA Framework folder is NOT present.					

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STEP#	Procedure	Description	Description					
4.	NOAM VIP GUI: Verify server status	. J						
		Appl State	Alm	DB	Reporting Status	Proc		
		Enabled	Norm	Norm	Norm	Norm		
		Enabled	Norm	Norm	Norm	Norm		
		Enabled	Norm	Norm	Norm	Norm		
		any of these are Norm status to I If the Alarm (Aln acceptable to pr alarms present, feature activatio	It to feature activation if any of the above states are not Norm. If e not Norm, corrective action should be taken to restore the non-Norm before proceeding with the feature activation. If there are present, it is proceed with the feature activation. If there are Major or Critical these alarms should be analyzed before proceeding with the control on. The activation may be able to proceed in the presence of the critical alarms. Contact My Oracle Support (MOS) for necessary.			restore the non- on. oresent, it is lajor or Critical iding with the presence of		
5.	NOAM VIP GUI: Verify server configuratio n	Navigate to Configuration -> Server Groups. Configuration Networking Servers Server Groups Resource Domains Places Place Associations Verify the configuration data is correct for your network.						

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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 DCA Framework Activation

Procedure 4: DCA Framework Activation

STEP#	Procedure	Description					
1	This procedure verifies that the feature activation steps have been completed.						
Check off number.	Check off $()$ each step as it is completed. Boxes have been provided for this purpose under each step number.						
If this prod	cedure fails, cor	ntact My Oracle Support (MOS) and ask for assistance.					
1.	NOAM VIP GUI: Logout	Log out of any active NOAM GUI sessions.					
2.	Establish a secure shell	Establish a secure shell session on the active NOAM by using the XMI VIP address. Login as the admusr .					
	session on	Use your SSH client to connect to the server (ex. Putty).					
	the active NOAM	Note : You must consult your own software client's documentation to learn how to launch a connection. For example:					
		# ssh <active address="" no="" vip="" xmi=""></active>					
3.	DCA	Change to the following directory:					
	Activation: Change	\$ cd /usr/TKLC/dsr/prod/maint/loaders/activate					
	directory						
4.	DCA	Run the DCA activation script by executing the following command:					
	Activation: Execute the	# ./featureActivateDeactivate					
	DCA	Choose Activate and DCA Framework options.					
	activation script	There is an option to choose to activate this feature on all SOAMs or on a specific SOAM. It is recommended to select Activate on all SOAM .					
Note: If a new site is added or if a SOAM site framework was not act the activation script can be executed again to add the application new sites. The script does not have any impact on the sites or which the framework is already active.							
		Verify the screen output is similar to Appendix A.					
5.	NOAM VIP and SOAM VIP GUIs: Login	Log into the active NOAM and SOAM GUIs.					

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STEP#	Procedure	Description
6.	NOAM VIP and SOAM VIP GUIS: Verify the DCA Framework folder and Configuratio n sub-menu	On NOAM, verify the DCA Framework folder displays under the DSR Main Menu with Configuration as a sub-menu. On SOAM, verify the DCA Framework folder displays under the DSR Main Menu with Configuration as a sub-menu.
7.	Close SSH connection to active NOAMs	Log out of the active NOAM login shell and close the SSH connections by executing the following command: # exit Close the SSH connection

5.2.2 DCA Application Activation

DCA framework must be activated before any application can be activated.

Procedure 5: DCA Application Activation

STEP#	Procedure	Description					
This proce	This procedure verifies that the global admin has been enabled						
Check off number.	(√) each step a	as it is completed. Boxes have been provided for this purpose under each step					
If this prod	cedure fails, cor	ntact My Oracle Support (MOS) and ask for assistance.					
1.	NOAM VIP	Log out of any active NOAM GUI sessions.					
	GUI: Logout						
2.	Establish a	Establish a secure shell session on the active NOAM by using the XMI VIP					
	secure shell	address. Login as the admusr .					
	session on the active NOAM	Use your SSH client to connect to the server (ex. Putty).					
		Note : You must consult your own software client's documentation to learn how to launch a connection. For example:					
# ssh <active address="" no="" vip="" xmi=""></active>							
3.	Change to	# cd /usr/TKLC/dsr/prod/maint/loaders/					
	the DCA activation directory						

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STEP#	Procedure	Description			
4.	Execute the DCA activation script	Execute the feature activation script: # ./featureActivateDeactivate Choose Activate and DCA Application. When asked, select Activate a DCA Application. Note: The above option is not asked the DCA is not active on the system. The script goes directly to Activate a DCA Application mode. When asked, Enter the long name for the DCA application. Note: The DCA long name should consist of a combination of letters, numbers, and spaces and should not begin with a space. It has a maximum of 32 characters. When asked, Enter the short name for the DCA application. Note: The DCA short name should consist of a combination of letters and numbers. It has a maximum of 6 characters. Verify the screen looks similar to Appendix C. Navigate to Status & Manage -> Server to restart the DSR MP.			
5.	NOAM VIP and SOAM VIP GUIS: Login	Log into the active NOAM and SOAM GUIs.			
6.	NOAM VIP and SOAM VIP GUIs: Verify the DCA Application folder and sub-menus	On NOAM, verify the DCA folder with the name provided in step 4 displays under the DCA Framework menu. Sub-menus should include: General Options, Trial MP assignment, and Application Control. On SOAM, verify the DCA folder with the name provided in step 4 displays under the DCA Framework menu. Sub-menus should include: General Options, Trial MP assignment, Application Control, and System Options.			
7.	Close SSH connection to active NOAMs	Log out of the active NOAM login shell and close the SSH connections by executing the following command: # exit Close the SSH connection			

5.2.3 DCA Application Reactivation

DCA Feature reactivation option is executed mainly during Disaster Recovery. It allows reactivating all the activated DCA Application in the system after Disaster Recovery procedure is executed. Detailed steps are given in the procedure below.

Procedure 6: DCA Application Reactivation

STEP#	Procedure	Description					
This prod	This procedure verifies that the global admin has been enabled						
Check of number.	Check off $()$ each step as it is completed. Boxes have been provided for this purpose under each step number.						
If this pro	ocedure fails, cor	ntact My Oracle Support (MOS) and ask for assistance.					

