

**Oracle® Communications  
Diameter Signaling Router (DSR)**

**SDS Software Upgrade Procedure**

Release 5.0

**909-2307-001, Revision E**

April 2014

**ORACLE®**

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**CAUTION: Use only the Upgrade procedure included in the Upgrade Kit.**

**Before upgrading any system, please access Oracle's Tekelec Customer Support site and review any Technical Service Bulletins (TSBs) that relate to this upgrade.** Refer to Appendix J for instructions on accessing this site.

Contact Oracle's Tekelec Customer Care Center and inform them of your upgrade plans prior to beginning this or any upgrade procedure.

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# 1. INTRODUCTION

## 1.1 Purpose and Scope

This document describes methods utilized and procedures executed to perform an application's software upgrade on in-service SDS servers and SDS DP blades in an SDS network. Supported paths are major upgrades from SDS 4.0 to SDS 5.0 and minor upgrades from SDS Software Release 4.0.0-40.x to a later 4.0.y-40.z release. The audience for this document includes Tekelec customers as well as the SDS group: Global Software Delivery. This document provides step-by-step instructions to execute any Release 4.0.x software upgrade.

The SDS software includes all Tekelec Platform Distribution (TPD) software. Any TPD upgrade necessary is included automatically as part of the SDS software upgrade. The execution of this procedure assumes that the SDS software load (ISO file, CD-ROM or other form of media) has already been delivered to the customer's premises. This includes delivery of the software load to the local workstation being used to perform this upgrade. *The distribution of the SDS software load is outside the scope of this procedure.*

## 1.2 References

- [1] SDS SW Installation and Configuration Guide, UG006385, Tekelec
- [2] Database Management: Backup and System Restoration, UG005196, Tekelec, Current revision.
- [3] SDS 4.0 Disaster Recovery Guide, UG006387, Tekelec, Current revision
- [4] *HP Solutions Firmware Upgrade Pack Release Notes*, 795-000-2xx, v2.1.5 (or latest 2.1 version)
- [5] *Platform 6.x Configuration Procedure Reference*, 909-2209-001, v. A or greater, 2012
- [6] *TPD 6.X PXE Installation Procedure*, 909-2244-001, Tekelec, Current revision.

## 1.3 Acronyms

Acronym	Meaning
CSV	Comma-separated Values
DB	Database
DP	Database Processor
DR	Disaster Recovery
GA	General Availability
GUI	Graphical User Interface
HA	High Availability
IMI	Internal Management Interface
IPM	Initial Product Manufacture
ISO	ISO 9660 file system (when used in the context of this document)
LA	Limited Availability
MOP	Method of Procedure
MP	Message Processing or Message Processor
NE	Network Element
NO or NOAM	Network OAM&P
OAM	Operations, Administration and Maintenance
OAM&P	Operations, Administration, Maintenance and Provisioning
SDS	Subscriber Database Server
SO or SOAM	System OAM
TPD	Tekelec Platform Distribution
UI	User Interface
VIP	Virtual IP
VPN	Virtual Private Network
XMI	External Management Interface
XSI	External Signaling Interface

**Table 1 - Acronyms**

## 1.4 Terminology

This section describes terminology as it is used within this document.

Term	Meaning
<b>Upgrade</b>	The process of converting an application from its current release on a System to a newer release.
<b>Major Upgrade</b>	An upgrade from a current major release to a newer major release. An example of a major upgrade is: SOME_APPLICATION 1.0.0_10.1.0 to 2.0.0_20.1.0.
<b>Incremental Upgrade</b>	An upgrade from a current build to a newer build within the same major release. An example of an incremental upgrade is: SOME_APPLICATION 2.0.0_20.1.0 to 2.0.0_20.2.0.
<b>Software Only Upgrade</b>	An upgrade that does not require a Database Schema change, only the software is changed.
<b>DB Conversion Upgrade</b>	An upgrade that requires a Database Schema change performed during upgrade that is necessitated by new feature content or bug fixes. For release 1.0, this is a manual procedure not performed automatically by software.
<b>Single Server Upgrade</b>	The process of converting an SDS server from its current release on a single server to a newer release.
<b>Backout</b>	The process of converting a single SDS server to a prior version. This could be performed due to failure in Single Server Upgrade.
<b>Downgrade</b>	The process of converting an SDS server from its current release to a prior release. This could be performed due to a misbehaving system.
<b>Rollback</b>	Automatic recovery procedure that puts a server into its pre-upgrade status. This procedure occurs automatically during upgrade if there is a failure.
<b>Source Release</b>	Software release to upgrade from.
<b>Target Release</b>	Software release to upgrade to.
<b>Health Check</b>	Procedure used to determine the health and status of the network. This includes statuses displayed from the GUI. This can be observed Pre-Server Upgrade, In-Progress Server Upgrade, and Post-Server Upgrade.
<b>Upgrade Ready</b>	State that allows for graceful upgrade of a server without degradation of service. It is a state that a server is required to be in before it can be upgraded. The state is defined by the following attributes: <ul style="list-style-type: none"> <li>• Server is Forced Standby</li> <li>• Server is Application Disabled (Signaling servers will not process any traffic)</li> </ul>
<b>UI</b>	User interface. "Platcfg UI" refers specifically to the Platform Configuration Utility User Interface, which is a text-based user interface.

**Table 2 - Terminology**

## 1.5 How to use this Document

When executing this document, there are a few key points which help to ensure that the user understands the author's intent. These points are as follows;

- 1) Before beginning a procedure, completely read the instructional text (it will appear immediately after the Section heading for each procedure) and all associated procedural WARNINGS or NOTES.
- 2) Before execution of a STEP within a procedure, completely read the left and right columns including any STEP specific WARNINGS or NOTES.
- 3) If a procedural STEP fails to execute successfully or fails to receive the desired output, STOP and contact Oracle's Tekelec Customer Care Center (US: 1-888-367-8552, Intl: +1-919-460-2150) for assistance before attempting to continue.

## 1.5.1 Executing Procedures

The user should be familiar with the structure and conventions used within these procedures before attempting execution. **Table 3** and the details below provide an example of how procedural steps might be displayed within this document.

### Column 1: Step

- **Table 3**, Column 1, contains the Step number and also a checkbox if the step requires action by the user.
- Sub-steps within a given Step X are referred to as Step X.Y. (*See example: Step 1 has sub-steps Steps 1.1 to 1.2*).
- Each checkbox should be checked-off in order to keep track of the progress during execution of the procedure.

### Column 2: Procedure

- **Table 3**, column 2, contains a heading which indicates the server/IP being accessed as well as text instructions and/or notes to the user. This column may also describe the operations to be performed or observed during the step.

### Column 3: Result

- **Table 3**, column 3, generally displays the results of executing the instructions (shown in column 2) to the user.
- The Result column may also display any of the following:
  - Inputs (commands or responses) required by the user.
  - Outputs which should be displayed on the terminal.
  - Illustrations or graphic figures related to the step instruction.
  - Screen captures from the product GUI related to the step instruction.

#### Procedure x: Verifying the Time in GMT

Step	Procedure	Result
1. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Access the command prompt.</p> <p>2) Log into the server as the "root" user.</p> <p><b>NOTE:</b> <i>The password will not appear on the screen as the characters are typed.</i></p>	<pre>CentOS release 5.7 (Final) Kernel 2.6.18-274.7.1.el5prere15.0.0_72.32.0 on an x86_64  sds-mrsvnc-a login: root Password: &lt;root_password&gt;</pre>
2. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Output similar to that shown on the right will appear as the server returns to a command prompt.</p>	<p><b>*** TRUNCATED OUTPUT ***</b></p> <pre>VPATH=/opt/TKLCcomcol/runcm5.13:/opt/TKLCcomcol/cm5.13 RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpss7:/usr/TKLC/sds PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=00 [root@sds-mrsvnc-a ~]#</pre>
3. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Verify that the correct Date &amp; Time are displayed in <b>GMT</b> (+/- 4 min.).</p>	<pre>[root@sds-mrsvnc-a ~]# date -u Thu Jan 26 16:37:10 UTC 2012 [root@sds-mrsvnc-a ~]#</pre>
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>		



## 1.6 Activity Logging

All activity while connected to the system should be logged using a convention which notates the **Customer Name**, **Site/Node** location, **Server hostname** and the **Date**. All logs should be provided to Oracle's Tekelec Customer Care Center for archiving post upgrade.

## 1.7 Recommendations

No specific recommendations have been identified for the current version of this procedure.

### 1.7.1 Use of Health Checks

The user may execute the **Perform Health Check** or **View Logs** steps freely or repeat as many times as desired in between procedures during the upgrade process. It is not recommended to do this in between steps within a procedure, unless there is a failure to troubleshoot.

### 1.7.2 Large Installation Support

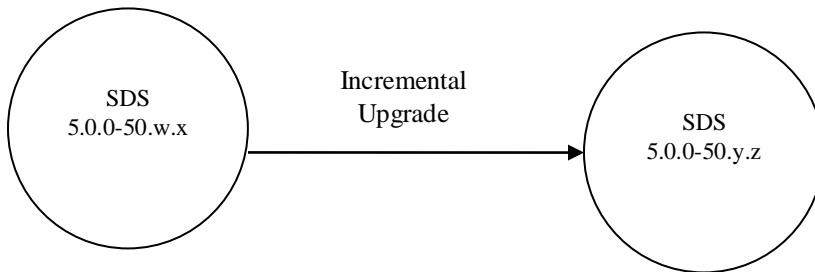
For large systems containing multiple Signaling Network Elements, it may not be feasible to apply the software upgrade to every Network Element within a single maintenance window. However, whenever possible, Primary and DR Provisioning Site Network Elements should be upgraded within the same maintenance window. When multiple maintenance windows are required, replication may be allowed and provisioning re-enabled between scheduled maintenance windows.

## 2. GENERAL DESCRIPTION

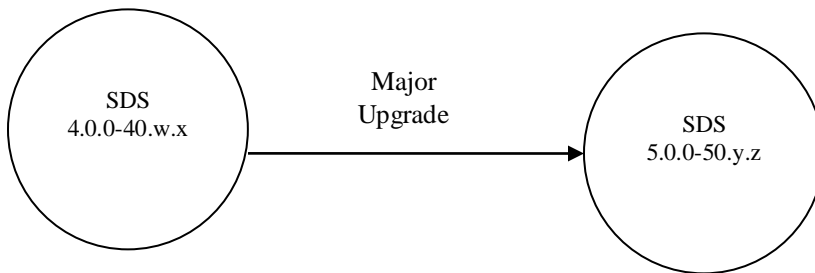
This document defines the step-by-step actions performed to execute a software upgrade of an in-service SDS from the source release to the target release.

### 2.1 Supported Upgrade Paths

The supported SDS upgrade path is shown in **Figure 1** and **Figure 2**.



**Figure 1:** Supported Upgrade Paths



**Figure 2:** Supported Upgrade Paths

**NOTE:** *Initial installation is not within the scope of this upgrade document. See [1] for initial installation requirements.*

### 3. UPGRADE OVERVIEW

This section lists the required materials and information needed to execute an upgrade. It also provides a brief timing overview of the activities needed to upgrade the source release software that is installed and running on an SDS server to the Target Release software. The approximate time required is outlined in **Sections 3.3- 3.7**. These tables are used to plan and estimate the time necessary to complete your upgrade.

Timing values are estimates only. They estimate the completion time of a step or group of steps for an experienced user. These tables are not to be used to execute procedures. Detailed steps for each procedure begin with **Procedure 1** in **Section 5**.

#### 3.1 Upgrade Requirements

The following levels of access, materials and information are needed to execute an upgrade:

- Target-release ISO image file (*Example: 872-2079-02-5.0.0-50.x.y-x86\_64.iso*)
- VPN access to the customer's network.
- GUI access to the SDS Network OAM&P VIP with Administrator privileges.
- SSH/SFTP access to the SDS Network OAM&P XMI VIP as the "root" user.

**NOTE:** All logins into the SDS Active and DR site servers are made via the External Management (XMI) VIP unless otherwise stated.

- User logins, passwords, IP addresses and other administration information. See Section 3.1.2.
- Direct access to server IMI IP addresses from the user's local workstation is preferable in the case of a Backout.

**NOTE:** If direct access to the IMI IP addresses cannot be made available, then target server access can be made via a tandem connection through the Active Primary SDS (i.e. An SSH connection is made to the Active Primary SDS XMI first, then from the Active Primary SDS, an 2<sup>nd</sup> SSH connection can be made to the target server's IMI IP address).

##### 3.1.1 ISO Image File

You must obtain a copy of the target release ISO image file. This file is necessary to perform the upgrade. The SDS ISO image file will be in the following format:

**Example:** 872-2079-05-5.0.0-50.8.0-x86\_64.iso

**NOTE:** Actual number values may vary between releases.

Prior to the execution of this upgrade procedure it is assumed that the SDS ISO image file has already been delivered to the customer's system. The delivery of the ISO image requires that the file be placed on the disk of a PC workstation with GUI access to the Active Primary SDS XMI VIP. If the user performing the upgrade is at a remote location, it is assumed the ISO file is has already been transferred to the Active Primary SDS server prior to starting the upgrade procedure.

### 3.1.2 Logins, Passwords and Site Information

Obtain all the information requested in the following table. This ensures that the necessary administration information is available prior to an upgrade. Consider the confidential nature of the information recorded in this table. While all of the information in the table is required to complete the upgrade, there may be security policies in place that require secure disposal once the upgrade has been completed.

NE Type	NE Name <sup>†</sup>
Primary Site	
DR Site	
Software	Values
Source Release Level:	
Target Release Level:	
Target Release ISO file name:	
Access Information	Values
‡ Primary Site XMI VIP (GUI):	
‡ DR Site XMI VIP:	
GUI Administrator Username:	
GUI Administrator Password:	
“root” user Password:	
iLO user “root” user Password:	
Customer VPN Instructions:	

**Table 4** – Logins, Passwords and Site Information

<sup>†</sup> **NOTE:** The **NE Name** may be viewed from the Primary Site GUI under [Main Menu → Configuration → Network Elements].

<sup>‡</sup> **NOTE:** The **XMI VIP** may be viewed from the Primary Provisioning Site GUI under [Main Menu → Configuration → Server Groups].

### 3.2 Upgrade Maintenance Windows



**!! WARNING !!**

**IT IS RECOMENDED THAT SOAM SITES CONTAINING MATED MESSAGE PROCESSORS BE UPGRADED IN SEPARATE MAINTENANCE WINDOWS IF AT ALL POSSIBLE.**

**Table 5 - Upgrade Maintenance Windows**

<p><b>Maintenance Window 1</b></p> <p>Date: _____</p> <p><b>NOTE:</b> The <b>NE Name</b> may be viewed from the Primary Provisioning Site GUI under [Main Menu → Configuration → Network Elements].</p>	<ul style="list-style-type: none"> <li>Record the Site <b>NE Name</b> of the Primary Provisioning Site and the DR Provisioning Site to be upgraded during Maintenance Window 1 in the space provided below:</li> <li>“Check off” the associated <b>Check Box</b> as Upgrade is completed for each <b>site</b>.</li> </ul> <p><input type="checkbox"/> Primary Provisioning SDS Site: _____</p> <p><input type="checkbox"/> DR Provisioning Site: _____</p>
<p><b>Maintenance Window 2</b></p> <p>Date: _____</p> <p><b>NOTE:</b> The <b>NE Name</b> may be viewed from the Primary Provisioning Site GUI under [Main Menu → Configuration → Network Elements].</p>	<ul style="list-style-type: none"> <li>Record the Site <b>NE Name</b> of each SOAM to be upgraded during Maintenance Window 2 in the space provided below:</li> <li>“Check off” the associated <b>Check Box</b> as Upgrade is completed for each <b>SOAM</b>.</li> </ul> <p><input type="checkbox"/> SOAM1: _____      <input type="checkbox"/> SOAM6: _____</p> <p><input type="checkbox"/> SOAM2: _____      <input type="checkbox"/> SOAM7: _____</p> <p><input type="checkbox"/> SOAM3: _____      <input type="checkbox"/> SOAM8: _____</p> <p><input type="checkbox"/> SOAM4: _____      <input type="checkbox"/> SOAM9: _____</p> <p><input type="checkbox"/> SOAM5: _____      <input type="checkbox"/> SOAM10: _____</p>
<p><b>Maintenance Window 3</b></p> <p>Date: _____</p> <p><b>NOTE:</b> The <b>NE Name</b> may be viewed from the Primary Provisioning Site GUI under [Main Menu → Configuration → Network Elements].</p>	<ul style="list-style-type: none"> <li>Record the Site <b>NE Name</b> of each SOAM to be upgraded during Maintenance Window 3 in the space provided below:</li> <li>“Check off” the associated <b>Check Box</b> as Upgrade is completed for each <b>SOAM</b>.</li> </ul> <p><input type="checkbox"/> SOAM1: _____      <input type="checkbox"/> SOAM6: _____</p> <p><input type="checkbox"/> SOAM2: _____      <input type="checkbox"/> SOAM7: _____</p> <p><input type="checkbox"/> SOAM3: _____      <input type="checkbox"/> SOAM8: _____</p> <p><input type="checkbox"/> SOAM4: _____      <input type="checkbox"/> SOAM9: _____</p> <p><input type="checkbox"/> SOAM5: _____      <input type="checkbox"/> SOAM10: _____</p>