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STEP#	Procedure	Description
1.	NOAM VIP GUI: Logout	Log out of any active NOAM GUI sessions.
2.	Establish a secure shell session on the active NOAM	Establish a secure shell session on the active NOAM by using the XMI VIP address. Login as the admusr . Use your SSH client to connect to the server (ex. Putty). Note: You must consult your own software client's documentation to learn how to launch a connection. For example: # ssh <active address="" no="" vip="" xmi=""></active>
3.	Change to the DCA activation directory	# cd /usr/TKLC/dsr/prod/maint/loaders/
4.	Execute the DCA activation script	# ./featureActivateDeactivate Choose Activate and DCA Application. When asked, select Activate a DCA Application. Note: The above option is not asked the DCA is not active on the system. The script goes directly to Activate a DCA Application mode. When asked, Enter the long name for the DCA application. Note: The DCA long name should consist of a combination of letters, numbers, and spaces and should not begin with a space. It has a maximum of 32 characters. When asked, Enter the short name for the DCA application. Note: The DCA short name should consist of a combination of letters and numbers. It has a maximum of 6 characters. Verify the screen looks similar to Appendix C. Navigate to Status & Manage -> Server to restart the DSR MP.
5.	NOAM VIP and SOAM VIP GUIs: Login	Log into the active NOAM and SOAM GUIs.
6.	NOAM VIP and SOAM VIP GUIS: Verify the DCA Application folder and sub-menus	On NOAM, verify the DCA folder with the name provided in step 4 displays under the DCA Framework menu. Sub-menus should include: General Options, Trial MP assignment, and Application Control. On SOAM, verify the DCA folder with the name provided in step 4 displays under the DCA Framework menu. Sub-menus should include: General Options, Trial MP assignment, Application Control, and System Options.
7.	Close SSH connection to active NOAMs	Log out of the active NOAM login shell and close the SSH connections by executing the following command: # exit Close the SSH connection

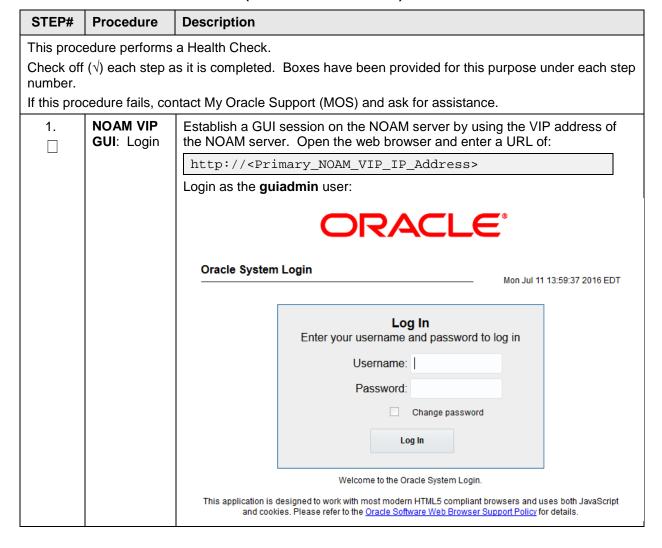
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5.3 Post-Activation Procedures

5.3.1 Perform Health Check

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

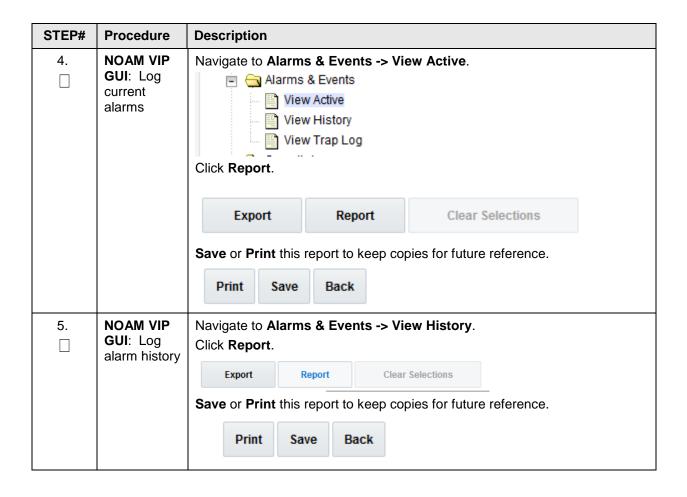
Procedure 7: Perform Health Check (Post-Feature Activation)



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STEP#	Procedure	Description					
2.	NOAM VIP GUI: Verify server status	Navigate to Status & Manage Status & Manage Network Elements Server HA Database KPIs Processes Tasks Files Verify all Server Status is Normal (Norm) for: Alarm (Alm), Database (DB), Reporting Status, and Processes (Proc).					
		Appl State	Alm	DB	Reporting Status	Proc	
		Enabled	Norm	Norm	Norm	Norm	
		Enabled	Norm	Norm	Norm	Norm	
		Enabled	Norm	Norm	Norm	Norm	
		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 before 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.					
3.	NOAM VIP GUI: Verify server configuration	Navigate to Configuration -> Server Groups. Configuration Networking Servers Server Groups Resource Domains Places Place Associations Verify the configuration data is correct for your network.					

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6. Feature Deactivation

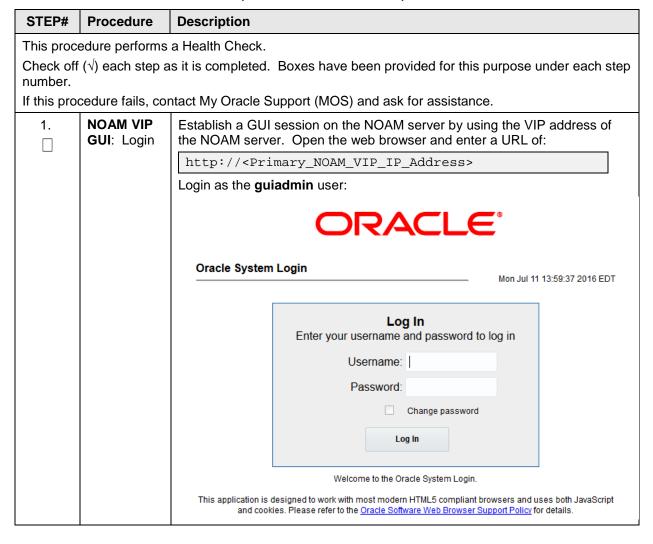
6.1 Pre-Deactivation Procedures

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

6.1.1 Perform Health Check

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

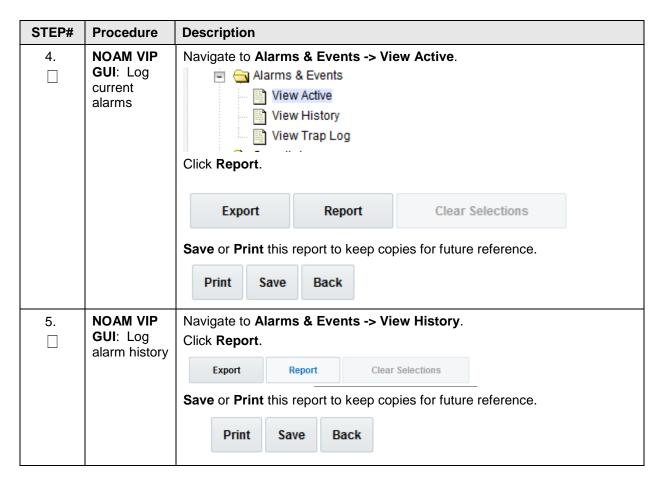
Procedure 8: Perform Health Check (Pre-Feature Deactivation)



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STEP#	Procedure	Description				
2.	NOAM VIP GUI: Verify server status	Navigate to Status & Manage -> Server. Status & Manage Network Elements Server HA Database KPIs Processes Tasks Files Verify all Server Status is Normal (Norm) for:				
		Alarm (Alm), Da Appl State Enabled Enabled	Alm Norm	porting Status, DB Norm	and Processes (Reporting Status Norm	(Proc). Proc Norm
		Enabled	Norm	Norm	Norm	Norm
	Do not proceed to feature activation if any of the above states If any of these are not Norm, corrective action should be taken non-Norm status to Norm before proceeding with the feature at If the Alarm (Alm) status is not Norm but only Minor alarms are acceptable to proceed with the feature activation. If there are Critical alarms present, these alarms should be analyzed beforwith the feature activation. The activation may be able to proceed with the feature activation or Critical alarms. Contact My Orac (MOS) for assistance as necessary.					
3.	NOAM VIP GUI: Verify server configuration	Navigate to Configuration -> Server Groups. Configuration Networking Servers Server Groups Resource Domains Places Places Place Associations Verify the configuration data is correct for your network.				

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6.2 Deactivation Procedures

6.2.1 DCA Application Deactivation

Procedure 9: DCA Application Deactivation

Procedure	Decription			
This procedure verifies that the feature deactivation steps have been completed .				
Check off $()$ each step as it is completed. Boxes have been provided for this purpose under each step number.				
If this procedure fails, contact My Oracle Support (MOS) and ask for assistance.				
NOAM VIP GUI: Logout	Log out of any active NOAM GUI sessions.			
Establish a secure shell session on the active NOAM	Establish a secure shell session on the active NOAM by using the XMI VIP address. Login as the admusr . Use your SSH client to connect to the server (ex. Putty). Note: You must consult your own software client's documentation to learn how to launch a connection. For example: # ssh <active address="" no="" vip="" xmi=""></active>			
	edure verifies that (√) each step as sedure fails, con NOAM VIP GUI: Logout Establish a secure shell session on the active			

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STEP#	Procedure	Decription
3.	Change to the DCA activation directory	# cd /usr/TKLC/dsr/prod/maint/loaders/
4.	Execute the DCA activation script	Execute the feature activation script: # ./featureActivateDeactivate Choose Deactivate and DCA Application. When asked, Enter the name for the DCA application to be deactivated. Verify the screen looks similar to Appendix D. Navigate to Status & Manage -> Server to restart the DSR MP.
5.	NOAM VIP and SOAM VIP GUIs: Login	Log into the active NOAM and SOAM GUIs.
6.	NOAM VIP and SOAM VIP GUIs: Verify the DCA Application folder and sub-menus	On NOAM, navigate to Diameter -> DCA Framework and verify the DCA Application folder no longer exists. On SOAM, navigate to Diameter -> DCA Framework and verify the DCA Application folder no longer exists.
7.	Close SSH connection to active NOAMs	Log out of the active NOAM login shell and close the SSH connections by executing the following command: # exit Close the SSH connection

6.2.2 DCA Framework Deactivation

All DCA applications must be deactivated before executing the following procedure.

Procedure 10: DCA Framework Deactivation

Procedure	Description			
This procedure verifies that the DCA Framework has been disabled.				
Check off $()$ each step as it is completed. Boxes have been provided for this purpose under each step number.				
If this procedure fails, contact My Oracle Support (MOS) and ask for assistance.				
NOAM VIP GUI: Logout	Log out of any active NOAM GUI sessions.			
Establish a secure shell session on the active NOAM	Establish a secure shell session on the active NOAM by using the XMI VIP address. Login as the admusr . Use your SSH client to connect to the server (ex. Putty). Note: You must consult your own software client's documentation to learn how to launch a connection. For example: # ssh <active address="" no="" vip="" xmi=""></active>			
	dure verifies that verifies the verifies that verifies the verifies that verif			

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STEP#	Procedure	Description		
3.	Change to the DCA activation directory	# cd /usr/TKLC/dsr/prod/maint/loaders/		
4.	Execute the DCA activation	Execute the feature activation script: # ./featureActivateDeactivate Choose Deactivate and DCA Application.		
	script	Note : For Tier 3 SOAM, this feature can be deactivated on all SOAMs or a specific SOAM.		
		Verify the screen looks similar to Appendix E.		
5.	Log into Active NOAM and SOAM GUI	Log into the Active NOAM and SOAM GUI.		
6.	Verify the DCA Framework flder	Verify the DCA Framework folder no longer exists under the Diameter menu.		
7.	Close SSH connection to active NOAMs	Log out of the active NOAM login shell and close the SSH connections by executing the following command: # exit Close the SSH connection		

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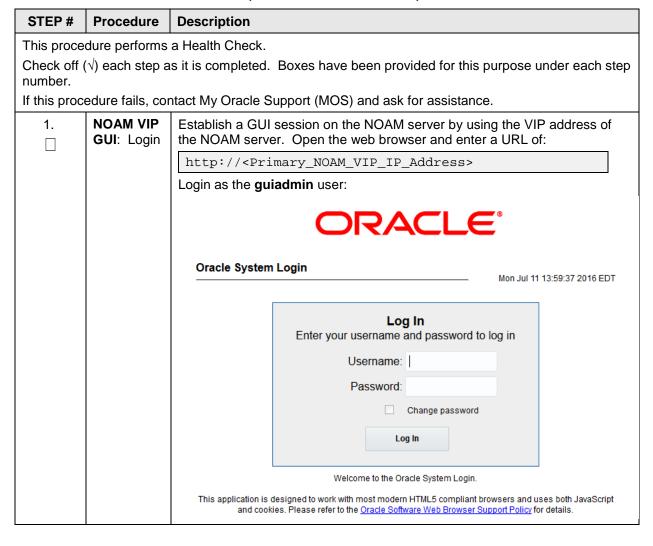
6.3 Post-Deactivation Procedures

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

6.3.1 Perform Health Check

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

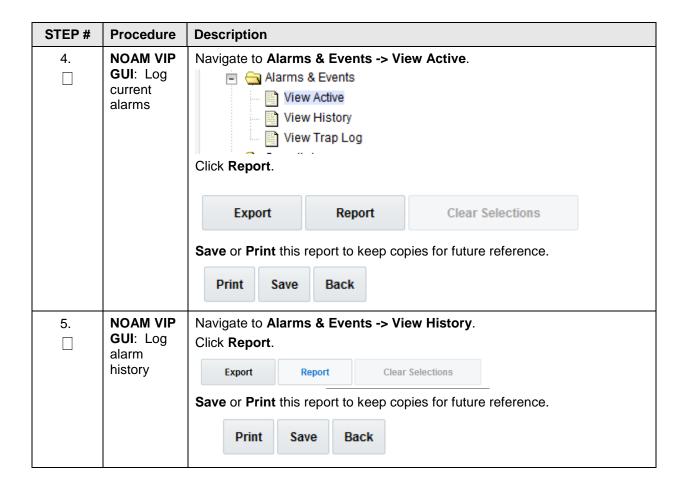
Procedure 11: Perform Health Check (Post-Feature Deactivation)



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STEP#	Procedure	Description					
2.	NOAM VIP GUI: Verify server status	Navigate to Status & Manage -> Server. Status & Manage Network Elements Server HA Database KPIs Processes Tasks Files Verify all Server Status is Normal (Norm) for: Alarm (Alm), Database (DB), Reporting Status, and Processes (Proc).					
		Appl State	Alm	DB	Reporting Status	Proc	
		Enabled	Norm	Norm	Norm	Norm	
		Enabled	Norm	Norm	Norm	Norm	
		Enabled	Norm	Norm	Norm	Norm	
		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 before 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.					
3.	NOAM VIP GUI: Verify server configuratio n	Navigate to Configuration -> Server Groups. Configuration Networking Servers Server Groups Resource Domains Places Place Associations Verify the configuration data is correct for your network.					