<p><b>Maintenance Window 4</b></p> <p>Date: _____</p> <p><b>NOTE:</b> The <b>NE Name</b> may be viewed from the Primary Provisioning Site GUI under [Main Menu → Configuration → Network Elements].</p>	<ul style="list-style-type: none"> <li>Record the Site <b>NE Name</b> of each SOAM to be upgraded during Maintenance Window 4 in the space provided below:</li> <li>“Check off” the associated <b>Check Box</b> as Upgrade is completed for each <b>SOAM</b>.</li> </ul> <table border="0"> <tr> <td><input type="checkbox"/> SOAM1: _____</td> <td><input type="checkbox"/> SOAM6: _____</td> </tr> <tr> <td><input type="checkbox"/> SOAM2: _____</td> <td><input type="checkbox"/> SOAM7: _____</td> </tr> <tr> <td><input type="checkbox"/> SOAM3: _____</td> <td><input type="checkbox"/> SOAM8: _____</td> </tr> <tr> <td><input type="checkbox"/> SOAM4: _____</td> <td><input type="checkbox"/> SOAM9: _____</td> </tr> <tr> <td><input type="checkbox"/> SOAM5: _____</td> <td><input type="checkbox"/> SOAM10: _____</td> </tr> </table>	<input type="checkbox"/> SOAM1: _____	<input type="checkbox"/> SOAM6: _____	<input type="checkbox"/> SOAM2: _____	<input type="checkbox"/> SOAM7: _____	<input type="checkbox"/> SOAM3: _____	<input type="checkbox"/> SOAM8: _____	<input type="checkbox"/> SOAM4: _____	<input type="checkbox"/> SOAM9: _____	<input type="checkbox"/> SOAM5: _____	<input type="checkbox"/> SOAM10: _____
<input type="checkbox"/> SOAM1: _____	<input type="checkbox"/> SOAM6: _____										
<input type="checkbox"/> SOAM2: _____	<input type="checkbox"/> SOAM7: _____										
<input type="checkbox"/> SOAM3: _____	<input type="checkbox"/> SOAM8: _____										
<input type="checkbox"/> SOAM4: _____	<input type="checkbox"/> SOAM9: _____										
<input type="checkbox"/> SOAM5: _____	<input type="checkbox"/> SOAM10: _____										
<p><b>Maintenance Window 5</b></p> <p>Date: _____</p> <p><b>NOTE:</b> The <b>NE Name</b> may be viewed from the Primary Provisioning Site GUI under [Main Menu → Configuration → Network Elements].</p>	<ul style="list-style-type: none"> <li>Record the Site <b>NE Name</b> of each SOAM to be upgraded during Maintenance Window 5 in the space provided below:</li> <li>“Check off” the associated <b>Check Box</b> as Upgrade is completed for each <b>SOAM</b>.</li> </ul> <table border="0"> <tr> <td><input type="checkbox"/> SOAM1: _____</td> <td><input type="checkbox"/> SOAM6: _____</td> </tr> <tr> <td><input type="checkbox"/> SOAM2: _____</td> <td><input type="checkbox"/> SOAM7: _____</td> </tr> <tr> <td><input type="checkbox"/> SOAM3: _____</td> <td><input type="checkbox"/> SOAM8: _____</td> </tr> <tr> <td><input type="checkbox"/> SOAM4: _____</td> <td><input type="checkbox"/> SOAM9: _____</td> </tr> <tr> <td><input type="checkbox"/> SOAM5: _____</td> <td><input type="checkbox"/> SOAM10: _____</td> </tr> </table>	<input type="checkbox"/> SOAM1: _____	<input type="checkbox"/> SOAM6: _____	<input type="checkbox"/> SOAM2: _____	<input type="checkbox"/> SOAM7: _____	<input type="checkbox"/> SOAM3: _____	<input type="checkbox"/> SOAM8: _____	<input type="checkbox"/> SOAM4: _____	<input type="checkbox"/> SOAM9: _____	<input type="checkbox"/> SOAM5: _____	<input type="checkbox"/> SOAM10: _____
<input type="checkbox"/> SOAM1: _____	<input type="checkbox"/> SOAM6: _____										
<input type="checkbox"/> SOAM2: _____	<input type="checkbox"/> SOAM7: _____										
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<input type="checkbox"/> SOAM4: _____	<input type="checkbox"/> SOAM9: _____										
<input type="checkbox"/> SOAM5: _____	<input type="checkbox"/> SOAM10: _____										
<p><b>Maintenance Window 6</b></p> <p>Date: _____</p> <p><b>NOTE:</b> The <b>NE Name</b> may be viewed from the Primary Provisioning Site GUI under [Main Menu → Configuration → Network Elements].</p>	<ul style="list-style-type: none"> <li>Record the Site <b>NE Name</b> of each SOAM to be upgraded during Maintenance Window 6 in the space provided below:</li> <li>“Check off” the associated <b>Check Box</b> as Upgrade is completed for each <b>SOAM</b>.</li> </ul> <table border="0"> <tr> <td><input type="checkbox"/> SOAM1: _____</td> <td><input type="checkbox"/> SOAM6: _____</td> </tr> <tr> <td><input type="checkbox"/> SOAM2: _____</td> <td><input type="checkbox"/> SOAM7: _____</td> </tr> <tr> <td><input type="checkbox"/> SOAM3: _____</td> <td><input type="checkbox"/> SOAM8: _____</td> </tr> <tr> <td><input type="checkbox"/> SOAM4: _____</td> <td><input type="checkbox"/> SOAM9: _____</td> </tr> <tr> <td><input type="checkbox"/> SOAM5: _____</td> <td><input type="checkbox"/> SOAM10: _____</td> </tr> </table>	<input type="checkbox"/> SOAM1: _____	<input type="checkbox"/> SOAM6: _____	<input type="checkbox"/> SOAM2: _____	<input type="checkbox"/> SOAM7: _____	<input type="checkbox"/> SOAM3: _____	<input type="checkbox"/> SOAM8: _____	<input type="checkbox"/> SOAM4: _____	<input type="checkbox"/> SOAM9: _____	<input type="checkbox"/> SOAM5: _____	<input type="checkbox"/> SOAM10: _____
<input type="checkbox"/> SOAM1: _____	<input type="checkbox"/> SOAM6: _____										
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<input type="checkbox"/> SOAM4: _____	<input type="checkbox"/> SOAM9: _____										
<input type="checkbox"/> SOAM5: _____	<input type="checkbox"/> SOAM10: _____										

### 3.3 Upgrade Preparation Overview

The pre-upgrade procedures shown in the following table should be executed prior to the upgrade maintenance window and may be executed outside a maintenance window if desired.

Procedure Number	Procedure Title	Elapsed Time (Hours:Minutes)	
		This Step	Cumulative
1	<i>Required Materials Check</i>	00:15	00:15
2	<i>ISO Administration</i>	*	*

**Table 6** - Upgrade Preparation Procedures

**\*NOTE:** ISO transfers to the target systems cannot be estimated since times will vary significantly depending on the number of systems and the speed of the network.

These factors significantly affect the total time needed to complete upgrade and therefore require the scheduling of multiple maintenance windows to complete all activities.

The ISO transfers to the target systems should be performed prior to, outside of, the scheduled maintenance window. The user should schedule the required maintenance windows accordingly.

### 3.4 Primary Provisioning / DR Provisioning Execution Overview

The procedures shown in the following table are executed inside a maintenance window.

Procedure Number	Procedure Title	Elapsed Time (Hours:Minutes)	
		This Step	Cumulative
3	<i>Disable AppProcControl Table Replication</i>	00:05	00:05
4	<i>Terminate User Sessions</i>	00:05	00:10
5	<i>Disable Global Provisioning</i>	00:05	00:15
6	<i>Inhibit DR Provisioning Site Servers</i>	00:05	00:20
7	<i>Inhibit Primary Provisioning Site Servers</i>	00:05	00:25
8	<i>Database Backup</i>	01:00	01:25
9	<i>Upgrade DR Provisioning Site NE</i>	01:00	02:25
10	<i>Upgrade Primary Provisioning Site NE</i>	01:00	03:25
11	<i>Allow Primary Provisioning Site Servers</i>	00:05	03:30
12	<i>Allow DR Provisioning Site Servers</i>	00:05	03:35
13	<i>Enable Global Provisioning</i>	00:05	03:40

**Table 7** - Primary Provisioning / DR Provisioning Upgrade Procedures

### 3.5 SOAM Upgrade Execution Overview

The procedures shown in the following table should be executed inside a maintenance window.

Procedure Number	Procedure Title	Elapsed Time (Hours:Minutes)	
		This Step	Cumulative
14	<i>Inhibit SOAM Servers</i>	00:05	00:05
15	<i>Upgrade SOAM NE (SOAM Servers)</i>	01:30	01:35
16	<i>Upgrade SOAM NE (DP Servers)</i>	00:05	01:40
Appendix F	<i>Disable Hyperthreading</i>	00:05	01:45

Table 8 - SOAM Upgrade Procedures

### 3.6 Post Upgrade Execution Overview

These procedures are performed only after all sites on network have been upgraded.

Procedure Number	Procedure Title	Elapsed Time (Hours:Minutes)	
		This Step	Cumulative
Appendix G.1	<i>Enable AppProcControl Replication</i>	00:05	00:05
Appendix G.2	<i>Accept Upgrade</i>	*	*

Table 9 - Post Upgrade Procedures

### 3.7 Recovery Procedures Overview

These procedures are customized to the specific situation encountered and therefore do not have well established timeframes.

Procedure Number	Procedure Title	Elapsed Time (Hours:Minutes)	
		This Step	Cumulative
17	<i>Backout DP SOAM NE</i>	*	*
18	<i>Backout DR SDS NE</i>	*	*
19	<i>Backout Primary SDS NE</i>	*	*

Table 10 - Backout Procedures



#### 4. SDS UPGRADE MATRIX

Upgrading the SDS product in the customer network is a task which requires multiple procedures of varying types. The matrix shown below provides a guide to the user as to which procedures are to be performed on which site types. As always, the user should contact Oracle's Tekelec Customer Care Center for assistance if experiencing difficulties with the interpretation or execution of any of the procedures listed.

**NOTE:** Primary Provisioning and DR Provisioning sites must be upgraded in the same maintenance window.

Site Type		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	F	G
<input type="checkbox"/>	Primary SDS / DR SDS / Query Server	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✓
<input type="checkbox"/>	SOAM / DP	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✓	✓	✗

Table 11 - SDS Upgrade Matrix

#### SDS Upgrade: List of Procedures

Procedure No :	Title :	Page No :
1	Required Materials Check	18
2	ISO Administration & Pre-Upgrade Checks	19
3	Disable AppProcControl Table Replication	31
4	Terminate User Sessions	33
5	Disable Global Provisioning	36
6	Inhibit DR Provisioning Site Servers	38
7	Inhibit Primary Provisioning Site Servers	41
8	Database Backup	45
9	Upgrade DR Provisioning Site NE	52
10	Upgrade Primary Provisioning Site NE	56
11	Allow Primary Provisioning Site Servers	69
12	Allow DR Provisioning Site Servers	65
13	Enable Global Provisioning	73
14	Inhibit SOAM Servers	78
15	Upgrade SOAM NE (SOAM Servers)	88
16	Upgrade SOAM NE (DP Servers)	93
Appendix F	Disable Hyperthreading	166
Appendix G	Finalizing Upgrade	166

Table 12 - SDS Upgrade: List of Procedures

## 5. UPGRADE PREPARATION

This section provides detailed procedures to prepare a system for upgrade execution. These procedures may be executed outside of a maintenance window.

### 5.1 Required Materials Check

This procedure verifies that all required materials needed to perform an upgrade have been collected and recorded.

#### Procedure 1: Required Materials Check

<b>Step</b>	This procedure verifies that all required materials are present.  Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.  <b>SHOULD THIS PROCEDURE FAIL, CONTACT ORACLE'S TEKELEC CUSTOMER CARE CENTER AND ASK FOR UPGRADE ASSISTANCE.</b>	
1. <input type="checkbox"/>	Verify all required materials are present.	<ul style="list-style-type: none"><li>Materials are listed in Section 3.1: Required Materials. Verify all required materials are present.</li></ul>
2. <input type="checkbox"/>	Verify all administration data needed during upgrade.	<ul style="list-style-type: none"><li>Double-check that all information in Section 3.1.2 is filled-in and accurate.</li></ul>

### 5.2 Release Notes

This section contains any release-specific information that might be helpful to complete the software upgrade procedure.

#### 5.2.1 Discrepancies in Primary / DR Provisioning Sites Release Levels

When upgrading SDS to the target release, the following alarms *may be reported* on the GUI during the period of time period when the Primary Provisioning Site NE is at the new software level and the DR Provisioning Network Element is at the old software level:

- 31124: A DB replication audit command detected errors
- 31105: The DB merge process (inetmerge) is impaired by a s/w fault

These alarms, if present, will exist for the Active and Standby DR Provisioning Site servers. They should clear themselves automatically within 5 minutes, and will cease to be raised once the DR Provisioning Site NE is upgraded to the same software level as the Primary Provisioning Site. To avoid seeing these alarms altogether, the upgrade of the Primary Provisioning Site and DR Provisioning Site NEs should be performed within the same maintenance window.

### 5.3 Perform Health Check (Upgrade Preparation)

This procedure is part of Software Upgrade Preparation and is used to determine the health and status of the SDS 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 a maintenance window.

- Execute SDS Health Check procedures as specified in **Appendix B**.

### 5.4 Perform Firmware Verification (Upgrade Preparation)

This procedure is part of Software Upgrade Preparation and is used to determine the whether a firmware update is required. If [4] has been provided with the upgrade kit, follow its instructions to verify the firmware on SDS rack mount servers and SOAM/DP blades. Execute firmware upgrade procedures if required by [4]:

- 
- Execute Section entitled “*Upgrade DL360 or DL380 Server Firmware*” of [5] for SDS rack mount servers.
  - Execute Section entitled “*Upgrade Blade Server Firmware*” of [5] for SDS blades.


### 5.5 ISO Administration & Pre-Upgrade Checks

ISO transfers to the target servers may require a significant amount of time depending on the number of systems and the speed of the network. These factors may significantly affect total time needed and require the scheduling of multiple maintenance windows to complete the entire upgrade procedure. The ISO transfers to the target servers should be performed prior to the first scheduled maintenance window. Schedule the required maintenance windows accordingly before proceeding.

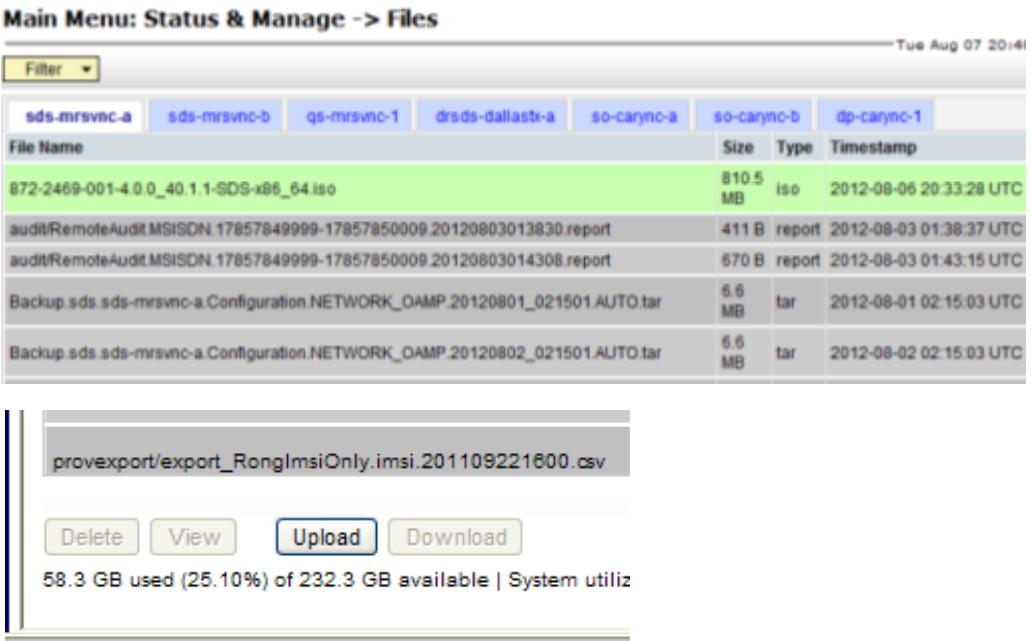
Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

SHOULD ANY STEP IN THIS PROCEDURE FAIL, STOP AND CONTACT ORACLE’S TEKELEC CUSTOMER CARE CENTER FOR ASSISTANCE BEFORE CONTINUING!

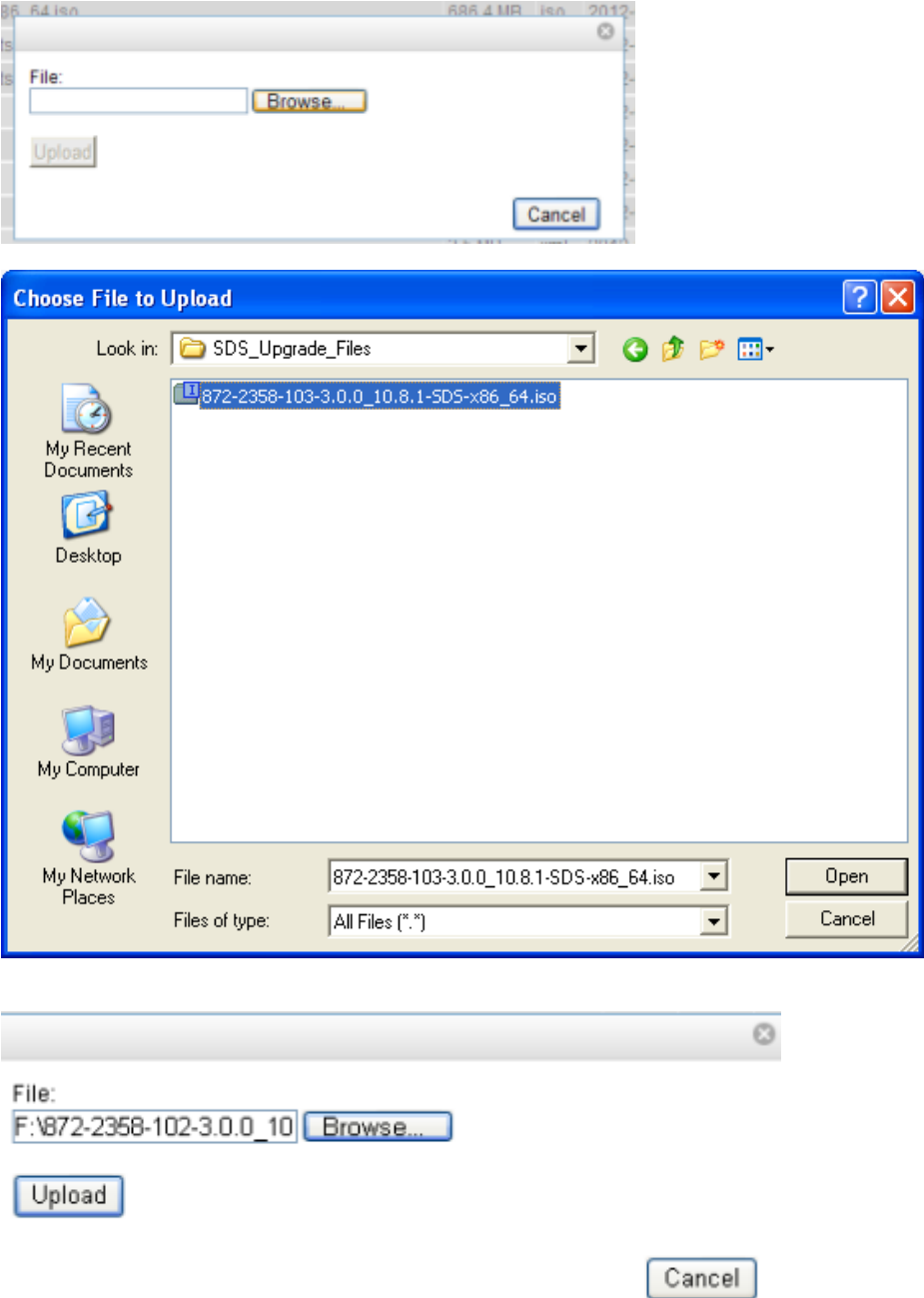
#### Procedure 2: ISO Administration & Pre-Upgrade Checks

Step	Procedure	Result
1. <input type="checkbox"/>	Using the <b>VIP</b> address, access the Primary Provisioning Site GUI.	<ul style="list-style-type: none"> <li>• Access the Primary Provisioning Site GUI as specified in <b>Appendix A</b>.</li> </ul>
2. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b> Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>Files</b></p> <p>...as shown on the right.</p>	 <p>The screenshot shows a web interface titled "Connected using VIP to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P)". On the left is a "Main Menu" with categories: Administration, Configuration, Alarms &amp; Events, Security Log, Status &amp; Manage, Network Elements, Server, HA, Database, KPIs, Processes, Tasks, Files, and Measurements. The "Files" section is expanded, showing a "Main Menu: Status &amp; Manage -&gt; Files" view with a filter dropdown and a list of files. The file list includes "872-2469-001-4 0.0_40.1.1-SDS-x86_64.iso" and several "auditRemoteAudit.MSI" reports, as well as "Backup" files for "sds.sds-mrsvnc-a.Configuration.NETWORK_OAMP" with various dates and times.</p>

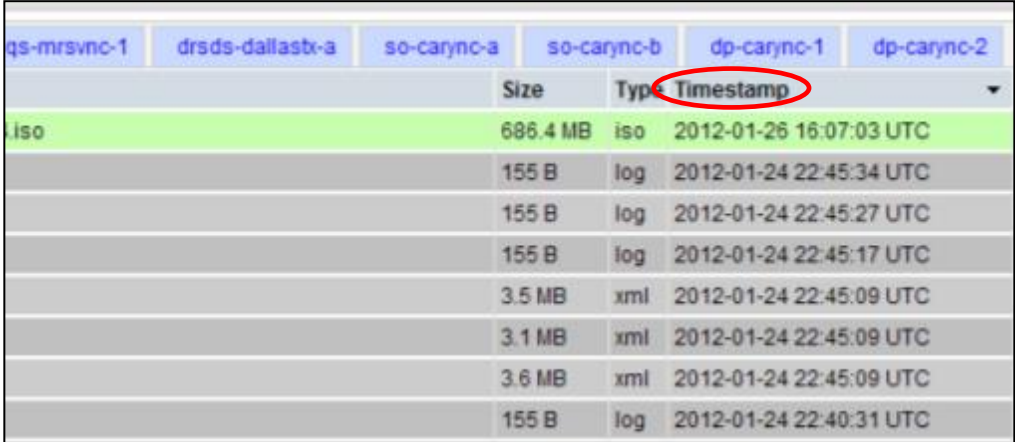
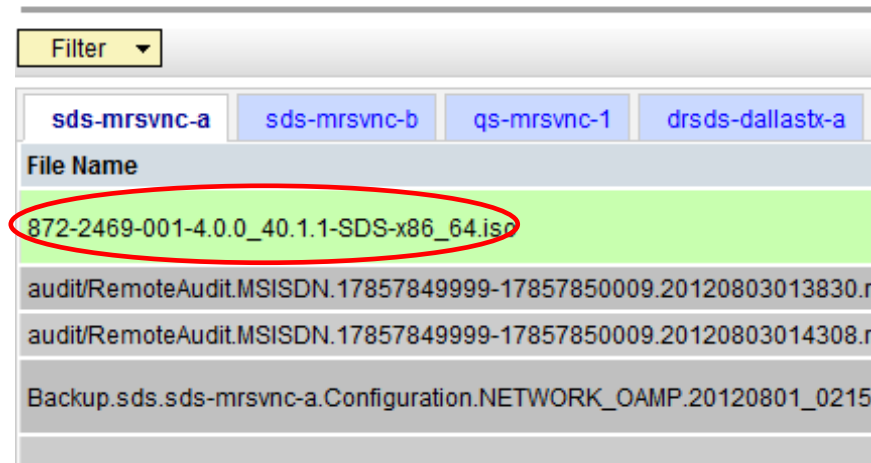

**Procedure 2: ISO Administration & Pre-Upgrade Checks**

Step	Procedure	Result
<p>3.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Verify the <b>hostname</b> of the server currently using the <b>Active Provisioning Site VIP</b>.</p> <p>2) Using the cursor, select the <b>hostname</b> of the server from the list tabs.</p> <p>3) Click on the <b>“Upload”</b> button.</p>	 <p>The screenshot shows a web interface titled "Main Menu: Status &amp; Manage -&gt; Files" with a timestamp of "Tue Aug 07 20:41". It features a "Filter" dropdown and several server tabs: "sds-mrsvnc-a", "sds-mrsvnc-b", "qs-mrsvnc-1", "drds-dallastr-a", "so-carync-a", "so-carync-b", and "dp-carync-1". A table lists files with columns for "File Name", "Size", "Type", and "Timestamp". The file "872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso" is highlighted in green. Below the table, a text input field contains the filename "provexport/export_RongImsiOnly.imsi.201109221600.csv". Action buttons for "Delete", "View", "Upload", and "Download" are visible, with "Upload" highlighted. At the bottom, a system utilization bar shows "58.3 GB used (25.10%) of 232.3 GB available   System utiliz".</p>

**Procedure 2: ISO Administration & Pre-Upgrade Checks**

Step	Procedure	Result
<p>4.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Click on the “Browse...” dialogue button located in the bottom left quadrant of the screen.</p> <p>2) Select the Drive and directory location of the ISO file for the target release. Select the ISO file and click on the “Open” dialogue button.</p> <p>3) Click on the “Upload a File” dialogue button.</p> <p><b>NOTE 1:</b> <i>It is recommended to access the ISO file for the target release from a local hard drive partition as opposed to a network or flash drive location.</i></p> <p><b>NOTE 2:</b> <i>Depending on network conditions, this upload may take an extended period of time (&gt; 60 min.).</i></p> <p><i>Alternatively, the ISO file can be manually transferred to the “/var/TKLC/db/filemgmt” directory of the Active Provisioning Site server using SFTP.</i></p>	 <p>The result column contains two screenshots. The top screenshot shows a file selection dialog with a 'File:' field, a 'Browse...' button, and an 'Upload' button. The bottom screenshot shows a 'Choose File to Upload' dialog with a file list containing '872-2358-103-3.0.0_10.8.1-SDS-x86_64.iso'. Below this, there is a 'File name:' field with the same filename, a 'Files of type:' dropdown set to 'All Files (*.*)', and 'Open' and 'Cancel' buttons. At the bottom of the result column, there is another dialog showing a 'File:' field with the path 'F:\872-2358-102-3.0.0_10', a 'Browse...' button, an 'Upload' button, and a 'Cancel' button.</p>

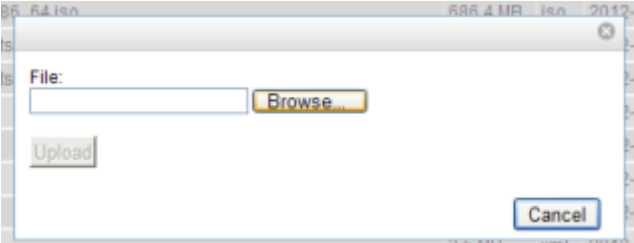
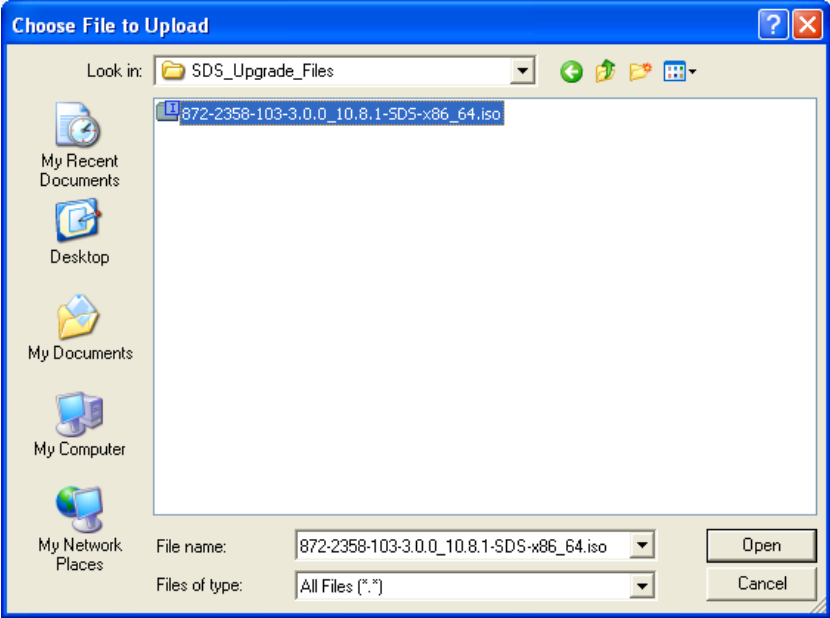
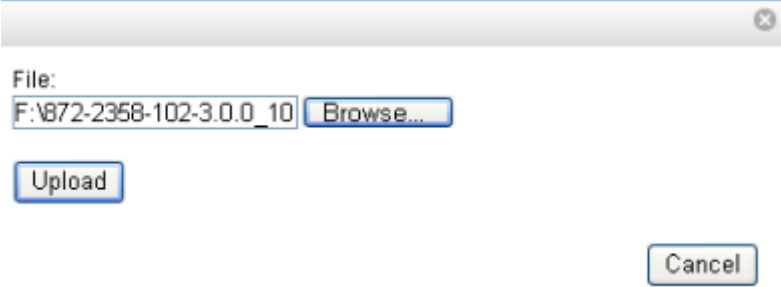
**Procedure 2: ISO Administration & Pre-Upgrade Checks**

Step	Procedure	Result																																
<p>5.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click the <b>TimeStamp</b> link located on the top right of the right panel.</p>	 <table border="1"> <thead> <tr> <th>Size</th> <th>Type</th> <th>TimeStamp</th> </tr> </thead> <tbody> <tr> <td>686.4 MB</td> <td>iso</td> <td>2012-01-26 16:07:03 UTC</td> </tr> <tr> <td>155 B</td> <td>log</td> <td>2012-01-24 22:45:34 UTC</td> </tr> <tr> <td>155 B</td> <td>log</td> <td>2012-01-24 22:45:27 UTC</td> </tr> <tr> <td>155 B</td> <td>log</td> <td>2012-01-24 22:45:17 UTC</td> </tr> <tr> <td>3.5 MB</td> <td>xml</td> <td>2012-01-24 22:45:09 UTC</td> </tr> <tr> <td>3.1 MB</td> <td>xml</td> <td>2012-01-24 22:45:09 UTC</td> </tr> <tr> <td>3.6 MB</td> <td>xml</td> <td>2012-01-24 22:45:09 UTC</td> </tr> <tr> <td>155 B</td> <td>log</td> <td>2012-01-24 22:40:31 UTC</td> </tr> </tbody> </table>	Size	Type	TimeStamp	686.4 MB	iso	2012-01-26 16:07:03 UTC	155 B	log	2012-01-24 22:45:34 UTC	155 B	log	2012-01-24 22:45:27 UTC	155 B	log	2012-01-24 22:45:17 UTC	3.5 MB	xml	2012-01-24 22:45:09 UTC	3.1 MB	xml	2012-01-24 22:45:09 UTC	3.6 MB	xml	2012-01-24 22:45:09 UTC	155 B	log	2012-01-24 22:40:31 UTC					
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<p>6.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user should be presented with a reverse-sorted list of files showing the newest files at the top.</p> <p>The ISO file uploaded in <b>Step 4</b> of this procedure should now appear at the top most position in the "Filename" column.</p>	<p><b>Main Menu: Status &amp; Manage -&gt; Files</b></p>  <p>Filter</p> <p>sds-mrsvnc-a sds-mrsvnc-b qs-mrsvnc-1 drdsds-dallastx-a</p> <p>File Name</p> <p>872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso</p> <p>audit/RemoteAudit.MSISDN.17857849999-17857850009.20120803013830.r</p> <p>audit/RemoteAudit.MSISDN.17857849999-17857850009.20120803014308.r</p> <p>Backup.sds.sds-mrsvnc-a.Configuration.NETWORK_OAMP.20120801_0215</p>																																
<p>7.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>HA</b></p> <p>...as shown on the right.</p>	 <p>Connected using VIP to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P)</p> <p>Main Menu</p> <ul style="list-style-type: none"> <li>Administration</li> <li>Configuration</li> <li>Alarms &amp; Events</li> <li>Security Log</li> <li>Status &amp; Manage             <ul style="list-style-type: none"> <li>Network Elements</li> <li>Server</li> <li>HA</li> <li>Database</li> <li>KPIs</li> <li>Processes</li> </ul> </li> <li>Tasks</li> <li>Files</li> </ul> <p><b>Main Menu: Status &amp; Manage -&gt; HA</b></p> <p>Filter</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>HA Role</th> <th>Max Allowed HA Role</th> <th>Mate Host</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Active</td> <td>Active</td> <td>sds-mrsvnc-b</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Standby</td> <td>Standby</td> <td>sds-mrsvnc-a</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td>Observer</td> <td>Observer</td> <td>sds-mrsvnc-a sds-mrsvnc-b</td> </tr> <tr> <td>drdsds-dallastx-a</td> <td>Active</td> <td>Active</td> <td></td> </tr> <tr> <td>so-carync-a</td> <td>Standby</td> <td>Active</td> <td>so-carync-b</td> </tr> <tr> <td>so-carync-b</td> <td>Active</td> <td>Active</td> <td>so-carync-a</td> </tr> <tr> <td>dp-carync-1</td> <td>Active</td> <td>Active</td> <td></td> </tr> </tbody> </table>	Hostname	HA Role	Max Allowed HA Role	Mate Host	sds-mrsvnc-a	Active	Active	sds-mrsvnc-b	sds-mrsvnc-b	Standby	Standby	sds-mrsvnc-a	qs-mrsvnc-1	Observer	Observer	sds-mrsvnc-a sds-mrsvnc-b	drdsds-dallastx-a	Active	Active		so-carync-a	Standby	Active	so-carync-b	so-carync-b	Active	Active	so-carync-a	dp-carync-1	Active	Active	
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drdsds-dallastx-a	Active	Active																																
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dp-carync-1	Active	Active																																

**Procedure 2: ISO Administration & Pre-Upgrade Checks**

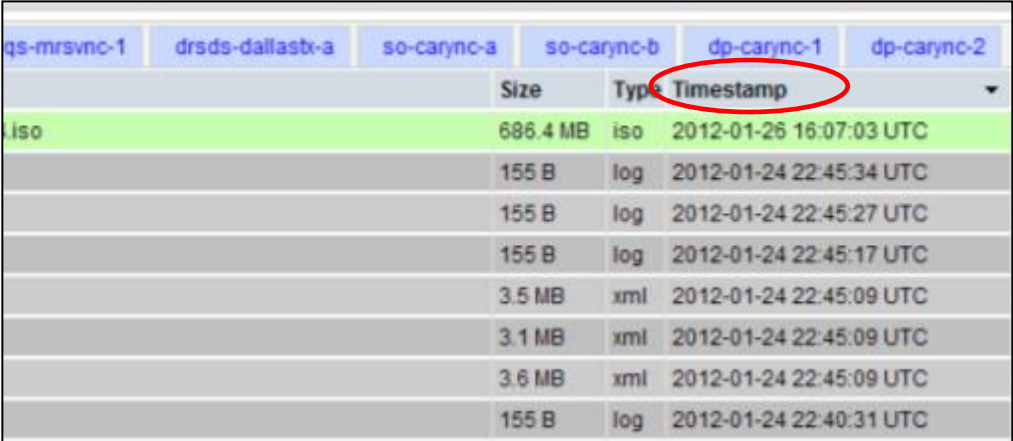
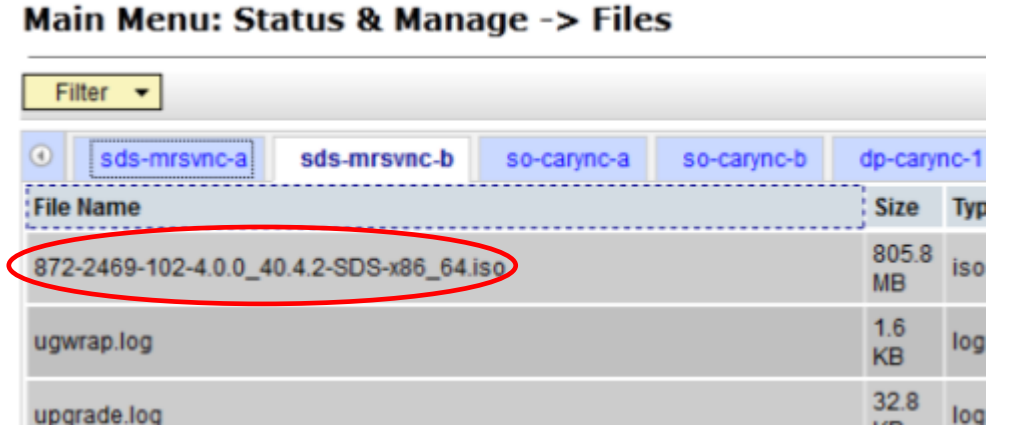
Step	Procedure	Result																																																
8. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP (SSH):</b></p> <p>Find the Hostname of the Standby server by locating the server currently using the <b>Active Provisioning Site VIP</b> and finding the server with <b>HA Role "Standby"</b> in the same <b>Network Element</b>.</p>	<p><b>Main Menu: Status &amp; Manage -&gt; HA</b></p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>HA Role</th> <th>Max Allowed HA Role</th> <th>Mate Hostname List</th> <th>Network Element</th> <th>Server Role</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Active</td> <td>Active</td> <td>sds-mrsvnc-b</td> <td>sds_mrsvnc</td> <td>Network OAM&amp;P</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Standby</td> <td>Standby</td> <td>sds-mrsvnc-a</td> <td>sds_mrsvnc</td> <td>Network OAM&amp;P</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td>Observer</td> <td>Observer</td> <td>sds-mrsvnc-b sds-mrsvnc-a</td> <td>sds_mrsvnc</td> <td>Query Server</td> </tr> <tr> <td>drdsds-dallastx-a</td> <td>Active</td> <td>Active</td> <td></td> <td>dr_dallastx</td> <td>Network OAM&amp;P</td> </tr> <tr> <td>so-carync-a</td> <td>Standby</td> <td>Active</td> <td>so-carync-b</td> <td>so_carync</td> <td>System OAM</td> </tr> <tr> <td>so-carync-b</td> <td>Active</td> <td>Active</td> <td>so-carync-a</td> <td>so_carync</td> <td>System OAM</td> </tr> <tr> <td>dp-carync-1</td> <td>Active</td> <td>Active</td> <td></td> <td>so_carync</td> <td>MP</td> </tr> </tbody> </table>	Hostname	HA Role	Max Allowed HA Role	Mate Hostname List	Network Element	Server Role	sds-mrsvnc-a	Active	Active	sds-mrsvnc-b	sds_mrsvnc	Network OAM&P	sds-mrsvnc-b	Standby	Standby	sds-mrsvnc-a	sds_mrsvnc	Network OAM&P	qs-mrsvnc-1	Observer	Observer	sds-mrsvnc-b sds-mrsvnc-a	sds_mrsvnc	Query Server	drdsds-dallastx-a	Active	Active		dr_dallastx	Network OAM&P	so-carync-a	Standby	Active	so-carync-b	so_carync	System OAM	so-carync-b	Active	Active	so-carync-a	so_carync	System OAM	dp-carync-1	Active	Active		so_carync	MP
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dp-carync-1	Active	Active		so_carync	MP																																													
9. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP (SSH):</b></p> <p>Record the Standby server's name.</p>	<ul style="list-style-type: none"> <li>Record the name of the <b>Active Provisioning Site Standby Server</b>, obtained in step 8, in the space provided below:</li> </ul> <p>Active Provisioning Site Standby Server: _____</p>																																																
10. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>Files</b></p> <p>...as shown on the right.</p>																																																	
11. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Using the cursor, the <b>Standby</b> server's hostname (from step 9) in the top tab bar.</p> <p>2) Click on the <b>"Upload"</b> button.</p>	<p><b>Main Menu: Status &amp; Manage -&gt; Files</b></p>																																																

**Procedure 2: ISO Administration & Pre-Upgrade Checks**

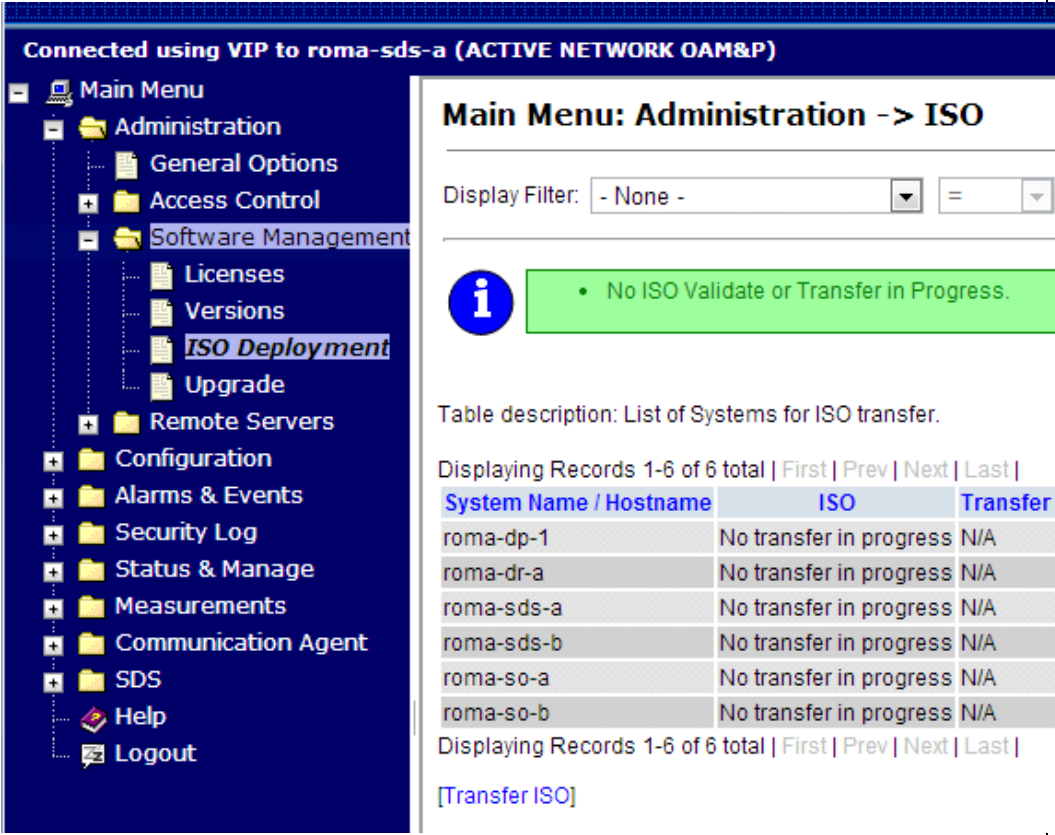
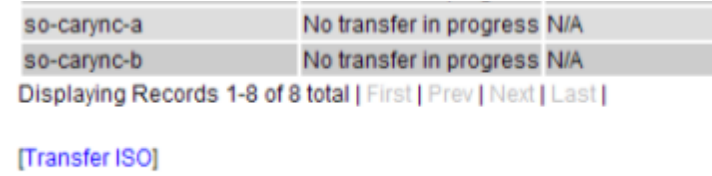
Step	Procedure	Result
<p>12.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Click on the “Browse...” dialogue button located in the bottom left quadrant of the screen.</p> <p>2) Select the Drive and directory location of the ISO file for the target release. Select the ISO file and click on the “Open” dialogue button.</p> <p>3) Click on the “Upload a File” dialogue button.</p> <p><b>NOTE 1:</b> <i>It is recommended to access the ISO file for the target release from a local hard drive partition as opposed to a network or flash drive location.</i></p> <p><b>NOTE 2:</b> <i>Depending on network conditions, this upload may take an extended period of time (&gt; 60 min.).</i></p> <p><i>Alternatively, the ISO file can be manually transferred to the “/var/TKLC/db/filemgmt” directory of the Standby Provisioning Site server using SFTP.</i></p>	  