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Appendix A. DCA Framework Activation

```
[admusr@HPC07-NO1 loaders]$ ./featureActivateDeactivate
Tue Feb 2 17:47:18 EST 2016::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: 8
Run script to Activate DcaFramework Feature
Execution of Activation/Deactivation Process Starts
______
Starting Activation/Deactivation process....
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.DcaFrameworkActivateAsourced
script on HPC07-NO1
______
Current server is HA ACTIVE
______
Add Dca Framework KPI group
______
KPI Group=Dca Framework
Visibility=VIS_ALL
______
Add Dca Framework Measurement groups
______
Meas_Group=Dca Framework Performance
Visibility=VIS_ALL
______
Add Dca Framework GUI Configuration Permissions.
```

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Set Dca Framework Entry in the DcaFrmEngOption table
=== changed 1 records ===
There is no Standby NOAMP server configured in the Topology
=======================================
The Active SO server configured in the Topology are
=======================================
1. HPC07-S01
2. ALL SOS
Enter your choice on which SO you want to Activate or Deactivate the Feature :2
Activate/Deactivate DcaFramework on all SOs configured in the Topology
2 2
This is a 3 Tier Setup , So run the B sourced loaders on SO server : HPC07-SO1
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.DcaFrameworkActivateBsourced script on HPC07-S01
FIPS integrity verification test failed.
Add Dca Framework GUI Configuration Permissions.
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

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Appendix B. DCA Framework Deactivation

```
[admusr@HPC07-NO1 loaders]$ ./featureActivateDeactivate
Tue Feb 2 17:50:17 EST 2016::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
List of Feature you can 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: 8
Run script to Deactivate DcaFramework Feature
Execution of Activation/Deactivation Process Starts
______
Starting Activation/Deactivation process....
______
The Active SO server configured in the Topology are
______
1. HPC07-S01
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 HPC07-S01
FIPS integrity verification test failed.
_____
DCAFRAMEWORK is activated on HPC07-S01
_____
Executing
/usr/TKLC/dsr/prod/maint/loaders/deactivate/load.DcaFrameworkDeactivateAsourced script
on HPC07-NO1
Current server is HA ACTIVE
```

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_======================================
There are active dca app on this system. exiting
=======================================
There is no Mate NOAMP server configured in the Topology
======================================
Activate/Deactivate DcaFramework on all SOs configured in the Topology
=======================================
This is a 3 Tier Setup , So run the B sourced loaders on SO server : HPC07-S01
Executing /usr/TKLC/dsr/prod/maint/loaders/deactivate/load.DcaFrameworkDeactivateBsourced script on HPC07-S01
FIPS integrity verification test failed.
There are active dca app on this system. exiting
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

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Appendix C. DCA Application Activation

```
[admusr@Active-NO loaders]$./featureActivateDeactivate
Wed Mar 1 11:34:03 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: 9
====== Start of Log Data in file /var/TKLC/log/DcaActivationTopLevel.log ========
Log file location: /var/TKLC/log/DcaActivationTopLevel.log
Note:-
In case of any failure please execute
/usr/TKLC/dsr/prod/maint/loaders/deactivate/load.DcaDeactivationTopLevel script to the control of the control
revert the changes.
______
Execution of Activation Process Starts
______
Dca framework is activated on the setup..Continuing
Following Dca apps are activated on the system:
First DCA App
1. Recover currently activated Dca Applications
2. Activate a Dca Application
Enter your choice : 2
Enter the long name for the Dca application: Second DCA App
Entered dca name Second DCA App consist of valid characters
Entered Name is Second DCA App
next available dal id is 129
Enter the short name for the Dca application:SDA
```

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```
length of shortName is 3.continuing..
Entered dca name SDA consist of valid characters
Entered Name is SDA
_____
Verify that Dca Application is in the DalId table
______
dalId=129
birthTime=03/01/2017 11:34:21.000
name=Second DCA App
shortName=DCA:SDA
activated=No
______
Activation of Dca Application Starts.
______
Execution of Dca Applicaion Activation Script for Second DCA App[SDA] Starts.
______
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.DcaActivateAscoped script on
Active-NO
====== Start of Log Data in file /var/TKLC/log/DcaActivateAscoped.log =========
Server Name : Active-NO
Server Role : NETWORK_OAMP
Node Id
       : Active-NO
HA State
       : Active
Cluster Role : Primary
_____
Verify that Dca Application is in the DcaDalId table
_____
dalId=129
name=Second DCA App
shortName=SDA
______
Add Dca application entry to the DsrApplication table.
_____
Verify that Dca Application is in the table
_____
id=129
name=DCA_SDA
unavailableAction=ContinueRouting
avpInsertion=Yes
shutdownMode=Graceful
```

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```
shutdownTimer=5
resultCode=3002
vendorId=0
errorString=
resExhResultCode=3004
resExhVendorId=0
resExhErrorString=DSR Resource Exhausted
routeListId=-1
realm=
fqdn=
mcl=0
Add Dca Application KPI group
Verify that Dca Application is in the KPIVisibility table
KPI_Group=DCA:SDA
Visibility=VIS ALL
_____
Add Dca Application Measurement groups
Verify that Dca Application is in the MeasVisibility table
______
Meas_Group=DCA:SDA
Visibility=VIS_ALL
_____
Add Permission Group headers for Dca Application
_____
Verify that Dca Application is in the app_permission_groups table
_____
appid=129
group_id=3729
group_name=Second DCA App Configuration Permissions
Add network configuration parameters for Dca
_____
Verify that Dca Application is in the DcaAppNetworkUserOption table
______
dalId=129
name=diamAnsSub
```