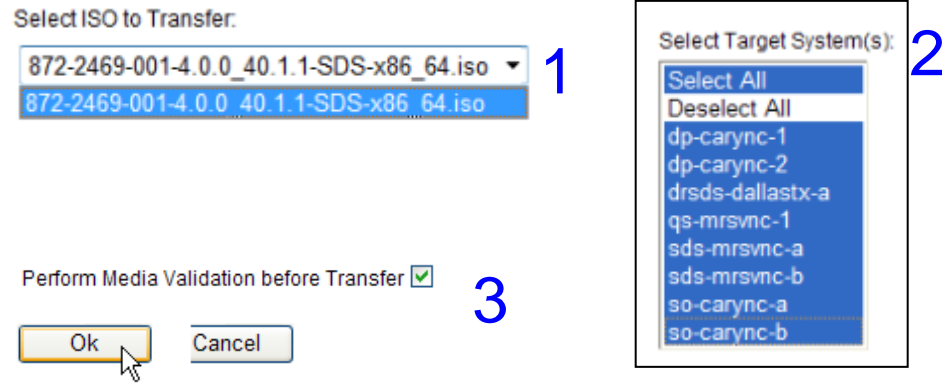
**Procedure 2: ISO Administration & Pre-Upgrade Checks**

Step	Procedure	Result																																				
<p>13.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click the <b>TimeStamp</b> link located on the top right of the right panel.</p>	 <table border="1"> <thead> <tr> <th></th> <th>Size</th> <th>Type</th> <th>TimeStamp</th> </tr> </thead> <tbody> <tr> <td>iso</td> <td>686.4 MB</td> <td>iso</td> <td>2012-01-26 16:07:03 UTC</td> </tr> <tr> <td></td> <td>155 B</td> <td>log</td> <td>2012-01-24 22:45:34 UTC</td> </tr> <tr> <td></td> <td>155 B</td> <td>log</td> <td>2012-01-24 22:45:27 UTC</td> </tr> <tr> <td></td> <td>155 B</td> <td>log</td> <td>2012-01-24 22:45:17 UTC</td> </tr> <tr> <td></td> <td>3.5 MB</td> <td>xml</td> <td>2012-01-24 22:45:09 UTC</td> </tr> <tr> <td></td> <td>3.1 MB</td> <td>xml</td> <td>2012-01-24 22:45:09 UTC</td> </tr> <tr> <td></td> <td>3.6 MB</td> <td>xml</td> <td>2012-01-24 22:45:09 UTC</td> </tr> <tr> <td></td> <td>155 B</td> <td>log</td> <td>2012-01-24 22:40:31 UTC</td> </tr> </tbody> </table>		Size	Type	TimeStamp	iso	686.4 MB	iso	2012-01-26 16:07:03 UTC		155 B	log	2012-01-24 22:45:34 UTC		155 B	log	2012-01-24 22:45:27 UTC		155 B	log	2012-01-24 22:45:17 UTC		3.5 MB	xml	2012-01-24 22:45:09 UTC		3.1 MB	xml	2012-01-24 22:45:09 UTC		3.6 MB	xml	2012-01-24 22:45:09 UTC		155 B	log	2012-01-24 22:40:31 UTC
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<p>14.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user should be presented with a reverse-sorted list of files showing the newest files at the top.</p> <p>The ISO file uploaded in <b>Step 4</b> of this procedure should now appear at the top most position in the "Filename" column.</p>	 <p><b>Main Menu: Status &amp; Manage -&gt; Files</b></p> <p>Filter</p> <p>sds-mrsvnc-a sds-mrsvnc-b so-carync-a so-carync-b dp-carync-1</p> <table border="1"> <thead> <tr> <th>File Name</th> <th>Size</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>872-2469-102-4.0.0_40.4.2-SDS-x86_64.iso</td> <td>805.8 MB</td> <td>iso</td> </tr> <tr> <td>ugwrap.log</td> <td>1.6 KB</td> <td>log</td> </tr> <tr> <td>upgrade.log</td> <td>32.8 KB</td> <td>log</td> </tr> </tbody> </table>	File Name	Size	Type	872-2469-102-4.0.0_40.4.2-SDS-x86_64.iso	805.8 MB	iso	ugwrap.log	1.6 KB	log	upgrade.log	32.8 KB	log																								
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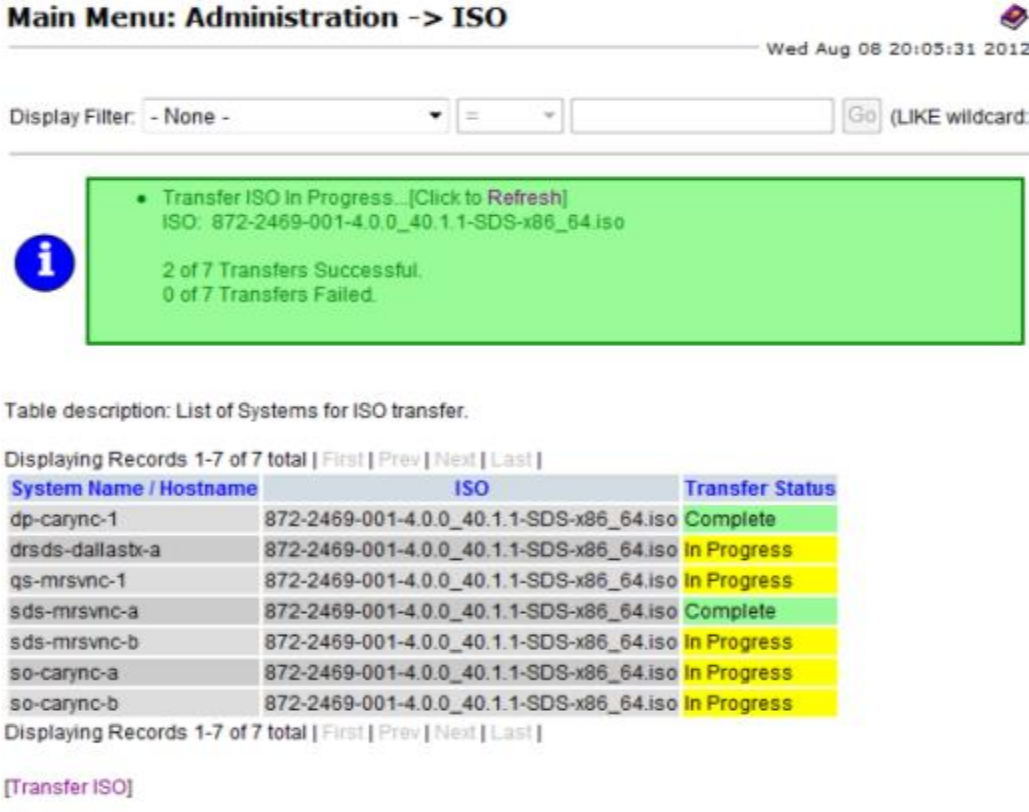
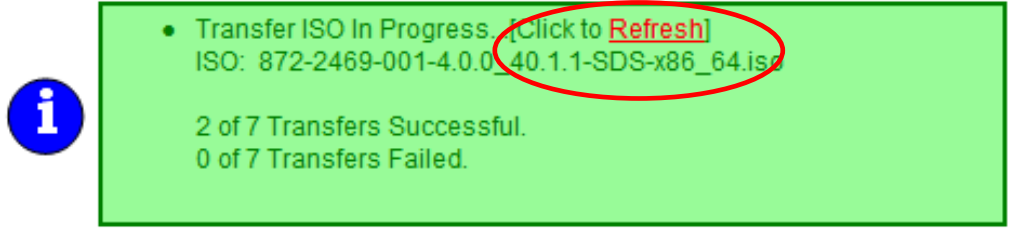

**Procedure 2: ISO Administration & Pre-Upgrade Checks**

Step	Procedure	Result																					
<p>15.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP (GUI):</b> Select...</p> <p><b>Main Menu</b> → Administration → Software Management → ISO Deployment</p> <p>...as shown on the right.</p> <p><b>NOTE:</b> On 4.0 systems, select...</p> <p><b>Main Menu</b> → Administration → ISO</p>	 <p>The screenshot shows the 'Main Menu: Administration -&gt; ISO' interface. The left sidebar contains a tree view with 'Main Menu' expanded to 'Administration', then 'Software Management', and finally 'ISO Deployment' selected. The main content area displays a table of systems for ISO transfer. A green message box at the top indicates 'No ISO Validate or Transfer in Progress.' Below the table, there are navigation links for 'First', 'Prev', 'Next', and 'Last'.</p> <table border="1"> <thead> <tr> <th>System Name / Hostname</th> <th>ISO</th> <th>Transfer</th> </tr> </thead> <tbody> <tr> <td>roma-dp-1</td> <td>No transfer in progress</td> <td>N/A</td> </tr> <tr> <td>roma-dr-a</td> <td>No transfer in progress</td> <td>N/A</td> </tr> <tr> <td>roma-sds-a</td> <td>No transfer in progress</td> <td>N/A</td> </tr> <tr> <td>roma-sds-b</td> <td>No transfer in progress</td> <td>N/A</td> </tr> <tr> <td>roma-so-a</td> <td>No transfer in progress</td> <td>N/A</td> </tr> <tr> <td>roma-so-b</td> <td>No transfer in progress</td> <td>N/A</td> </tr> </tbody> </table>	System Name / Hostname	ISO	Transfer	roma-dp-1	No transfer in progress	N/A	roma-dr-a	No transfer in progress	N/A	roma-sds-a	No transfer in progress	N/A	roma-sds-b	No transfer in progress	N/A	roma-so-a	No transfer in progress	N/A	roma-so-b	No transfer in progress	N/A
System Name / Hostname	ISO	Transfer																					
roma-dp-1	No transfer in progress	N/A																					
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roma-sds-b	No transfer in progress	N/A																					
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roma-so-b	No transfer in progress	N/A																					
<p>16.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click on the <b>[ Transfer ISO ]</b> link located in the bottom left quadrant of the screen.</p>	 <p>The screenshot shows the bottom left quadrant of the GUI. It features a table with two rows of system information and a '[ Transfer ISO ]' link below it. The table shows system names and their ISO status.</p> <table border="1"> <tbody> <tr> <td>so-carync-a</td> <td>No transfer in progress</td> <td>N/A</td> </tr> <tr> <td>so-carync-b</td> <td>No transfer in progress</td> <td>N/A</td> </tr> </tbody> </table>	so-carync-a	No transfer in progress	N/A	so-carync-b	No transfer in progress	N/A															
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**Procedure 2: ISO Administration & Pre-Upgrade Checks**

Step	Procedure	Result
<p>17.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user should be presented with the <b>ISO [Transfer ISO]</b> Administration screen.</p>	
<p>18.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Using the pull-down menu, select the ISO file for the target release.</p> <p>2) Select all servers to be upgraded.</p> <p><b>NOTE:</b> This may be done one of two ways:</p> <p>a) <b>Select All:</b> If all servers are to be upgraded, they may be selected by clicking on the “<b>Select All</b>” option.</p> <p>b) <b>Multi-Select:</b> If only a group of servers are to be upgraded, they may be selected by holding down the <b>[CTRL]</b> key while using the cursor to click on the designated servers.</p> <p>3) Click on the “<b>Perform Media Validation before transfer</b>” check box.</p> <p>4) Click on the “<b>OK</b>” dialogue button.</p>	

**Procedure 2: ISO Administration & Pre-Upgrade Checks**

Step	Procedure	Result																								
<p>19.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user should be presented with the <b>ISO Administration</b> screen.</p>	 <p><b>Main Menu: Administration -&gt; ISO</b></p> <p>Wed Aug 08 20:05:31 2012</p> <p>Display Filter: - None - = <input type="text"/> Go (LIKE wildcard)</p> <p>• Transfer ISO In Progress... [Click to Refresh] ISO: 872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso</p> <p>2 of 7 Transfers Successful. 0 of 7 Transfers Failed.</p> <p>Table description: List of Systems for ISO transfer.</p> <p>Displaying Records 1-7 of 7 total   First   Prev   Next   Last  </p> <table border="1"> <thead> <tr> <th>System Name / Hostname</th> <th>ISO</th> <th>Transfer Status</th> </tr> </thead> <tbody> <tr> <td>dp-carync-1</td> <td>872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso</td> <td>Complete</td> </tr> <tr> <td>drsds-dallastx-a</td> <td>872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso</td> <td>In Progress</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td>872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso</td> <td>In Progress</td> </tr> <tr> <td>sds-mrsvnc-a</td> <td>872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso</td> <td>Complete</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso</td> <td>In Progress</td> </tr> <tr> <td>so-carync-a</td> <td>872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso</td> <td>In Progress</td> </tr> <tr> <td>so-carync-b</td> <td>872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso</td> <td>In Progress</td> </tr> </tbody> </table> <p>Displaying Records 1-7 of 7 total   First   Prev   Next   Last  </p> <p>[Transfer ISO]</p>	System Name / Hostname	ISO	Transfer Status	dp-carync-1	872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso	Complete	drsds-dallastx-a	872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso	In Progress	qs-mrsvnc-1	872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso	In Progress	sds-mrsvnc-a	872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso	Complete	sds-mrsvnc-b	872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso	In Progress	so-carync-a	872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso	In Progress	so-carync-b	872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso	In Progress
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<p>20.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>The progress of the individual file transfers may be monitored by periodically clicking on the [ <b>Click to Refresh</b> ] link.</p>	 <p>• Transfer ISO In Progress... [Click to Refresh] ISO: 872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso</p> <p>2 of 7 Transfers Successful. 0 of 7 Transfers Failed.</p>																								
<p>21.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Continue to monitor the file transfer progress until a “<b>Transfer Status</b>” of “<b>Complete</b>” is received for all selected servers.</p>	<p>Table description: List of Systems for ISO transfer.</p> <p>Displaying Records 1-7 of 7 total   First   Prev   Next   Last  </p> <table border="1"> <thead> <tr> <th>System Name / Hostname</th> <th>ISO</th> <th>Transfer Status</th> </tr> </thead> <tbody> <tr> <td>dp-carync-1</td> <td>872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso</td> <td>Complete</td> </tr> <tr> <td>drsds-dallastx-a</td> <td>872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso</td> <td>Complete</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td>872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso</td> <td>Complete</td> </tr> <tr> <td>sds-mrsvnc-a</td> <td>872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso</td> <td>Complete</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso</td> <td>Complete</td> </tr> <tr> <td>so-carync-a</td> <td>872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso</td> <td>Complete</td> </tr> <tr> <td>so-carync-b</td> <td>872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso</td> <td>Complete</td> </tr> </tbody> </table> <p>Displaying Records 1-7 of 7 total   First   Prev   Next   Last  </p>	System Name / Hostname	ISO	Transfer Status	dp-carync-1	872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso	Complete	drsds-dallastx-a	872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso	Complete	qs-mrsvnc-1	872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso	Complete	sds-mrsvnc-a	872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso	Complete	sds-mrsvnc-b	872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso	Complete	so-carync-a	872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso	Complete	so-carync-b	872-2469-001-4.0.0_40.1.1-SDS-x86_64.iso	Complete
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 <p><b>NOTE:</b> If the network has a PXE server as defined in [6] be sure to copy the SDS ISO image to each site's PXE server ISO storage.</p>																										
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>																										

## 5.6 Perform Health Check (Post ISO Administration)



This procedure is part of Software Upgrade Preparation and is used to determine the health and status of the SDS network and servers.

- Execute SDS Health Check procedures as specified in **Appendix B**.

## 6. PRIMARY PROVISIONING SITE / DR PROVISIONING SITE UPGRADE EXECUTION

Call Oracle's **Tekelec Customer Care Center** at **1-888-FOR-TKLC** (1-888-367-8552); or 1-919-460-2150 (international) and inform them of your plans to upgrade this system prior to executing this upgrade.

Before upgrade, users must perform the system Health Check **Appendix B**. This check ensures that the system to be upgraded is in an upgrade-ready state. Performing the system health check determines which alarms are present in the system and if upgrade 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 upgrade process is started. The sequence of upgrade is such that servers providing support services to other servers will be upgraded first.

### \*\*\*\* WARNING \*\*\*\*

Please read the following notes on this procedure:

Procedure completion times shown here are estimates. Times may vary due to differences in database size, user experience, and user preparation.

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 upgrade must mark the provided Check Box.

For procedures which are executed multiple times, a mark can be made below the Check Box (in the same column) for each additional iteration the step is executed.

Retention of Captured data is required as a future support reference if this procedure is executed by someone other than Oracle's Tekelec Customer Care Center.

**NOTE:** *For large systems containing multiple Signaling Network Elements, it may not be feasible to apply the software upgrade to every Network Element within a single maintenance window. However, whenever possible, Primary Provisioning and DR Provisioning Network Elements should be upgraded within the same maintenance window. If multiple maintenance windows are required, replication may be allowed and provisioning re-enabled between scheduled maintenance windows.*

## 6.1 Perform Health Check (Pre Upgrade)

This procedure is part of Software Upgrade Preparation and is used to determine the health and status of the SDS 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 a maintenance window.

- Execute SDS Health Check procedures as specified in **Appendix B**.

## 6.2 Primary Provisioning Site / DR Provisioning Site Upgrade

The following procedure details how to disable global provisioning and inhibit replication the Provisioning Site and DR Provisioning Site sites. This procedure must be executed before these Network Elements can be upgraded.

Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

SHOULD ANY STEP IN THIS PROCEDURE FAIL, STOP AND CONTACT ORACLE'S TEKELEC CUSTOMER CARE CENTER FOR ASSISTANCE BEFORE CONTINUING!

### 6.2.1 Disable AppProcControl Table Replication

Disable AppProcControl Table Replication Site sites. This procedure must be executed before these Network Elements can be upgraded.



**NOTE:** *Database AppProcControl replication will be re-enabled in Appendix G.1 after the last SOAM site is upgraded.*

#### Procedure 3: Disable AppProcControl Table Replication

Step	Procedure	Result
1. <input type="checkbox"/>	<b>Active Provisioning Site VIP (SSH):</b>  1) Access the command prompt.  2) Log into the server as the "root" user.	CentOS release 5.7 (Final) Kernel 2.6.18-274.7.1.el5prere15.0.0_72.32.0 on an x86_64  sds-mrsvnc-a login: <b>root</b> Password: <b>&lt;root_password&gt;</b>
2. <input type="checkbox"/>	<b>Active Provisioning Site VIP (SSH):</b>  Output similar to that shown on the right may appear as the server accesses the command prompt.	<b>*** TRUNCATED OUTPUT ***</b>  VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awps7 PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=00 VPATH=/opt/TKLCcomcol/runcm5.13:/opt/TKLCcomcol/cm5.13 PRODPATH= RELEASE=5.13 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awps7:/usr/TKLC/sds PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=0 [root@sds-mrsvnc-a ~]#

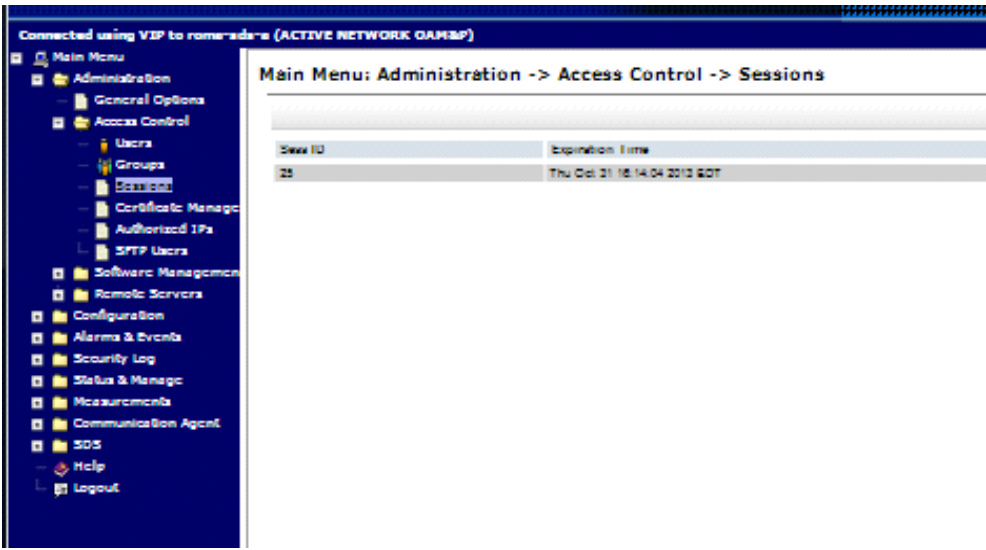
### Procedure 3: Disable AppProcControl Table Replication

Step	Procedure	Result
3. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Disable audit.</p> <p><b>NOTE:</b> <i>This step is only needed for a major upgrade. It can also be run on SDS 5.0 without harm, but note that the command will fail because the table no longer exists.</i></p>	<pre>[root@sds-mrsvnc-a ~]# itrunc RepAuditCmd</pre>
4. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Disable replication for the AppProcControl table.</p>	<pre>[root@sds-chltnc-a ~]# iset -fexcldeTables='AppProcControl' NodeInfo where "1=1" === changed 10 records === [root@sds-chltnc-a ~]#</pre>
5. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Enable guiadmin GUI access.</p> <p><b>NOTE:</b> <i>This step is only needed for a major upgrade but it can be run anytime without harm.</i></p>	<pre>[root@sds-chltnc-a ~]# iset -fuse_remote_auth='0' -fuse_local_auth='1' user where "username='guiadmin'" === changed 1 records === [root@sds-chltnc-a ~]#</pre>
6. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Exit from the server command line.</p>	<pre>[root@sds-mrsvnc-a ~]# exit logout</pre>
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>		

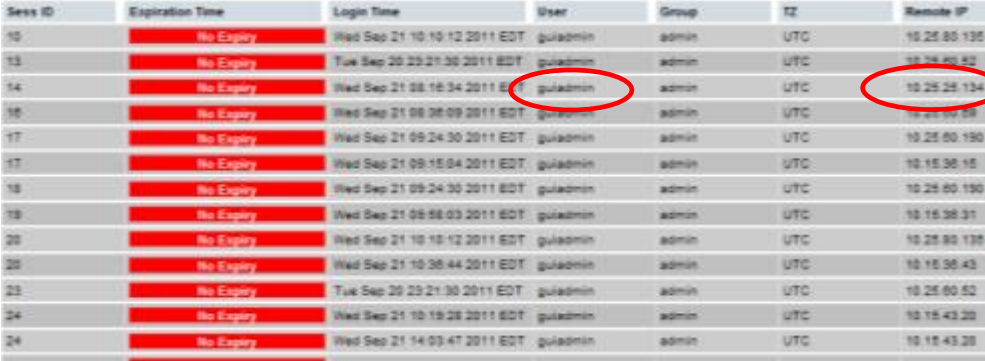


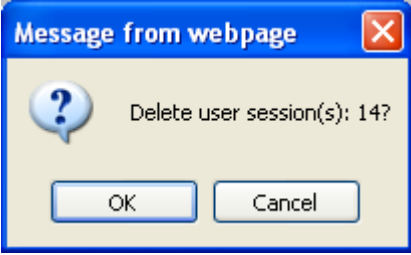


## 6.2.2 Terminate User Sessions

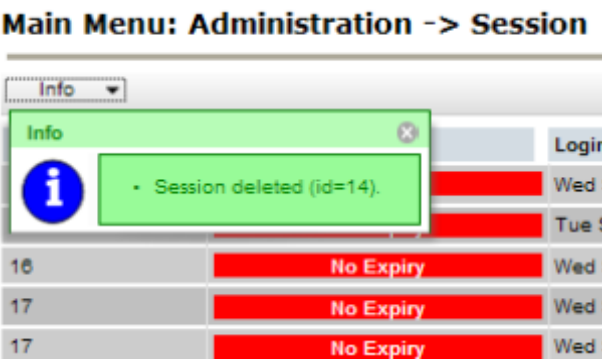
### Procedure 4: Terminate User Sessions

Step	Procedure	Result																																																												
1. <input type="checkbox"/>	Using the <b>VIP</b> address, access the Primary Provisioning Site GUI.	<ul style="list-style-type: none"> <li>Access the Primary Provisioning Site GUI as specified in <b>Appendix A</b>.</li> </ul>																																																												
2. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p><b>THIS STEP MAY ONLY BE PERFORMED BY THE CUSTOMER!</b></p> <p>Select...</p> <p><b>Main Menu</b>            → Administration              → Access Control                → Sessions</p> <p>...as shown on the right.</p> <p><b>NOTE:</b> On 4.0 systems, select...  <b>Main Menu</b>            → Administration              → Sessions</p>																																																													
3. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p><b>THIS STEP MAY ONLY BE PERFORMED BY THE CUSTOMER!</b></p> <p>In the right panel, the user will be presented with the list of Active GUI sessions connected to the Active Provisioning Site server.</p>	<table border="1"> <thead> <tr> <th>Sess ID</th> <th>Expiration Time</th> <th>Login Time</th> <th>User</th> <th>Group</th> </tr> </thead> <tbody> <tr><td>10</td><td>No Expiry</td><td>Wed Sep 21 10:10:12 2011 EDT</td><td>guiadmin</td><td>admin</td></tr> <tr><td>13</td><td>No Expiry</td><td>Tue Sep 20 23:21:30 2011 EDT</td><td>guiadmin</td><td>admin</td></tr> <tr><td>14</td><td>No Expiry</td><td>Wed Sep 21 08:16:34 2011 EDT</td><td>guiadmin</td><td>admin</td></tr> <tr><td>16</td><td>No Expiry</td><td>Wed Sep 21 08:36:09 2011 EDT</td><td>guiadmin</td><td>admin</td></tr> <tr><td>17</td><td>No Expiry</td><td>Wed Sep 21 09:24:30 2011 EDT</td><td>guiadmin</td><td>admin</td></tr> <tr><td>17</td><td>No Expiry</td><td>Wed Sep 21 09:15:04 2011 EDT</td><td>guiadmin</td><td>admin</td></tr> <tr><td>18</td><td>No Expiry</td><td>Wed Sep 21 09:24:30 2011 EDT</td><td>guiadmin</td><td>admin</td></tr> <tr><td>19</td><td>No Expiry</td><td>Wed Sep 21 09:58:03 2011 EDT</td><td>guiadmin</td><td>admin</td></tr> <tr><td>20</td><td>No Expiry</td><td>Wed Sep 21 10:10:12 2011 EDT</td><td>guiadmin</td><td>admin</td></tr> <tr><td>20</td><td>No Expiry</td><td>Wed Sep 21 10:36:44 2011 EDT</td><td>guiadmin</td><td>admin</td></tr> <tr><td>23</td><td>No Expiry</td><td>Tue Sep 20 23:21:30 2011 EDT</td><td>guiadmin</td><td>admin</td></tr> </tbody> </table>	Sess ID	Expiration Time	Login Time	User	Group	10	No Expiry	Wed Sep 21 10:10:12 2011 EDT	guiadmin	admin	13	No Expiry	Tue Sep 20 23:21:30 2011 EDT	guiadmin	admin	14	No Expiry	Wed Sep 21 08:16:34 2011 EDT	guiadmin	admin	16	No Expiry	Wed Sep 21 08:36:09 2011 EDT	guiadmin	admin	17	No Expiry	Wed Sep 21 09:24:30 2011 EDT	guiadmin	admin	17	No Expiry	Wed Sep 21 09:15:04 2011 EDT	guiadmin	admin	18	No Expiry	Wed Sep 21 09:24:30 2011 EDT	guiadmin	admin	19	No Expiry	Wed Sep 21 09:58:03 2011 EDT	guiadmin	admin	20	No Expiry	Wed Sep 21 10:10:12 2011 EDT	guiadmin	admin	20	No Expiry	Wed Sep 21 10:36:44 2011 EDT	guiadmin	admin	23	No Expiry	Tue Sep 20 23:21:30 2011 EDT	guiadmin	admin
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**Procedure 4: Terminate User Sessions**

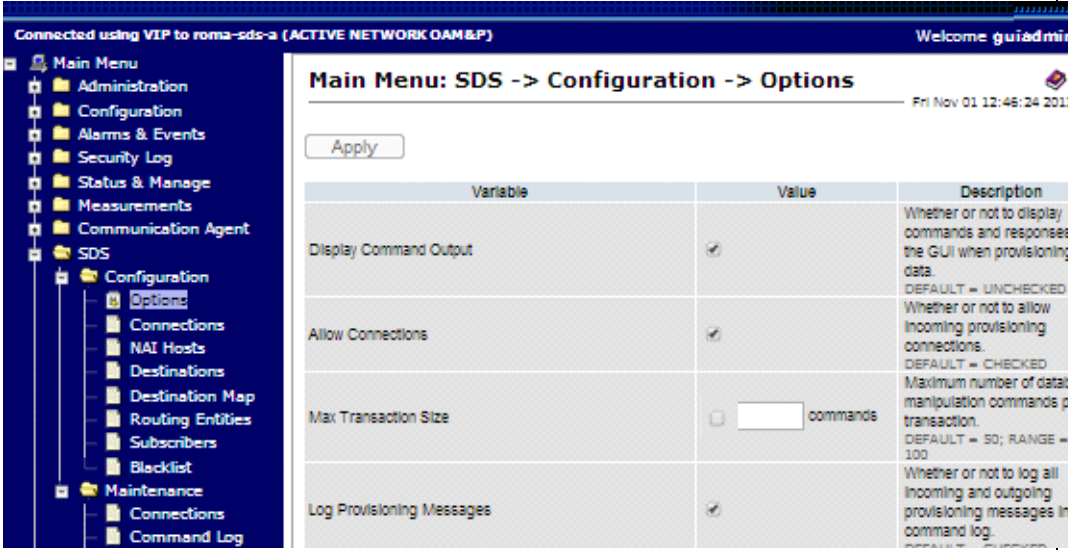
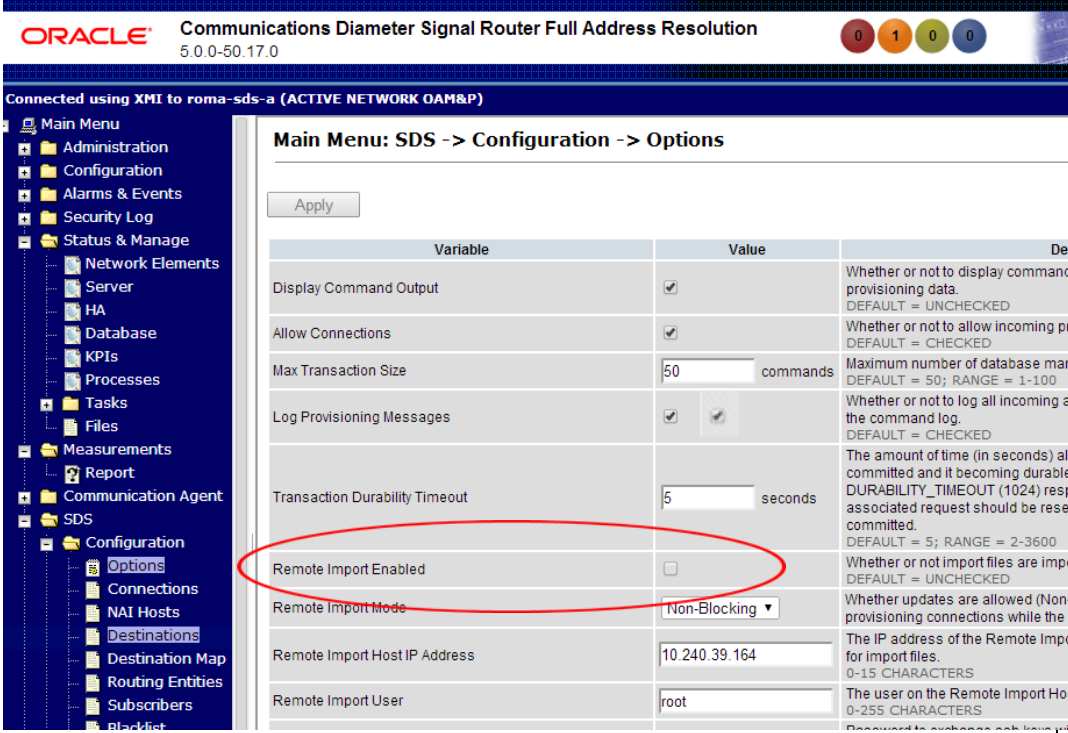
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<p>4.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p><b>THIS STEP MAY ONLY BE PERFORMED BY THE CUSTOMER!</b></p> <p>The User ID and Remote IP address of each session will be displayed as seen on the right.</p> <p>Every attempt should be made to contact users not engaged in this Upgrade activity and request that they discontinue GUI access until the upgrade activity has completed.</p>	 <table border="1"> <thead> <tr> <th>Sess ID</th> <th>Expiration Time</th> <th>Login Time</th> <th>User</th> <th>Group</th> <th>TZ</th> <th>Remote IP</th> </tr> </thead> <tbody> <tr><td>10</td><td>No Expiry</td><td>Wed Sep 21 10:10:12 2011 EDT</td><td>guiadmin</td><td>admin</td><td>UTC</td><td>10.25.80.130</td></tr> <tr><td>13</td><td>No Expiry</td><td>Tue Sep 20 23:21:30 2011 EDT</td><td>guiadmin</td><td>admin</td><td>UTC</td><td>10.15.36.52</td></tr> <tr><td>14</td><td>No Expiry</td><td>Wed Sep 21 08:16:34 2011 EDT</td><td>guiadmin</td><td>admin</td><td>UTC</td><td>10.25.25.134</td></tr> <tr><td>16</td><td>No Expiry</td><td>Wed Sep 21 08:36:09 2011 EDT</td><td>guiadmin</td><td>admin</td><td>UTC</td><td>10.25.80.130</td></tr> <tr><td>17</td><td>No Expiry</td><td>Wed Sep 21 09:24:30 2011 EDT</td><td>guiadmin</td><td>admin</td><td>UTC</td><td>10.25.80.130</td></tr> <tr><td>17</td><td>No Expiry</td><td>Wed Sep 21 09:15:04 2011 EDT</td><td>guiadmin</td><td>admin</td><td>UTC</td><td>10.15.36.15</td></tr> <tr><td>18</td><td>No Expiry</td><td>Wed Sep 21 09:24:30 2011 EDT</td><td>guiadmin</td><td>admin</td><td>UTC</td><td>10.25.80.130</td></tr> <tr><td>18</td><td>No Expiry</td><td>Wed Sep 21 09:55:03 2011 EDT</td><td>guiadmin</td><td>admin</td><td>UTC</td><td>10.15.36.31</td></tr> <tr><td>20</td><td>No Expiry</td><td>Wed Sep 21 10:10:12 2011 EDT</td><td>guiadmin</td><td>admin</td><td>UTC</td><td>10.25.80.130</td></tr> <tr><td>20</td><td>No Expiry</td><td>Wed Sep 21 10:36:44 2011 EDT</td><td>guiadmin</td><td>admin</td><td>UTC</td><td>10.15.36.43</td></tr> <tr><td>23</td><td>No Expiry</td><td>Tue Sep 20 23:21:30 2011 EDT</td><td>guiadmin</td><td>admin</td><td>UTC</td><td>10.25.80.52</td></tr> <tr><td>24</td><td>No Expiry</td><td>Wed Sep 21 10:15:28 2011 EDT</td><td>guiadmin</td><td>admin</td><td>UTC</td><td>10.15.43.20</td></tr> <tr><td>24</td><td>No Expiry</td><td>Wed Sep 21 14:03:47 2011 EDT</td><td>guiadmin</td><td>admin</td><td>UTC</td><td>10.15.43.20</td></tr> </tbody> </table>	Sess ID	Expiration Time	Login Time	User	Group	TZ	Remote IP	10	No Expiry	Wed Sep 21 10:10:12 2011 EDT	guiadmin	admin	UTC	10.25.80.130	13	No Expiry	Tue Sep 20 23:21:30 2011 EDT	guiadmin	admin	UTC	10.15.36.52	14	No Expiry	Wed Sep 21 08:16:34 2011 EDT	guiadmin	admin	UTC	10.25.25.134	16	No Expiry	Wed Sep 21 08:36:09 2011 EDT	guiadmin	admin	UTC	10.25.80.130	17	No Expiry	Wed Sep 21 09:24:30 2011 EDT	guiadmin	admin	UTC	10.25.80.130	17	No Expiry	Wed Sep 21 09:15:04 2011 EDT	guiadmin	admin	UTC	10.15.36.15	18	No Expiry	Wed Sep 21 09:24:30 2011 EDT	guiadmin	admin	UTC	10.25.80.130	18	No Expiry	Wed Sep 21 09:55:03 2011 EDT	guiadmin	admin	UTC	10.15.36.31	20	No Expiry	Wed Sep 21 10:10:12 2011 EDT	guiadmin	admin	UTC	10.25.80.130	20	No Expiry	Wed Sep 21 10:36:44 2011 EDT	guiadmin	admin	UTC	10.15.36.43	23	No Expiry	Tue Sep 20 23:21:30 2011 EDT	guiadmin	admin	UTC	10.25.80.52	24	No Expiry	Wed Sep 21 10:15:28 2011 EDT	guiadmin	admin	UTC	10.15.43.20	24	No Expiry	Wed Sep 21 14:03:47 2011 EDT	guiadmin	admin	UTC	10.15.43.20
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<p>5.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p><b>THIS STEP MAY ONLY BE PERFORMED BY THE CUSTOMER!</b></p> <p>If unable to identify or contact the session owners, sessions not related to the upgrade activity may be selected and deleted as follows:</p> <ol style="list-style-type: none"> <li>1) Select the session for deletion with the cursor.</li> <li>2) In the bottom left of the right panel, click the "Delete" dialogue button.</li> <li>3) In the pop-up window, click on the "OK" dialogue button.</li> </ol> <p><b>NOTE:</b> <i>The Session screen prevents users from deleting the session which they are currently connected to.</i></p> <p><i>If attempting to do so by accident, a message may be received in the Banner area stating "Logout to delete your own session (id=xx)".</i></p>	 <table border="1"> <thead> <tr> <th>Sess ID</th> <th>Expiration Time</th> <th>Login Time</th> <th>User</th> </tr> </thead> <tbody> <tr><td>10</td><td>No Expiry</td><td>Wed Sep 21 10:10:12 2011 EDT</td><td>guiadmin</td></tr> <tr><td>13</td><td>No Expiry</td><td>Tue Sep 20 23:21:30 2011 EDT</td><td>guiadmin</td></tr> <tr><td>14</td><td>No Expiry</td><td>Wed Sep 21 08:16:34 2011 EDT</td><td>guiadmin</td></tr> <tr><td>16</td><td>No Expiry</td><td>Wed Sep 21 08:36:09 2011 EDT</td><td>guiadmin</td></tr> <tr><td>17</td><td>No Expiry</td><td>Wed Sep 21 09:24:30 2011 EDT</td><td>guiadmin</td></tr> <tr><td>17</td><td>No Expiry</td><td>Wed Sep 21 09:15:04 2011 EDT</td><td>guiadmin</td></tr> </tbody> </table>   <p>1</p> <p>2</p> <p>3</p>	Sess ID	Expiration Time	Login Time	User	10	No Expiry	Wed Sep 21 10:10:12 2011 EDT	guiadmin	13	No Expiry	Tue Sep 20 23:21:30 2011 EDT	guiadmin	14	No Expiry	Wed Sep 21 08:16:34 2011 EDT	guiadmin	16	No Expiry	Wed Sep 21 08:36:09 2011 EDT	guiadmin	17	No Expiry	Wed Sep 21 09:24:30 2011 EDT	guiadmin	17	No Expiry	Wed Sep 21 09:15:04 2011 EDT	guiadmin																																																																						
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**Procedure 4: Terminate User Sessions**