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```
value=process_answer
_____
dalId=129
name=diamRecSub
value=process_request
_____
dalId=129
name=guestReadOnly
value=true
_____
dalId=129
name=maxSbrQuery
value=5
dalId=129
name=opCountEnabled
value=true
_____
dalId=129
name=opCountHandler
value=3000
_____
dalId=129
name=opCountMain
value=5000
_____
dalId=129
name=stateTTL
value=120
Execution status of activation script on Active-NO: PASSED
Please check /var/TKLC/log/DcaActivateAscoped.log for more details.
______
Starting Activation on StandBy NOAMP Server if it exists in the topology.
______
FIPS integrity verification test failed.
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.DcaActivateStandByAscoped
script on Standby-NO
FIPS integrity verification test failed.
===== Start of Log Data in file /var/TKLC/log/DcaActivateStandbyAscoped.log ======
```

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```
Server Name : Standby-NO
Server Role: NETWORK_OAMP
-----
Verify that Dca Application is in the DcaDalId table
_____
dalId=129
name=Second DCA App
shortName=SDA
_____
Add Dca Application to DsrApplication.
_____
Verify that Dca Application is in the table
_____
id=129
name=DCA_SDA
unavailableAction=ContinueRouting
avpInsertion=Yes
shutdownMode=Graceful
shutdownTimer=5
resultCode=3002
vendorId=0
errorString=
resExhResultCode=3004
resExhVendorId=0
resExhErrorString=DSR Resource Exhausted
routeListId=-1
realm=
fqdn=
mcl=0
Add Permission Group headers for Dca Application
_____
Verify that Dca Application is in the app permission groups table
_____
_appid=129
group_id=3729
group_name=Second DCA App Configuration Permissions
Execution status of activation script on Standby-NO: PASSED
Please check /var/TKLC/log/DcaActivateStandbyAscoped.log.Standby-NO for more details.
```

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```
FIPS integrity verification test failed.
FIPS integrity verification test failed.
Active-NO is Active and Primary NOAMP Server. So, proceeding with next NOAMP Server.
===== Activation done on all Network OAMP Servers ======
====== Starting Activation on System OAM servers ======
Active-SO is Active. So, proceeding with Activation.
FIPS integrity verification test failed.
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.DcaActivateBscoped script on
Active-SO
FIPS integrity verification test failed.
====== Start of Log Data in file /var/TKLC/log/DcaActivateBscoped.log =========
Server Name : Active-SO
Server Role: SYSTEM OAM
Node Id : Active-SO
HA State : Active
______
Verify that Dca Application is in the DcaDalId table
______
dalId=129
name=Second DCA App
shortName=SDA
Add Dca application to DsrApplication. If already present then skip.
_____
Verify that Dca application is in the table
______
id=129
name=DCA_SDA
unavailableAction=ContinueRouting
avpInsertion=Yes
shutdownMode=Graceful
shutdownTimer=5
resultCode=3002
vendorId=0
errorString=
resExhResultCode=3004
resExhVendorId=0
resExhErrorString=DSR Resource Exhausted
routeListId=-1
realm=
```

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```
fqdn=
mcl=0
______
Add Permission Group headers for Dca app on SOAM server
_____
Verify that Dca Application is in the app_permission_groups table
_____
_appid=129
group_id=3729
group_name=Second DCA App Configuration Permissions
______
Add system configuration parameters for Dca
______
Verify that Dca Application is in the DcaAppSystemUserOption table
______
dalId=129
name=rtErrAction
_____
dalId=129
name=rtErrCode
value=
_____
dalId=129
name=rtErrString
value=
_____
dalId=129
name=rtErrVendorId
value=
FIPS integrity verification test failed.
FIPS integrity verification test failed.
===== Start of Log Data in file /var/TKLC/log/DcaActivateStandbyBscoped.log ======
Server Name : Standby-SO
Server Role: SYSTEM_OAM
Node Id : Standby-SO
_____
Add Permission Group headers for Dca Application
-----
```

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```
Verify that Dca Application is in the app_permission_groups table
_____
_appid=129
group_id=3729
group_name=Second DCA App Configuration Permissions
Execution status of activation script on Standby-SO: PASSED
Please check /var/TKLC/log/DcaActivateStandbyBscoped.log.Standby-SO for more details.
FIPS integrity verification test failed.
FIPS integrity verification test failed.
Execution status of activation script on Active-SO: PASSED
Please check /var/TKLC/log/DcaActivateBscoped.log.Active-SO for more details.
FIPS integrity verification test failed.
FIPS integrity verification test failed.
______
 === changed 1 records ===
_____
Verify that activated field is udpated for Dca Application in the DalId table
_____
dalId=129
birthTime=03/01/2017 11:34:21.000
name=Second DCA App
shortName=DCA:SDA
activated=Yes
______
Execution of Dca Applicaion Activation Script for Second DCA App[SDA] completes.
______
Execution of Dca Applicaion Activation Script complete.
```

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Appendix D. DCA Application Reactivation

```
[admusr@Active-NO loaders]$ ./featureActivateDeactivate
Thu Mar 2 05:17:31 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: 9
====== Start of Log Data in file /var/TKLC/log/DcaActivationTopLevel.log ========
Log file location: /var/TKLC/log/DcaActivationTopLevel.log
Note:-
In case of any failure please execute
/usr/TKLC/dsr/prod/maint/loaders/deactivate/load.DcaDeactivationTopLevel script to the control of the control
revert the changes.
Execution of Activation Process Starts
______
Dca framework is activated on the setup..Continuing
Following Dca apps are activated on the system:
First DCA App
Second DCA App
1. Recover currently activated Dca Applications
2. Activate a Dca Application
Enter your choice : 1
______
Recovery of all Currently Activated Dca Application Starts.
Execution of Dca Applicaion Activation Script for First DCA App[FDA] Starts.
```

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```
______
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.DcaActivateAscoped script on
====== Start of Log Data in file /var/TKLC/log/DcaActivateAscoped.log =========
Server Name : Active-NO
Server Role : NETWORK_OAMP
Node Id
        : Active-NO
HA State
        : Active
Cluster Role : Primary
_____
Verify that Dca Application is in the DcaDalId table
_____
dalId=128
name=First DCA App
shortName=FDA
_____
Add Dca application entry to the DsrApplication table.
______
Verify that Dca Application is in the table
id=128
name=DCA_FDA
unavailableAction=ContinueRouting
avpInsertion=Yes
shutdownMode=Graceful
shutdownTimer=5
resultCode=3002
vendorId=0
errorString=
resExhResultCode=3004
resExhVendorId=0
resExhErrorString=DSR Resource Exhausted
routeListId=-1
realm=
fqdn=
mcl=0
Add Dca Application KPI group
_____
Given Dca Entry with KPI_Group=DCA:FDA already present in KPIVisibility table.
Skipping.
```