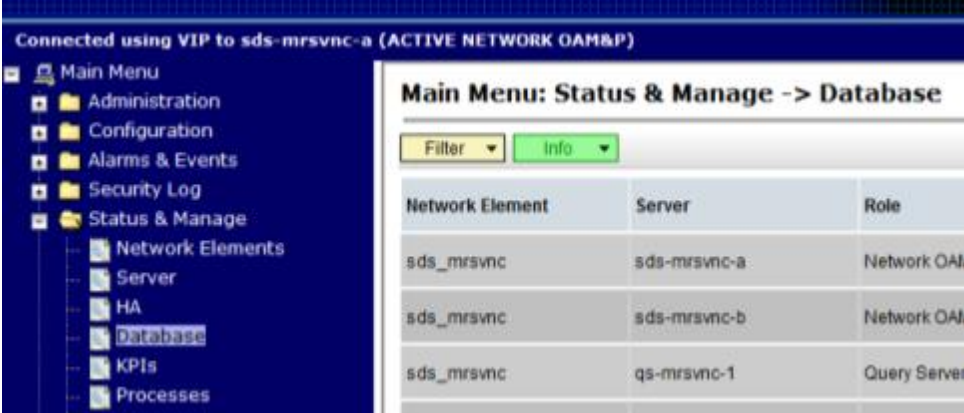
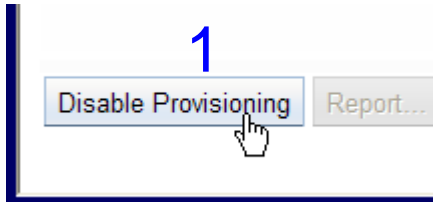
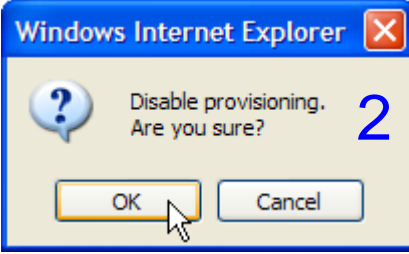
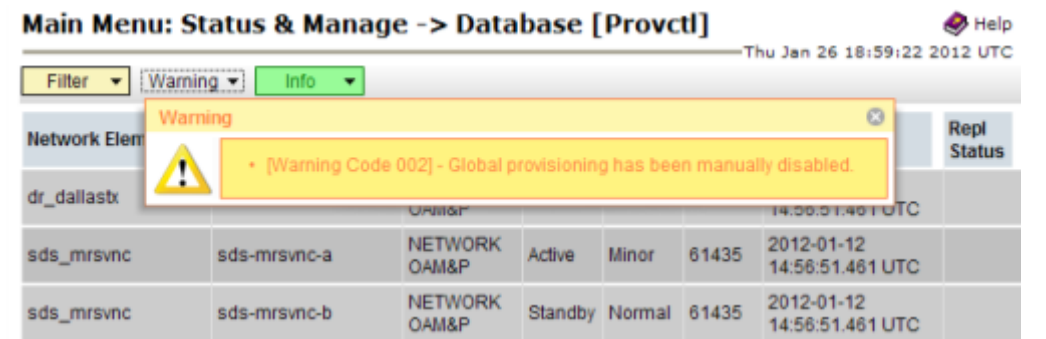
Step	Procedure	Result								
<p>6.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p><b>THIS STEP MAY ONLY BE PERFORMED BY THE CUSTOMER!</b></p> <p>The user will receive a confirmation message in the Info tab indicating the session ID which was deleted.</p>	 <p><b>Main Menu: Administration -&gt; Session</b></p> <table border="1"> <tr> <td>Info</td> <td>Logi</td> </tr> <tr> <td>16</td> <td>No Expiry Wed</td> </tr> <tr> <td>17</td> <td>No Expiry Wed</td> </tr> <tr> <td>17</td> <td>No Expiry Wed</td> </tr> </table>	Info	Logi	16	No Expiry Wed	17	No Expiry Wed	17	No Expiry Wed
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<p>7.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p><b>THIS STEP MAY ONLY BE PERFORMED BY THE CUSTOMER!</b></p> <p>Delete any additional GUI sessions as needed.</p>	<ul style="list-style-type: none"> <li>Repeat <b>Steps 5-6</b> of this Procedure for each additional GUI session to be deleted.</li> </ul>								
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>										

## 6.2.3 Disable Global Provisioning and Remote Import

### Procedure 5: Disable Global Provisioning and Remote Import

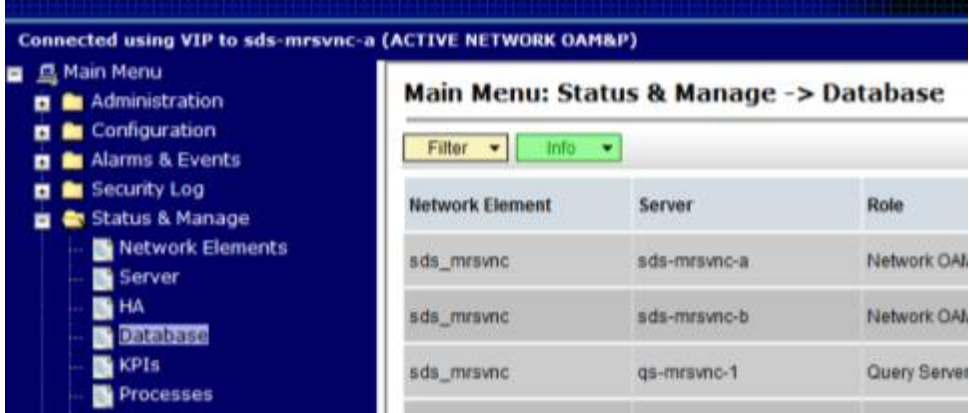
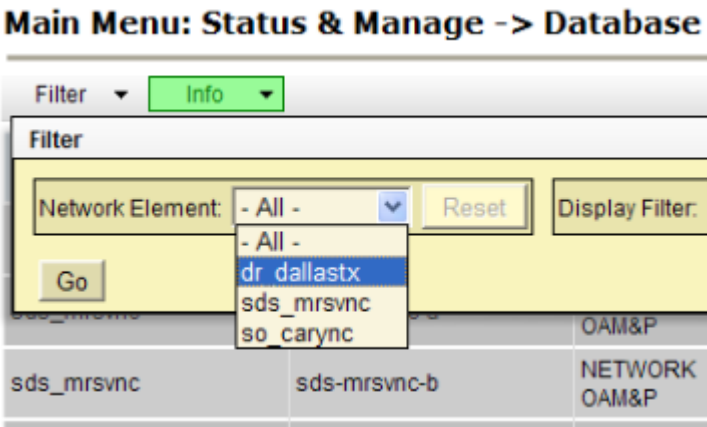

<p>1.</p> <p><input type="checkbox"/></p>	<p>Active SDS VIP:</p> <p>Select...</p> <p><b>Main Menu</b>          → SDS          → Configuration          → Options</p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Variable</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Display Command Output</td> <td><input checked="" type="checkbox"/></td> <td>Whether or not to display commands and responses the GUI when provisioning data. DEFAULT = UNCHECKED</td> </tr> <tr> <td>Allow Connections</td> <td><input checked="" type="checkbox"/></td> <td>Whether or not to allow incoming provisioning connections. DEFAULT = CHECKED</td> </tr> <tr> <td>Max Transaction Size</td> <td><input type="text" value=""/> commands</td> <td>Maximum number of database manipulation commands per transaction. DEFAULT = 50; RANGE = 1-100</td> </tr> <tr> <td>Log Provisioning Messages</td> <td><input checked="" type="checkbox"/></td> <td>Whether or not to log all incoming and outgoing provisioning messages in command log. DEFAULT = CHECKED</td> </tr> </tbody> </table>	Variable	Value	Description	Display Command Output	<input checked="" type="checkbox"/>	Whether or not to display commands and responses the GUI when provisioning data. DEFAULT = UNCHECKED	Allow Connections	<input checked="" type="checkbox"/>	Whether or not to allow incoming provisioning connections. DEFAULT = CHECKED	Max Transaction Size	<input type="text" value=""/> commands	Maximum number of database manipulation commands per transaction. DEFAULT = 50; RANGE = 1-100	Log Provisioning Messages	<input checked="" type="checkbox"/>	Whether or not to log all incoming and outgoing provisioning messages in command log. DEFAULT = CHECKED															
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<p>2.</p> <p><input type="checkbox"/></p>	<p>Active SDS VIP:</p> <p>Disable Remote Import:</p> <p>1) First, record whether <b>Remote Import</b> was:  <input type="checkbox"/> Enabled  <input type="checkbox"/> Not enabled</p> <p>2) Then make sure the “<b>Remote Import Enabled</b>” check box is <b>NOT</b> checked.</p> <p>3) Click on the “<b>Apply</b>” dialogue button</p>	 <table border="1"> <thead> <tr> <th>Variable</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Display Command Output</td> <td><input checked="" type="checkbox"/></td> <td>Whether or not to display command provisioning data. DEFAULT = UNCHECKED</td> </tr> <tr> <td>Allow Connections</td> <td><input checked="" type="checkbox"/></td> <td>Whether or not to allow incoming provisioning connections. DEFAULT = CHECKED</td> </tr> <tr> <td>Max Transaction Size</td> <td>50 commands</td> <td>Maximum number of database manipulation commands per transaction. DEFAULT = 50; RANGE = 1-100</td> </tr> <tr> <td>Log Provisioning Messages</td> <td><input checked="" type="checkbox"/></td> <td>Whether or not to log all incoming and outgoing provisioning messages in the command log. DEFAULT = CHECKED</td> </tr> <tr> <td>Transaction Durability Timeout</td> <td>5 seconds</td> <td>The amount of time (in seconds) all committed and it becoming durable DURABILITY_TIMEOUT (1024) resp associated request should be reseed committed. DEFAULT = 5; RANGE = 2-3600</td> </tr> <tr> <td>Remote Import Enabled</td> <td><input type="checkbox"/></td> <td>Whether or not import files are imported. DEFAULT = UNCHECKED</td> </tr> <tr> <td>Remote Import Mode</td> <td>Non-Blocking</td> <td>Whether updates are allowed (Non-provisioning connections while the import is in progress).</td> </tr> <tr> <td>Remote Import Host IP Address</td> <td>10.240.39.164</td> <td>The IP address of the Remote Import Host for import files. 0-15 CHARACTERS</td> </tr> <tr> <td>Remote Import User</td> <td>root</td> <td>The user on the Remote Import Host for import files. 0-255 CHARACTERS</td> </tr> </tbody> </table>	Variable	Value	Description	Display Command Output	<input checked="" type="checkbox"/>	Whether or not to display command provisioning data. DEFAULT = UNCHECKED	Allow Connections	<input checked="" type="checkbox"/>	Whether or not to allow incoming provisioning connections. DEFAULT = CHECKED	Max Transaction Size	50 commands	Maximum number of database manipulation commands per transaction. DEFAULT = 50; RANGE = 1-100	Log Provisioning Messages	<input checked="" type="checkbox"/>	Whether or not to log all incoming and outgoing provisioning messages in the command log. DEFAULT = CHECKED	Transaction Durability Timeout	5 seconds	The amount of time (in seconds) all committed and it becoming durable DURABILITY_TIMEOUT (1024) resp associated request should be reseed committed. DEFAULT = 5; RANGE = 2-3600	Remote Import Enabled	<input type="checkbox"/>	Whether or not import files are imported. DEFAULT = UNCHECKED	Remote Import Mode	Non-Blocking	Whether updates are allowed (Non-provisioning connections while the import is in progress).	Remote Import Host IP Address	10.240.39.164	The IP address of the Remote Import Host for import files. 0-15 CHARACTERS	Remote Import User	root	The user on the Remote Import Host for import files. 0-255 CHARACTERS
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**Procedure 5: Disable Global Provisioning and Remote Import**

<p>3.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p><b>THIS STEP TO BE PERFORMED BY TEKELEC!</b></p> <p>Select...</p> <p><b>Main Menu</b>          → Status &amp; Manage          → Database</p> <p>...as shown on the right.</p>		
<p>4.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p><b>THIS STEP TO BE PERFORMED BY TEKELEC!</b></p> <p>1) Click on the “Disable Provisioning” dialogue button in the bottom left corner of the right panel.</p> <p>2) In the pop-up window, click on the “OK” dialogue button.</p>		
<p>5.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p><b>THIS STEP TO BE PERFORMED BY TEKELEC!</b></p> <p>The user should be presented with a confirmation message (in the banner area) stating: <b>“Global Provisioning has been manually disabled”</b>.</p> <p><b>NOTE:</b> As a result of disabling Global Provisioning, Warning (Event ID 10008): “Global Provisioning Manually Disabled” will alarm until Global Provisioning is re-enabled.</p>		
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>			

## 6.2.4 Inhibit DR Provisioning Site Servers

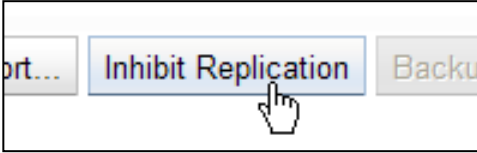
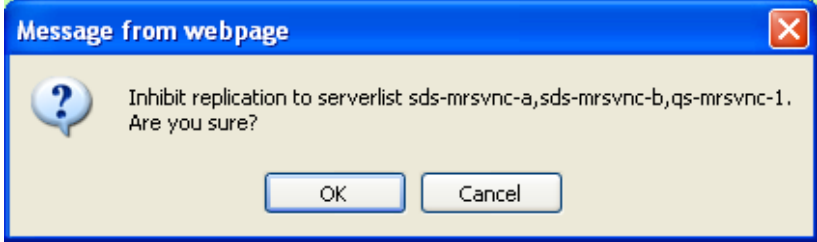
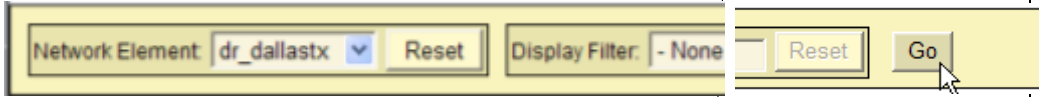
### Procedure 6: Inhibit DR Provisioning Site Servers

Step	Procedure	Result												
<p>1.</p> <input type="checkbox"/>	<p>Using the <b>VIP</b> address, access the Primary Provisioning Site GUI.</p>	<ul style="list-style-type: none"> <li>Access the Primary Provisioning Site GUI as specified in <b>Appendix A</b>.</li> </ul>												
<p>2.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>Database</b></p> <p>...as shown on the right.</p>	 <p>The screenshot shows the GUI interface with a navigation tree on the left and a table on the right. The table is titled 'Main Menu: Status &amp; Manage -&gt; Database' and contains the following data:</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> </tr> </thead> <tbody> <tr> <td>sds_mrvnc</td> <td>sds-mrvnc-a</td> <td>Network OAM</td> </tr> <tr> <td>sds_mrvnc</td> <td>sds-mrvnc-b</td> <td>Network OAM</td> </tr> <tr> <td>sds_mrvnc</td> <td>qs-mrvnc-1</td> <td>Query Server</td> </tr> </tbody> </table>	Network Element	Server	Role	sds_mrvnc	sds-mrvnc-a	Network OAM	sds_mrvnc	sds-mrvnc-b	Network OAM	sds_mrvnc	qs-mrvnc-1	Query Server
Network Element	Server	Role												
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<p>3.</p> <input type="checkbox"/>	<p>Record the name of the <b>DR Provisioning Site NE</b> in the space provided to the right.</p>	<ul style="list-style-type: none"> <li>Using the information provided in Section 3.1.2 (<i>Logins, Passwords and Site Information</i>) record the name of the <b>DR Provisioning Site NE</b> in the space provided below:</li> </ul> <p>DR Provisioning Site NE: _____</p>												
<p>4.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>From the “<b>Network Element</b>” filter pull-down, select the NE name for the <b>DR NOAM</b>.</p>	 <p>The screenshot shows the 'Filter' section of the GUI. The 'Network Element' dropdown menu is open, showing the following options: '- All -', '- All -', 'dr_dallastx', 'sds_mrvnc', and 'so_carync'. The 'dr_dallastx' option is highlighted.</p>												
<p>5.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click on the “<b>GO</b>” dialogue button located on the right end of the filter bar.</p>	 <p>The screenshot shows a close-up of the filter bar. The 'Network Element' dropdown is set to 'dr_dallastx'. The 'Display Filter' is set to '- None -'. The 'Go' button is highlighted with a mouse cursor.</p>												

**Procedure 6: Inhibit DR Provisioning Site Servers**

Step	Procedure	Result																				
6. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user should be presented with the list of servers associated with the <b>DR Provisioning Site NE</b>.</p>	<p><b>Main Menu: Status &amp; Manage -&gt; Database (Filtered)</b></p> <p>Filter Info</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>NO_RLGHNC</td> <td>sds-rlghnc-a</td> <td>NETWORK OAM&amp;P</td> <td>Active</td> <td>Normal</td> </tr> <tr> <td>NO_RLGHNC</td> <td>sds-rlghnc-b</td> <td>NETWORK OAM&amp;P</td> <td>Standby</td> <td>Normal</td> </tr> <tr> <td>NO_RLGHNC</td> <td>sds-rlghnc-qs</td> <td>QUERY SERVER</td> <td>Not Applicable</td> <td>Normal</td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	NO_RLGHNC	sds-rlghnc-a	NETWORK OAM&P	Active	Normal	NO_RLGHNC	sds-rlghnc-b	NETWORK OAM&P	Standby	Normal	NO_RLGHNC	sds-rlghnc-qs	QUERY SERVER	Not Applicable	Normal
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7. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Using the cursor, select the server which displays <b>"QUERY SERVER"</b> under the <b>"Role"</b> column.</p>	<p><b>Main Menu: Status &amp; Manage -&gt; Database (Filtered)</b></p> <p>Filter Info</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>NO_RLGHNC</td> <td>sds-rlghnc-a</td> <td>NETWORK OAM&amp;P</td> <td>Active</td> <td>Normal</td> </tr> <tr> <td>NO_RLGHNC</td> <td>sds-rlghnc-b</td> <td>NETWORK OAM&amp;P</td> <td>Standby</td> <td>Normal</td> </tr> <tr> <td>NO_RLGHNC</td> <td>sds-rlghnc-qs</td> <td>QUERY SERVER</td> <td>Not Applicable</td> <td>Normal</td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	NO_RLGHNC	sds-rlghnc-a	NETWORK OAM&P	Active	Normal	NO_RLGHNC	sds-rlghnc-b	NETWORK OAM&P	Standby	Normal	NO_RLGHNC	sds-rlghnc-qs	QUERY SERVER	Not Applicable	Normal
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8. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Holding the <b>Ctrl</b> key, use the cursor to select the server which displays <b>"Standby"</b> under the <b>"HA Role"</b> or <b>"OAM Max HA Role"</b> column.</p>	<p><b>Main Menu: Status &amp; Manage -&gt; Database (Filtered)</b></p> <p>Filter Info</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>NETWORK OAM&amp;P</td> <td>Active</td> <td>Normal</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>NETWORK OAM&amp;P</td> <td>Standby</td> <td>Normal</td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td>QUERY SERVER</td> <td>Not Applicable</td> <td>Normal</td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	sds_mrsvnc	sds-mrsvnc-a	NETWORK OAM&P	Active	Normal	sds_mrsvnc	sds-mrsvnc-b	NETWORK OAM&P	Standby	Normal	sds_mrsvnc	qs-mrsvnc-1	QUERY SERVER	Not Applicable	Normal
Network Element	Server	Role	HA Role	Status																		
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sds_mrsvnc	qs-mrsvnc-1	QUERY SERVER	Not Applicable	Normal																		
9. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Holding the <b>Ctrl</b> key, use the cursor to select the server which displays <b>"Active"</b> under the <b>"HA Role"</b> or <b>"OAM Max HA Role"</b> column.</p>	<p><b>Main Menu: Status &amp; Manage -&gt; Database (Filtered)</b></p> <p>Filter Info</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>NETWORK OAM&amp;P</td> <td>Active</td> <td>Normal</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>NETWORK OAM&amp;P</td> <td>Standby</td> <td>Normal</td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td>QUERY SERVER</td> <td>Not Applicable</td> <td>Normal</td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	sds_mrsvnc	sds-mrsvnc-a	NETWORK OAM&P	Active	Normal	sds_mrsvnc	sds-mrsvnc-b	NETWORK OAM&P	Standby	Normal	sds_mrsvnc	qs-mrsvnc-1	QUERY SERVER	Not Applicable	Normal
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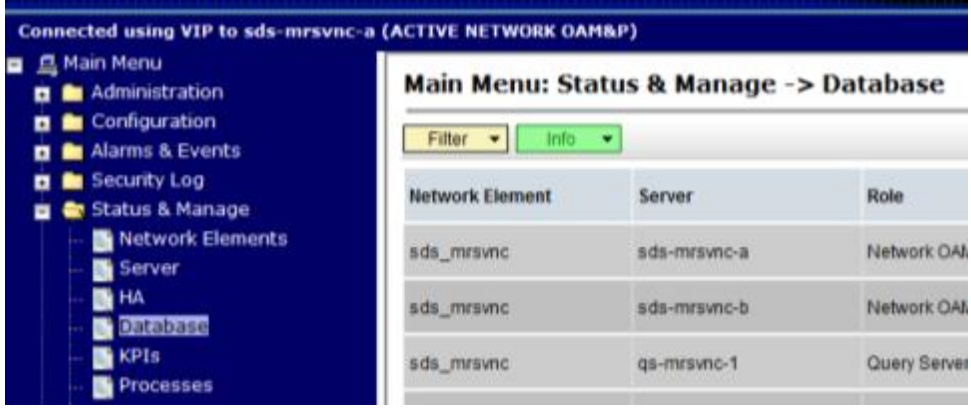
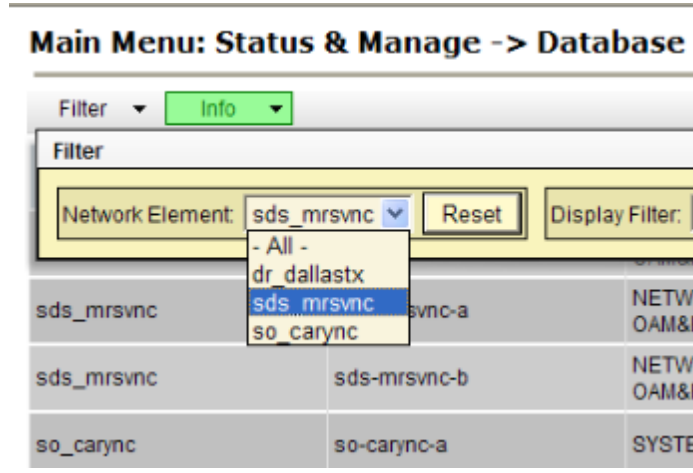

**Procedure 6: Inhibit DR Provisioning Site Servers**

Step	Procedure	Result																				
10. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Click on the “<b>Inhibit Replication</b>” dialogue button in the bottom left of the right panel.</p> <p>2) In the pop-up window, click on the “<b>OK</b>” dialogue button.</p> <p><b>NOTE:</b> As a result of inhibiting Replication to the server, <i>Minor Alarm (Event ID 31113): “Replication Manually Disabled”</i> will alarm until Replication is once again allowed.</p>	 <p>1</p>  <p>2</p>																				
11. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>It may take a minute or more for servers to transition to “<b>Inhibited</b>” state.</p>	<ul style="list-style-type: none"> <li>Note: It may take a minute or more for the servers to transition to “<b>Inhibited</b>” state.</li> </ul>																				
12. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p><i>Wait</i> until each server shows as inhibited before proceeding.</p>																					
13. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Verify that all servers in this Network Element now show it is “<b>Inhibited</b>” under the “<b>Repl Status</b>” column.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>Day</th> <th>Repl Status</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>NETWORK OAM&amp;P</td> <td>4-21 3:484 UTC</td> <td><b>Inhibited</b></td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>NETWORK OAM&amp;P</td> <td>4-21 3:484 UTC</td> <td><b>Inhibited</b></td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td>QUERY SERVER</td> <td>4-21 3:484 UTC</td> <td><b>Inhibited</b></td> </tr> </tbody> </table>	Network Element	Server	Role	Day	Repl Status	sds_mrsvnc	sds-mrsvnc-a	NETWORK OAM&P	4-21 3:484 UTC	<b>Inhibited</b>	sds_mrsvnc	sds-mrsvnc-b	NETWORK OAM&P	4-21 3:484 UTC	<b>Inhibited</b>	sds_mrsvnc	qs-mrsvnc-1	QUERY SERVER	4-21 3:484 UTC	<b>Inhibited</b>
Network Element	Server	Role	Day	Repl Status																		
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sds_mrsvnc	qs-mrsvnc-1	QUERY SERVER	4-21 3:484 UTC	<b>Inhibited</b>																		
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>																						



## 6.2.5 Inhibit Primary Provisioning Site Servers

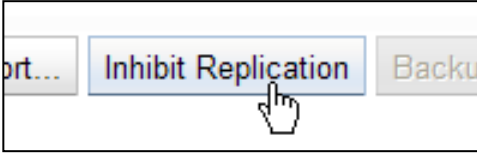
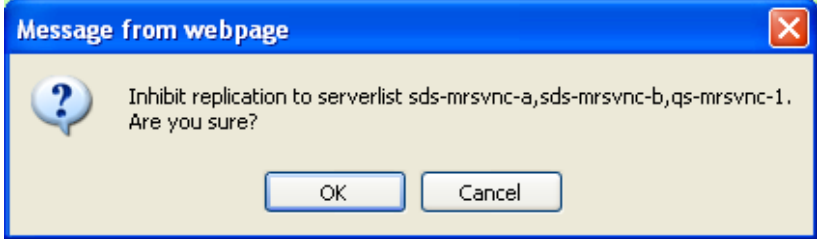
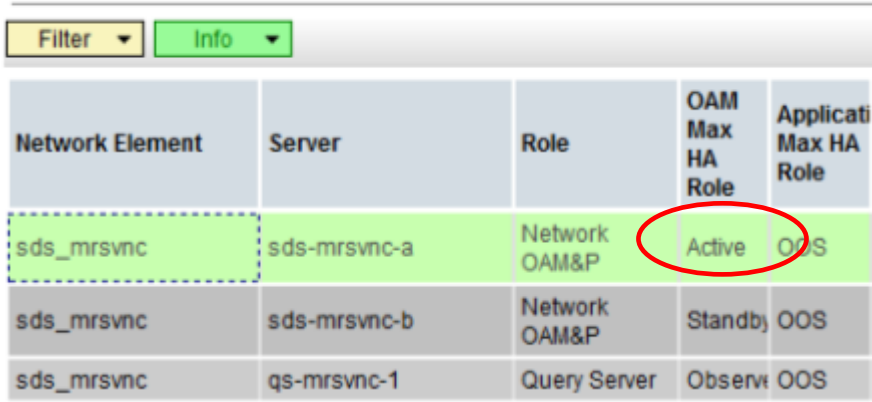
### Procedure 7: Inhibit Primary Provisioning Site Servers

Step	Procedure	Result												
1. <input type="checkbox"/>	Using the <b>VIP</b> address, access the Primary Provisioning Site GUI.	<ul style="list-style-type: none"> <li>Access the Primary Provisioning Site GUI as specified in <b>Appendix A</b>.</li> </ul>												
2. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>Database</b></p> <p>...as shown on the right.</p>	 <p>The screenshot shows the GUI interface. On the left is a 'Main Menu' tree with 'Database' selected. On the right is a table titled 'Main Menu: Status &amp; Manage -&gt; Database' with columns 'Network Element', 'Server', and 'Role'. The table contains three rows of data.</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>Network OAM</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>Network OAM</td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td>Query Server</td> </tr> </tbody> </table>	Network Element	Server	Role	sds_mrsvnc	sds-mrsvnc-a	Network OAM	sds_mrsvnc	sds-mrsvnc-b	Network OAM	sds_mrsvnc	qs-mrsvnc-1	Query Server
Network Element	Server	Role												
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sds_mrsvnc	sds-mrsvnc-b	Network OAM												
sds_mrsvnc	qs-mrsvnc-1	Query Server												
3. <input type="checkbox"/>	Record the name of the <b>Primary Provisioning Site NE</b> in the space provided to the right.	<ul style="list-style-type: none"> <li>Using the information provided in Section 3.1.2 (<i>Logins, Passwords and Site Information</i>) record the name of the <b>Primary Provisioning Site NE</b> in the space provided below:</li> </ul> <p>Primary Provisioning Site NE: _____</p>												
4. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>From the “<b>Network Element</b>” filter pull-down, select the NE name for the <b>Primary Provisioning Site</b>.</p>	 <p>The screenshot shows the filter bar with the 'Network Element' dropdown menu open, displaying options: '- All -', 'dr_dallastx', 'sds_mrsvnc', and 'so_carync'. The 'sds_mrsvnc' option is selected.</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>NETW OAM&amp;</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>NETW OAM&amp;</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>SYSTE</td> </tr> </tbody> </table>	Network Element	Server	Role	sds_mrsvnc	sds-mrsvnc-a	NETW OAM&	sds_mrsvnc	sds-mrsvnc-b	NETW OAM&	so_carync	so-carync-a	SYSTE
Network Element	Server	Role												
sds_mrsvnc	sds-mrsvnc-a	NETW OAM&												
sds_mrsvnc	sds-mrsvnc-b	NETW OAM&												
so_carync	so-carync-a	SYSTE												
5. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click on the “<b>GO</b>” dialogue button located on the right end of the filter bar.</p>	 <p>The close-up shows the filter bar with the 'Network Element' dropdown set to 'sds_mrsvnc', a 'Reset' button, and a 'Go' button. A mouse cursor is clicking on the 'Go' button.</p>												

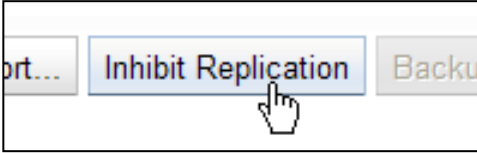
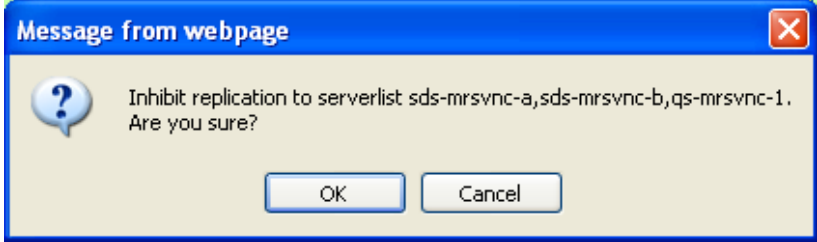

**Procedure 7: Inhibit Primary Provisioning Site Servers**

Step	Procedure	Result																																
6. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user should be presented with the list of servers associated with the <b>Primary Provisioning Site NE</b>.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> <th>DB Level</th> <th>DB Birthday</th> <th>Repl Status</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>NETWORK OAM&amp;P</td> <td>Active</td> <td>Minor</td> <td>61435</td> <td>2012-01-12 14:56:51.461 UTC</td> <td></td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>NETWORK OAM&amp;P</td> <td>Standby</td> <td>Normal</td> <td>61435</td> <td>2012-01-12 14:56:51.461 UTC</td> <td></td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td>QUERY SERVER</td> <td>Not Applicable</td> <td>Normal</td> <td>61435</td> <td>2012-01-12 14:56:51.461 UTC</td> <td></td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	DB Level	DB Birthday	Repl Status	sds_mrsvnc	sds-mrsvnc-a	NETWORK OAM&P	Active	Minor	61435	2012-01-12 14:56:51.461 UTC		sds_mrsvnc	sds-mrsvnc-b	NETWORK OAM&P	Standby	Normal	61435	2012-01-12 14:56:51.461 UTC		sds_mrsvnc	qs-mrsvnc-1	QUERY SERVER	Not Applicable	Normal	61435	2012-01-12 14:56:51.461 UTC	
Network Element	Server	Role	HA Role	Status	DB Level	DB Birthday	Repl Status																											
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sds_mrsvnc	qs-mrsvnc-1	QUERY SERVER	Not Applicable	Normal	61435	2012-01-12 14:56:51.461 UTC																												
7. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Using the cursor, select the server which displays <b>“QUERY SERVER”</b> under the <b>“Role”</b> column.</p>	<p><b>Main Menu: Status &amp; Manage -&gt; Database (Filtered)</b></p> <p>Filter Info</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>NO_RLGHNC</td> <td>sds-rlghnc-a</td> <td>NETWORK OAM&amp;P</td> <td>Active</td> <td>Normal</td> </tr> <tr> <td>NO_RLGHNC</td> <td>sds-rlghnc-b</td> <td>NETWORK OAM&amp;P</td> <td>Standby</td> <td>Normal</td> </tr> <tr> <td>NO_RLGHNC</td> <td>sds-rlghnc-qs</td> <td>QUERY SERVER</td> <td>Not Applicable</td> <td>Normal</td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	NO_RLGHNC	sds-rlghnc-a	NETWORK OAM&P	Active	Normal	NO_RLGHNC	sds-rlghnc-b	NETWORK OAM&P	Standby	Normal	NO_RLGHNC	sds-rlghnc-qs	QUERY SERVER	Not Applicable	Normal												
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NO_RLGHNC	sds-rlghnc-a	NETWORK OAM&P	Active	Normal																														
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NO_RLGHNC	sds-rlghnc-qs	QUERY SERVER	Not Applicable	Normal																														
8. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Holding the <b>Ctrl</b> key, use the cursor to select the server which displays <b>“Standby”</b> under the <b>“HA Role”</b> or <b>“OAM Max HA Role”</b> column.</p>	<p><b>Main Menu: Status &amp; Manage -&gt; Database (Filtered)</b></p> <p>Filter Info</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>NETWORK OAM&amp;P</td> <td>Active</td> <td>Normal</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>NETWORK OAM&amp;P</td> <td>Standby</td> <td>Normal</td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td>QUERY SERVER</td> <td>Not Applicable</td> <td>Normal</td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	sds_mrsvnc	sds-mrsvnc-a	NETWORK OAM&P	Active	Normal	sds_mrsvnc	sds-mrsvnc-b	NETWORK OAM&P	Standby	Normal	sds_mrsvnc	qs-mrsvnc-1	QUERY SERVER	Not Applicable	Normal												
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sds_mrsvnc	sds-mrsvnc-b	NETWORK OAM&P	Standby	Normal																														
sds_mrsvnc	qs-mrsvnc-1	QUERY SERVER	Not Applicable	Normal																														

**Procedure 7: Inhibit Primary Provisioning Site Servers**

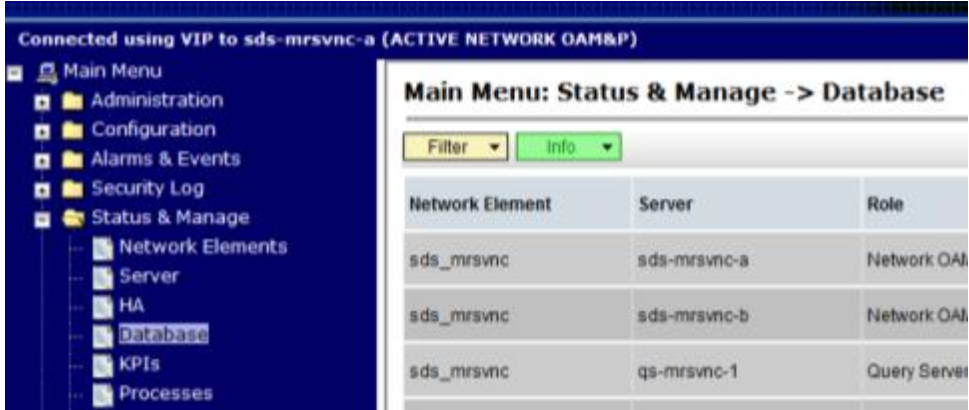
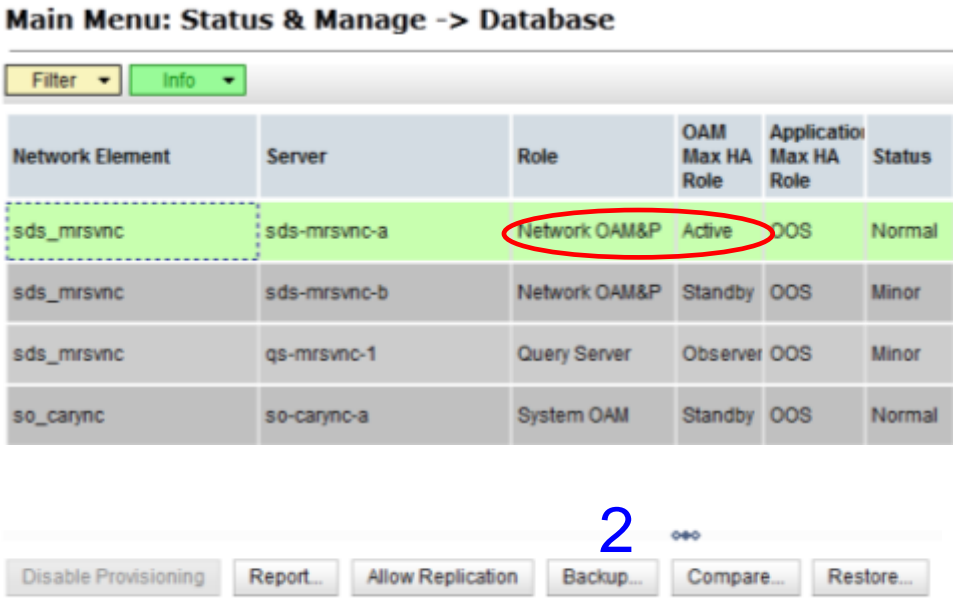
Step	Procedure	Result																				
<p>9.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Click on the “<b>Inhibit Replication</b>” dialogue button in the bottom left of the right panel.</p> <p>2) In the pop-up window, click on the “<b>OK</b>” dialogue button.</p> <p><b>NOTE:</b> As a result of inhibiting Replication to the server, <i>Minor Alarm (Event ID 31113): “Replication Manually Disabled”</i> will alarm until Replication is once again allowed.</p>	 <p>1</p>  <p>2</p>																				
<p>10.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>It may take a minute or more for servers to transition to “<b>Inhibited</b>” state.</p>	<ul style="list-style-type: none"> <li>Note: It may take a minute or more for the servers to transition to “<b>Inhibited</b>” state.</li> </ul>																				
<p>11.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Using the cursor, select the server which displays “<b>Active</b>” under the “<b>HA Role</b>” or “<b>OAM Max HA Role</b>” column.</p>	<p><b>Main Menu: Status &amp; Manage -&gt; Database</b></p>  <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>OAM Max HA Role</th> <th>Applicati Max HA Role</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td>Active</td> <td>OOS</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>Network OAM&amp;P</td> <td>Standby</td> <td>OOS</td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td>Query Server</td> <td>Observ</td> <td>OOS</td> </tr> </tbody> </table>	Network Element	Server	Role	OAM Max HA Role	Applicati Max HA Role	sds_mrsvnc	sds-mrsvnc-a	Network OAM&P	Active	OOS	sds_mrsvnc	sds-mrsvnc-b	Network OAM&P	Standby	OOS	sds_mrsvnc	qs-mrsvnc-1	Query Server	Observ	OOS
Network Element	Server	Role	OAM Max HA Role	Applicati Max HA Role																		
sds_mrsvnc	sds-mrsvnc-a	Network OAM&P	Active	OOS																		
sds_mrsvnc	sds-mrsvnc-b	Network OAM&P	Standby	OOS																		
sds_mrsvnc	qs-mrsvnc-1	Query Server	Observ	OOS																		