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```
_____
Verify that Dca Application is in the KPIVisibility table
_____
KPI_Group=DCA:FDA
Visibility=VIS_ALL
_____
Add Dca Application Measurement groups
Given Dca Entry with Meas_Group=DCA:FDA already present in MeasVisibility table.
Skipping.
_____
Verify that Dca Application is in the MeasVisibility table
_____
Meas_Group=DCA:FDA
Visibility=VIS_ALL
_____
Add Permission Group headers for Dca Application
-----
Given Dca Entry with _appid=128 already present in app_permission_groups table.
Skipping.
______
Verify that Dca Application is in the app_permission_groups table
_____
_appid=128
group_id=3728
group_name=First DCA App Configuration Permissions
_____
Add network configuration parameters for Dca
______
Given Dca Entry with name=diamRecSub for dalId=128 already present in
DcaAppNetworkUserOption table. Skipping.
Given Dca Entry with name=diamAnsSub for dalId=128 already present in
DcaAppNetworkUserOption table. Skipping.
Given Dca Entry with name=stateTTL for dalId=128 already present in
DcaAppNetworkUserOption table. Skipping.
Given Dca Entry with name=guestReadOnly for dalId=128 already present in
DcaAppNetworkUserOption table. Skipping.
Given Dca Entry with name=maxSbrQuery for dalId=128 already present in
DcaAppNetworkUserOption table. Skipping.
Given Dca Entry with name=opCountEnabled for dalId=128 already present in
DcaAppNetworkUserOption table. Skipping.
Given Dca Entry with name=opCountMain for dalId=128 already present in
DcaAppNetworkUserOption table. Skipping.
```

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```
Given Dca Entry with name=opCountHandler for dalId=128 already present in
DcaAppNetworkUserOption table. Skipping.
-----
Verify that Dca Application is in the DcaAppNetworkUserOption table
_____
dalId=128
name=diamAnsSub
value=process_answer
dalId=128
name=diamRecSub
value=process_request
_____
dalId=128
name=guestReadOnly
value=true
dalId=128
name=maxSbrQuery
value=5
_____
dalId=128
name=opCountEnabled
value=true
dalId=128
name=opCountHandler
value=3000
dalId=128
name=opCountMain
value=5000
_____
dalId=128
name=stateTTL
value=120
Execution status of activation script on Active-NO: PASSED
Please check /var/TKLC/log/DcaActivateAscoped.log for more details.
```

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```
Starting Activation on StandBy NOAMP Server if it exists in the topology.
______
FIPS integrity verification test failed.
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.DcaActivateStandByAscoped
script on Standby-NO
FIPS integrity verification test failed.
===== Start of Log Data in file /var/TKLC/log/DcaActivateStandbyAscoped.log ======
Server Name : Standby-NO
Server Role: NETWORK_OAMP
_____
Verify that Dca Application is in the DcaDalId table
_____
dalId=128
name=First DCA App
shortName=FDA
_____
Add Dca Application to DsrApplication.
______
Verify that Dca Application is in the table
_____
id=128
name=DCA_FDA
unavailableAction=ContinueRouting
avpInsertion=Yes
shutdownMode=Graceful
shutdownTimer=5
resultCode=3002
vendorId=0
errorString=
resExhResultCode=3004
resExhVendorId=0
resExhErrorString=DSR Resource Exhausted
routeListId=-1
realm=
fqdn=
mcl=0
______
Add Permission Group headers for Dca Application
_____
Given Dca Entry with _appid=128 already present in app_permission_groups table.
Skipping.
```

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```
______
Verify that Dca Application is in the app_permission_groups table
_____
_appid=128
group_id=3728
group_name=First DCA App Configuration Permissions
Execution status of activation script on Standby-NO: PASSED
Please check /var/TKLC/log/DcaActivateStandbyAscoped.log.Standby-NO for more details.
FIPS integrity verification test failed.
FIPS integrity verification test failed.
Active-NO is Active and Primary NOAMP Server. So, proceeding with next NOAMP Server.
====== Activation done on all Network OAMP Servers ======
===== Starting Activation on System OAM servers ======
Active-SO is Active. So, proceeding with Activation.
FIPS integrity verification test failed.
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.DcaActivateBscoped script on
Active-SO
FIPS integrity verification test failed.
====== Start of Log Data in file /var/TKLC/log/DcaActivateBscoped.log =========
Server Name : Active-SO
Server Role: SYSTEM_OAM
Node Id : Active-SO
HA State : Active
Given Dca application is already in DcaDalId table. Skipping.
______
Add Dca application to DsrApplication. If already present then skip.
______
Given Dca Entry with name=DCA_FDA already present in DsrApplication table. Skipping.
_____
Verify that Dca application is in the table
______
id=128
name=DCA_FDA
unavailableAction=ContinueRouting
avpInsertion=Yes
shutdownMode=Graceful
shutdownTimer=5
resultCode=3002
vendorId=0
```

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```
errorString=
resExhResultCode=3004
resExhVendorId=0
resExhErrorString=DSR Resource Exhausted
routeListId=-1
realm=
fqdn=
mcl=0
______
Add Permission Group headers for Dca app on SOAM server
______
Given Dca Entry with _appid=128 already present in app_permission_groups table.
Skipping.
_____
Verify that Dca Application is in the app_permission_groups table
______
appid=128
group_id=3728
group_name=First DCA App Configuration Permissions
_____
Add system configuration parameters for Dca
_____
Given Dca Entry with name=rtErrAction for dalId=128 already present in
DcaAppSystemUserOption table. Skipping.
Given Dca Entry with name=rtErrCode for dalId=128 already present in
DcaAppSystemUserOption table. Skipping.
Given Dca Entry with name=rtErrString for dalId=128 already present in
DcaAppSystemUserOption table. Skipping.
Given Dca Entry with name=rtErrVendorId for dalId=128 already present in
DcaAppSystemUserOption table. Skipping.
______
Verify that Dca Application is in the DcaAppSystemUserOption table
______
dalId=128
name=rtErrAction
value=0
_____
dalId=128
name=rtErrCode
value=
dalId=128
```

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```
name=rtErrString
value=
_____
dalId=128
name=rtErrVendorId
value=
_____
FIPS integrity verification test failed.
FIPS integrity verification test failed.
===== Start of Log Data in file /var/TKLC/log/DcaActivateStandbyBscoped.log ======
Server Name : Standby-SO
Server Role: SYSTEM_OAM
Node Id
       : Standby-S0
______
Add Permission Group headers for Dca Application
_____
Given Dca Entry with _appid=128 already present in app_permission_groups table.
_____
Verify that Dca Application is in the app_permission_groups table
______
_appid=128
group_id=3728
group_name=First DCA App Configuration Permissions
Execution status of activation script on Standby-SO: PASSED
Please check /var/TKLC/log/DcaActivateStandbyBscoped.log.Standby-SO for more details.
FIPS integrity verification test failed.
FIPS integrity verification test failed.
Execution status of activation script on Active-SO: PASSED
Please check /var/TKLC/log/DcaActivateBscoped.log.Active-SO for more details.
FIPS integrity verification test failed.
FIPS integrity verification test failed.
______
 === changed 1 records ===
Verify that activated field is udpated for Dca Application in the DalId table
______
dalId=128
birthTime=03/02/2017 02:30:27.000
```

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```
name=First DCA App
shortName=DCA:FDA
activated=Yes
Execution of Dca Applicaion Activation Script for First DCA App[FDA] completes.
______
Execution of Dca Applicaion Activation Script for Second DCA App[SDA] Starts.
______
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.DcaActivateAscoped script on
Active-NO
====== Start of Log Data in file /var/TKLC/log/DcaActivateAscoped.log =========
Server Name : Active-NO
Server Role : NETWORK OAMP
Node Id
        : Active-NO
HA State
        : Active
Cluster Role : Primary
______
Verify that Dca Application is in the DcaDalId table
______
dalId=129
name=Second DCA App
shortName=SDA
_____
Add Dca application entry to the DsrApplication table.
______
Verify that Dca Application is in the table
_____
id=129
name=DCA_SDA
unavailableAction=ContinueRouting
avpInsertion=Yes
shutdownMode=Graceful
shutdownTimer=5
resultCode=3002
vendorId=0
errorString=
resExhResultCode=3004
resExhVendorId=0
resExhErrorString=DSR Resource Exhausted
routeListId=-1
```

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```
realm=
fqdn=
mcl=0
_____
Add Dca Application KPI group
Given Dca Entry with KPI_Group=DCA:SDA already present in KPIVisibility table.
Skipping.
______
Verify that Dca Application is in the KPIVisibility table
______
KPI_Group=DCA:SDA
Visibility=VIS ALL
_____
Add Dca Application Measurement groups
_____
Given Dca Entry with Meas_Group=DCA:SDA already present in MeasVisibility table.
Skipping.
______
Verify that Dca Application is in the MeasVisibility table
______
Meas_Group=DCA:SDA
Visibility=VIS_ALL
_____
Add Permission Group headers for Dca Application
_____
Given Dca Entry with _appid=129 already present in app_permission_groups table.
Skipping.
______
Verify that Dca Application is in the app_permission_groups table
______
_appid=129
group_id=3729
group_name=Second DCA App Configuration Permissions
_____
Add network configuration parameters for Dca
-----
Given Dca Entry with name=diamRecSub for dalId=129 already present in
DcaAppNetworkUserOption table. Skipping.
Given Dca Entry with name=diamAnsSub for dalId=129 already present in
DcaAppNetworkUserOption table. Skipping.
```

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```
Given Dca Entry with name=stateTTL for dalId=129 already present in
DcaAppNetworkUserOption table. Skipping.
Given Dca Entry with name=guestReadOnly for dalId=129 already present in
DcaAppNetworkUserOption table. Skipping.
Given Dca Entry with name=maxSbrQuery for dalId=129 already present in
DcaAppNetworkUserOption table. Skipping.
Given Dca Entry with name=opCountEnabled for dalId=129 already present in
DcaAppNetworkUserOption table. Skipping.
Given Dca Entry with name=opCountMain for dalId=129 already present in
DcaAppNetworkUserOption table. Skipping.
Given Dca Entry with name=opCountHandler for dalId=129 already present in
DcaAppNetworkUserOption table. Skipping.
______
Verify that Dca Application is in the DcaAppNetworkUserOption table
_____
dalId=129
name=diamAnsSub
value=process_answer
_____
dalId=129
name=diamRecSub
value=process_request
_____
dalId=129
name=guestReadOnly
value=true
_____
dalId=129
name=maxSbrQuery
value=5
_____
dalId=129
name=opCountEnabled
value=true
_____
dalId=129
name=opCountHandler
value=3000
dalId=129
name=opCountMain
value=5000
```

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```
dalId=129
name=stateTTL
value=120
Execution status of activation script on Active-NO: PASSED
Please check /var/TKLC/log/DcaActivateAscoped.log for more details.
______
Starting Activation on StandBy NOAMP Server if it exists in the topology.
______
FIPS integrity verification test failed.
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.DcaActivateStandByAscoped
script on Standby-NO
FIPS integrity verification test failed.
===== Start of Log Data in file /var/TKLC/log/DcaActivateStandbyAscoped.log =======
Server Name : Standby-NO
Server Role: NETWORK_OAMP
______
Verify that Dca Application is in the DcaDalId table
_____
dalId=129
name=Second DCA App
shortName=SDA
_____
Add Dca Application to DsrApplication.
_____
Verify that Dca Application is in the table
_____
id=129
name=DCA_SDA
unavailableAction=ContinueRouting
avpInsertion=Yes
shutdownMode=Graceful
shutdownTimer=5
resultCode=3002
vendorId=0
errorString=
resExhResultCode=3004
resExhVendorId=0
resExhErrorString=DSR Resource Exhausted
```

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```
routeListId=-1
realm=
fqdn=
mcl=0
______
Add Permission Group headers for Dca Application
_____
Given Dca Entry with _appid=129 already present in app_permission_groups table.
Skipping.
_____
Verify that Dca Application is in the app_permission_groups table
_____
appid=129
group_id=3729
group_name=Second DCA App Configuration Permissions
Execution status of activation script on Standby-NO: PASSED
Please check /var/TKLC/log/DcaActivateStandbyAscoped.log.Standby-NO for more details.
FIPS integrity verification test failed.
FIPS integrity verification test failed.
Active-NO is Active and Primary NOAMP Server. So, proceeding with next NOAMP Server.
====== Activation done on all Network OAMP Servers ======
====== Starting Activation on System OAM servers ======
Active-SO is Active. So, proceeding with Activation.
FIPS integrity verification test failed.
Executing /usr/TKLC/dsr/prod/maint/loaders/activate/load.DcaActivateBscoped script on
Active-SO
FIPS integrity verification test failed.
====== Start of Log Data in file /var/TKLC/log/DcaActivateBscoped.log =========
Server Name : Active-SO
Server Role: SYSTEM_OAM
Node Id
        : Active-SO
HA State : Active
Given Dca application is already in DcaDalId table. Skipping.
______
Add Dca application to DsrApplication. If already present then skip.
______
Given Dca Entry with name=DCA_SDA already present in DsrApplication table. Skipping.
______
Verify that Dca application is in the table
______
```

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```
id=129
name=DCA_SDA
unavailableAction=ContinueRouting
avpInsertion=Yes
shutdownMode=Graceful
shutdownTimer=5
resultCode=3002
vendorId=0
errorString=
resExhResultCode=3004
resExhVendorId=0
resExhErrorString=DSR Resource Exhausted
routeListId=-1
realm=
fqdn=
mcl=0
_____
Add Permission Group headers for Dca app on SOAM server
______
Given Dca Entry with _appid=129 already present in app_permission_groups table.
Skipping.
______
Verify that Dca Application is in the app_permission_groups table
_____
_appid=129
group_id=3729
group_name=Second DCA App Configuration Permissions
______
Add system configuration parameters for Dca
_____
Given Dca Entry with name=rtErrAction for dalId=129 already present in
DcaAppSystemUserOption table. Skipping.
Given Dca Entry with name=rtErrCode for dalId=129 already present in
DcaAppSystemUserOption table. Skipping.
Given Dca Entry with name=rtErrString for dalId=129 already present in
DcaAppSystemUserOption table. Skipping.
Given Dca Entry with name=rtErrVendorId for dalId=129 already present in
DcaAppSystemUserOption table. Skipping.
______
Verify that Dca Application is in the DcaAppSystemUserOption table
_____
dalId=129
```

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```
name=rtErrAction
value=0
_____
dalId=129
name=rtErrCode
value=
______
dalId=129
name=rtErrString
-----
dalId=129
name=rtErrVendorId
value=
______
FIPS integrity verification test failed.
FIPS integrity verification test failed.
===== Start of Log Data in file /var/TKLC/log/DcaActivateStandbyBscoped.log =======
Server Name : Standby-SO
Server Role: SYSTEM_OAM
Node Id : Standby-SO
______
Add Permission Group headers for Dca Application
_____
Given Dca Entry with _appid=129 already present in app_permission_groups table.
_____
Verify that Dca Application is in the app_permission_groups table
_____
_appid=129
group_id=3729
group_name=Second DCA App Configuration Permissions
Execution status of activation script on Standby-SO: PASSED
Please check /var/TKLC/log/DcaActivateStandbyBscoped.log.Standby-SO for more details.
FIPS integrity verification test failed.
FIPS integrity verification test failed.
Execution status of activation script on Active-SO: PASSED
Please check /var/TKLC/log/DcaActivateBscoped.log.Active-SO for more details.
```

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FIPS integrity verification test failed.
FIPS integrity verification test failed.
=== changed 1 records ===
Verify that activated field is udpated for Dca Application in the DalId table
=======================================
dalId=129
birthTime=03/02/2017 05:15:45.000
name=Second DCA App
shortName=DCA:SDA
activated=Yes
Execution of Dca Applicaion Activation Script for Second DCA App[SDA] completes.
Execution of Dca Applicaion Activation Script complete.
======================================

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Appendix E. DCA Application Deactivation

```
[admusr@HPC07-NO1 loaders]$ pwd
/usr/TKLC/dsr/prod/maint/loaders
[admusr@HPC07-NO1 loaders]$ ./featureActivateDeactivate
Tue Feb 2 17:59:21 EST 2016::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
List of Feature you can 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: 9
Log file location: /var/TKLC/log/DcaDeactivationTopLevel.log
ion of Deactivation Process Starts
ing Dca apps are activated on the system
1. FDA
2. sda
Enter the name for the Dca application to be deactivated:sda
The name of application selected to deactivate is: sda
 === changed 1 records ===
_____
DalId Table successfully updated with deactivated status.
______
HPC07-S01 is Active. So, proceeding with Deactivation.
FIPS integrity verification test failed.
Executing /usr/TKLC/dsr/prod/maint/loaders/deactivate/load.DcaDeactivateBscoped script
on HPC07-S01
FIPS integrity verification test failed.
```

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```
====== Start of Log Data in file /var/TKLC/log/DcaDeactivateBscoped.log ========
Server Name : HPC07-S01
Server Role: SYSTEM_OAM
Node Id
      : HPC07-S01
HA State
      : Active
______
Remove the ART rules corresponding to the DCA
_____
No rules configured for the current application.
_____
Remove Dca from DcaAppSystemUserOption table
_____
 === deleted 5 records ===
______
Remove Dca Application from DsrApplicationPerMp table
______
 === deleted 0 records ===
_____
Remove Dca Application from DsrApplication table
_____
 === deleted 1 records ===
______
Remove permission group headers for Dca Application on SOAM server
______
 === deleted 1 records ===
Execution status of deactivation script on HPC07-S01: PASSED
Please check /var/TKLC/log/DcaDeactivateBscoped.log.HPC07-S01 for more details.
FIPS integrity verification test failed.
FIPS integrity verification test failed.
______
Starting Deactivation on Standby NOAMP server if present in topology.
______
HPC07-NO1 is Active NOAMP Server. Proceeding with next NOAMP server in the list.
______
Starting Deactivation on Active NOAMP server.
______
Executing /usr/TKLC/dsr/prod/maint/loaders/deactivate/load.DcaDeactivateAscoped script
====== Start of Log Data in file /var/TKLC/log/DcaDeactivateAscoped.log ========
```

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```
Server Name : HPC07-NO1
Server Role : NETWORK_OAMP
     : HPC07-NO1
Node Id
HA State
      : Active
Cluster Role : Primary
Remove Dca Application KPI groups
_____
 === deleted 1 records ===
_____
Remove Dca Application Measurement groups
_____
 === deleted 1 records ===
______
Remove permission group headers for Dca Application
_____
 === deleted 1 records ===
_____
Remove logical to physical sbr db mapping from
DcaLog2PhySbr and DcaLogicalSbr table
_____
Remove Dca from DcaLifecycleNoam table
______
 === deleted 0 records ===
_____
Remove Dca from DcaAppNetworkUserOption table
_____
 === deleted 3 records ===
_____
Remove Dca from DcaTrialMp table
_____
 === deleted 0 records ===
_____
Remove Dca from DsrApplicationPerMp table
_____
 === deleted 0 records ===
______
Remove Dca Application from DsrApplication table
_____
 === deleted 1 records ===
```

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Appendix F. 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.

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Appendix G. Emergency Response

In the event of a critical service situation, emergency response is offered by the CAS main number at 1-800-223-1711 (toll-free in the US), or by calling the Oracle Support hotline for your local country from the list at http://www.oracle.com/us/support/contact/index.html. The emergency response provides immediate coverage, automatic escalation, and other features to ensure that the critical situation is resolved as rapidly as possible.

A critical situation is defined as a problem with the installed equipment that severely affects service, traffic, or maintenance capabilities, and requires immediate corrective action. Critical situations affect service and/or system operation resulting in one or several of these situations:

- A total system failure that results in loss of all transaction processing capability
- Significant reduction in system capacity or traffic handling capability
- Loss of the system's ability to perform automatic system reconfiguration
- Inability to restart a processor or the system
- Corruption of system databases that requires service affecting corrective actions
- Loss of access for maintenance or recovery operations
- Loss of the system ability to provide any required critical or major trouble notification

Any other problem severely affecting service, capacity/traffic, billing, and maintenance capabilities may be defined as critical by prior discussion and agreement with Oracle.

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Appendix H. Locate Product Documentation on the Oracle Help Center

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

- 1. Access the Oracle Help Center site at http://docs.oracle.com.
- 2. Click Industries.
- 3. Under the Oracle Communications subheading, click the Oracle Communications documentation link. The Communications Documentation page appears. Most products covered by these documentation sets will appear under the headings "Network Session Delivery and Control Infrastructure" or "Platforms."
- 4. Click on your Product and then the Release Number. A list of the entire documentation set for the selected product and release appears.
- 5. To download a file to your location, right-click the PDF link, select Save target as (or similar command based on your browser), and save to a local folder.

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