**Procedure 7: Inhibit Primary Provisioning Site Servers**

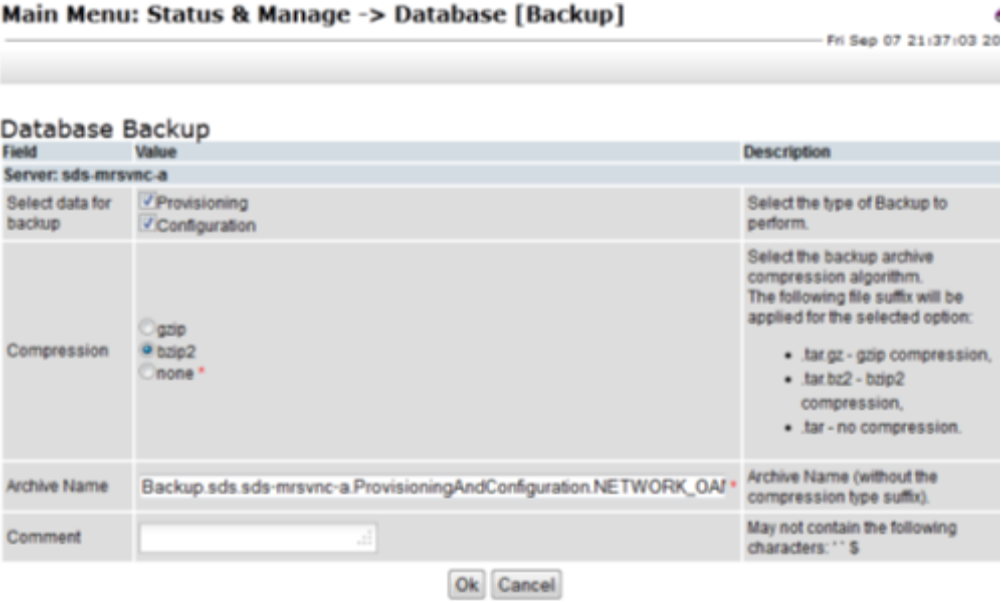
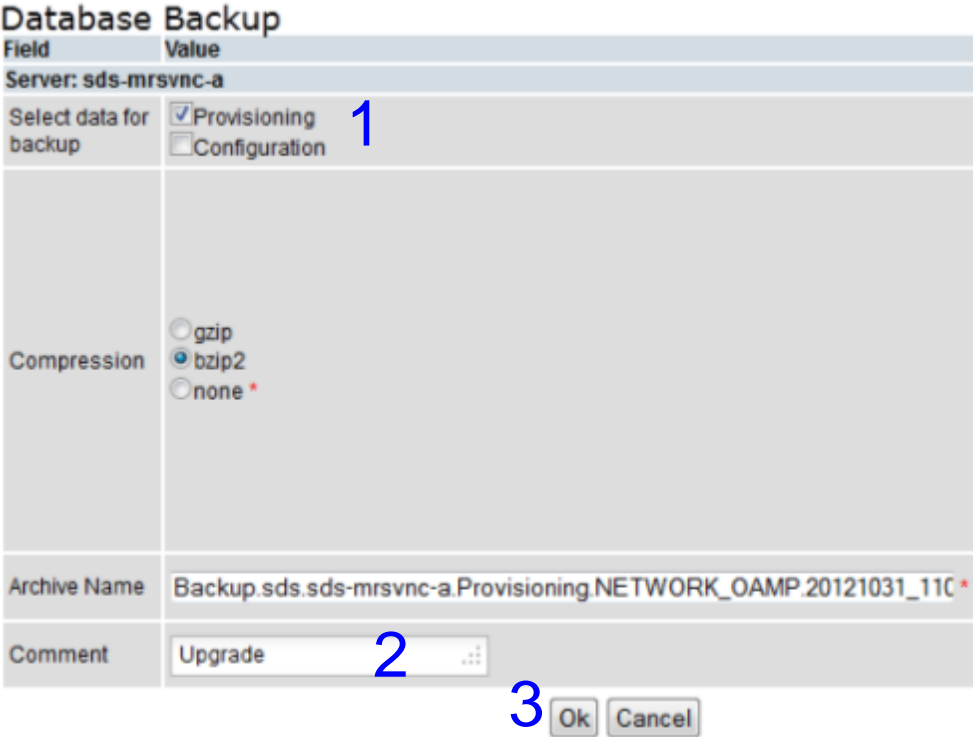
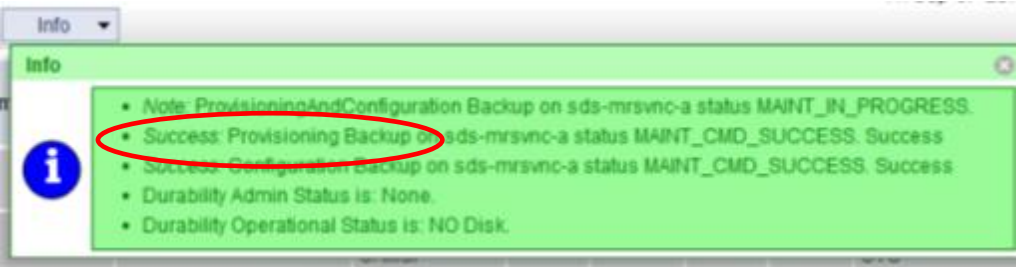
Step	Procedure	Result																				
12. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Click on the “<b>Inhibit Replication</b>” dialogue button in the bottom left of the right panel.</p> <p>2) In the pop-up window, click on the “<b>OK</b>” dialogue button.</p> <p><b>NOTE:</b> As a result of inhibiting Replication to the server, <i>Minor Alarm (Event ID 31113): “Replication Manually Disabled”</i> will alarm until Replication is once again allowed.</p>	 <p>1</p>  <p>2</p>																				
13. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>It may take a minute or more for servers to transition to “<b>Inhibited</b>” state.</p>	<ul style="list-style-type: none"> <li>Note: It may take a minute or more for the servers to transition to “<b>Inhibited</b>” state.</li> </ul>																				
14. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p><i>Wait</i> until each server shows as inhibited before proceeding.</p>																					
15. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Verify that all servers in this Network Element now show it is “<b>Inhibited</b>” under the “<b>Repl Status</b>” column.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>Day</th> <th>Repl Status</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>NETWORK OAM&amp;P</td> <td>4-21 3:484 UTC</td> <td><b>Inhibited</b></td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>NETWORK OAM&amp;P</td> <td>4-21 3:484 UTC</td> <td><b>Inhibited</b></td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td>QUERY SERVER</td> <td>4-21 3:484 UTC</td> <td><b>Inhibited</b></td> </tr> </tbody> </table>	Network Element	Server	Role	Day	Repl Status	sds_mrsvnc	sds-mrsvnc-a	NETWORK OAM&P	4-21 3:484 UTC	<b>Inhibited</b>	sds_mrsvnc	sds-mrsvnc-b	NETWORK OAM&P	4-21 3:484 UTC	<b>Inhibited</b>	sds_mrsvnc	qs-mrsvnc-1	QUERY SERVER	4-21 3:484 UTC	<b>Inhibited</b>
Network Element	Server	Role	Day	Repl Status																		
sds_mrsvnc	sds-mrsvnc-a	NETWORK OAM&P	4-21 3:484 UTC	<b>Inhibited</b>																		
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sds_mrsvnc	qs-mrsvnc-1	QUERY SERVER	4-21 3:484 UTC	<b>Inhibited</b>																		
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>																						

## 6.2.6 Database Backup (Provisioning)

### Procedure 8: Database Backup

Step	Procedure	Result																														
1. <input type="checkbox"/>	Using the <b>VIP</b> address, access the Primary Provisioning Site GUI.	<ul style="list-style-type: none"> <li>Access the Primary Provisioning Site GUI as specified in <b>Appendix A</b>.</li> </ul>																														
2. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>Database</b></p> <p>...as shown on the right.</p>	 <p>The screenshot shows the 'Main Menu: Status &amp; Manage -&gt; Database' interface. On the left is a tree view with 'Database' selected. On the right is a table with columns: Network Element, Server, and Role.</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> </tr> </thead> <tbody> <tr> <td>sds_mrsync</td> <td>sds-mrsync-a</td> <td>Network OAM</td> </tr> <tr> <td>sds_mrsync</td> <td>sds-mrsync-b</td> <td>Network OAM</td> </tr> <tr> <td>sds_mrsync</td> <td>qs-mrsync-1</td> <td>Query Server</td> </tr> </tbody> </table>	Network Element	Server	Role	sds_mrsync	sds-mrsync-a	Network OAM	sds_mrsync	sds-mrsync-b	Network OAM	sds_mrsync	qs-mrsync-1	Query Server																		
Network Element	Server	Role																														
sds_mrsync	sds-mrsync-a	Network OAM																														
sds_mrsync	sds-mrsync-b	Network OAM																														
sds_mrsync	qs-mrsync-1	Query Server																														
3. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>1) Select the name of the <b>Network OAM&amp;P Active</b> role.</p> <p>2) Then click the <b>Backup...</b> button.</p>	 <p>The screenshot shows the 'Main Menu: Status &amp; Manage -&gt; Database' interface. The table has columns: Network Element, Server, Role, OAM Max HA Role, Application Max HA Role, and Status. The first row is highlighted in green, and the 'Network OAM&amp;P Active' role is circled in red. Below the table is a 'Backup...' button.</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>OAM Max HA Role</th> <th>Application Max HA Role</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>sds_mrsync</td> <td>sds-mrsync-a</td> <td>Network OAM&amp;P Active</td> <td>Active</td> <td>OOS</td> <td>Normal</td> </tr> <tr> <td>sds_mrsync</td> <td>sds-mrsync-b</td> <td>Network OAM&amp;P</td> <td>Standby</td> <td>OOS</td> <td>Minor</td> </tr> <tr> <td>sds_mrsync</td> <td>qs-mrsync-1</td> <td>Query Server</td> <td>Observer</td> <td>OOS</td> <td>Minor</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>System OAM</td> <td>Standby</td> <td>OOS</td> <td>Normal</td> </tr> </tbody> </table> <p>Buttons: Disable Provisioning, Report..., Allow Replication, Backup..., Compare..., Restore...</p>	Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status	sds_mrsync	sds-mrsync-a	Network OAM&P Active	Active	OOS	Normal	sds_mrsync	sds-mrsync-b	Network OAM&P	Standby	OOS	Minor	sds_mrsync	qs-mrsync-1	Query Server	Observer	OOS	Minor	so_carync	so-carync-a	System OAM	Standby	OOS	Normal
Network Element	Server	Role	OAM Max HA Role	Application Max HA Role	Status																											
sds_mrsync	sds-mrsync-a	Network OAM&P Active	Active	OOS	Normal																											
sds_mrsync	sds-mrsync-b	Network OAM&P	Standby	OOS	Minor																											
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so_carync	so-carync-a	System OAM	Standby	OOS	Normal																											

**Procedure 8: Database Backup**

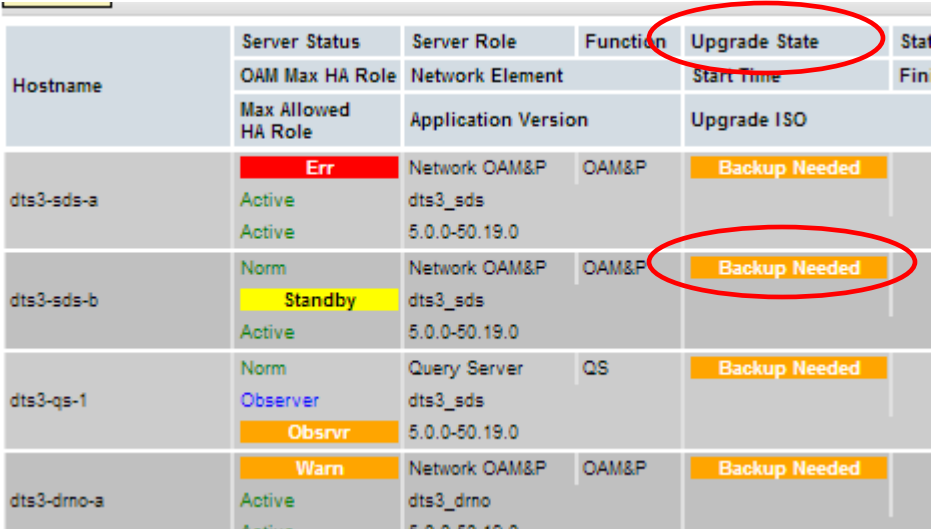
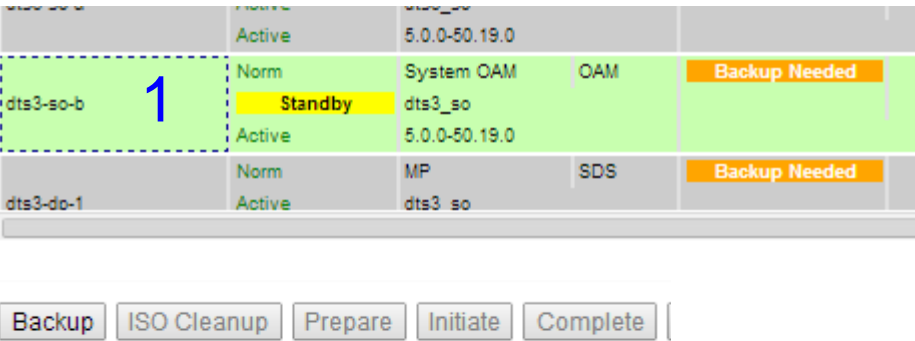
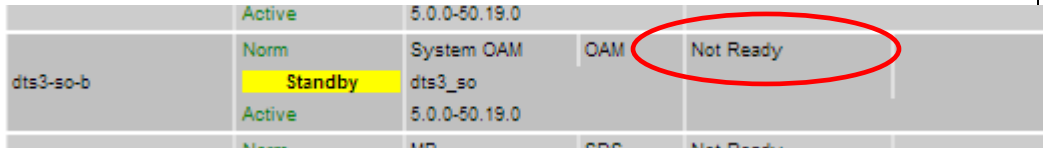
Step	Procedure	Result
<p>4.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>The user will be present with the backup form.</p>	
<p>5.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) Uncheck <b>Configuration</b> so only <b>Provisioning</b> data is backed up.</p> <p>2) Enter a comment in the comment field.</p> <p>3) Click “<b>Ok</b>” button.</p>	
<p>6.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Wait for the <b>Info</b> tab message to indicate successful backup.</p>	

**Procedure 8: Database Backup**

Step	Procedure	Result
7.	<p>1) Record the hostname of each server associated with the <b>Primary NOAM NE</b> (identified in <b>Step 3</b> of <b>Procedure 7</b>) and the <b>DR NOAM NE</b> (identified in <b>Step 3</b> of <b>Procedure 6</b>).</p> <p>2) Repeat <b>Steps 13 - 25</b> of this Procedure for each Server listed to the right.</p> <p>3) “<b>Check off</b>” each Check Box as <b>Steps 13 - 25</b> are completed for each Server listed to the right.</p>	<ul style="list-style-type: none"> <li>Using the worksheet provided in Appendix C.5, record the hostname of each Server to be upgraded in the space provided below:</li> <li>“<b>Check off</b>” the associated <b>Check Box</b> for each Server as <b>Steps 13 - 25</b> are completed.</li> </ul> <p><input type="checkbox"/> Primary SDS NO-A: _____</p> <p><input type="checkbox"/> Primary SDS NO-B: _____</p> <p><input type="checkbox"/> Primary Query Server: _____</p> <p><input type="checkbox"/> DR SDS NO-A: _____</p> <p><input type="checkbox"/> DR SDS NO-B: _____</p> <p><input type="checkbox"/> DR Query Server: _____</p>


<p>8.</p> <p><b>Active Provisioning Site VIP:</b></p> <p><b>NOTE:</b> <i>If this is a MAJOR upgrade from 4.x to 5.x, then skip to Step 13. Otherwise, continue with this step.</i></p> <p>Select...</p> <p><b>Main Menu</b>            → Administration            → Software Mangment            → Upgrade</p> <p>...as shown on the right.</p>	<p><b>ORACLE</b> Communications Diameter Signal Router Full Address Resolution 5.0.0-50.19.0</p> <p>Connected using VIP to dts3-sds-a (ACTIVE NETWORK OAM&amp;P)</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Server Status</th> <th>Server Role</th> <th>Function</th> <th>Upgrade Stat</th> </tr> </thead> <tbody> <tr> <td></td> <td>OAM Max HA Role</td> <td>Network Element</td> <td></td> <td>Start Time</td> </tr> <tr> <td></td> <td>Max Allowed HA Role</td> <td>Application Version</td> <td></td> <td>Upgrade ISO</td> </tr> <tr> <td>dts3-sds-a</td> <td>Err</td> <td>Network OAM&amp;P</td> <td>OAM&amp;P</td> <td>Backup N</td> </tr> <tr> <td>dts3-sds-b</td> <td>Standby</td> <td>Network OAM&amp;P</td> <td>OAM&amp;P</td> <td>Backup N</td> </tr> <tr> <td>dts3-qs-1</td> <td>Norm</td> <td>Query Server</td> <td>QS</td> <td>Backup N</td> </tr> <tr> <td>dts3-drno-a</td> <td>Warm</td> <td>Network OAM&amp;P</td> <td>OAM&amp;P</td> <td>Backup N</td> </tr> <tr> <td>dts3-so-a</td> <td>Norm</td> <td>System OAM</td> <td>OAM</td> <td>Backup N</td> </tr> </tbody> </table>	Hostname	Server Status	Server Role	Function	Upgrade Stat		OAM Max HA Role	Network Element		Start Time		Max Allowed HA Role	Application Version		Upgrade ISO	dts3-sds-a	Err	Network OAM&P	OAM&P	Backup N	dts3-sds-b	Standby	Network OAM&P	OAM&P	Backup N	dts3-qs-1	Norm	Query Server	QS	Backup N	dts3-drno-a	Warm	Network OAM&P	OAM&P	Backup N	dts3-so-a	Norm	System OAM	OAM	Backup N
Hostname	Server Status	Server Role	Function	Upgrade Stat																																					
	OAM Max HA Role	Network Element		Start Time																																					
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dts3-sds-a	Err	Network OAM&P	OAM&P	Backup N																																					
dts3-sds-b	Standby	Network OAM&P	OAM&P	Backup N																																					
dts3-qs-1	Norm	Query Server	QS	Backup N																																					
dts3-drno-a	Warm	Network OAM&P	OAM&P	Backup N																																					
dts3-so-a	Norm	System OAM	OAM	Backup N																																					

**Procedure 8: Database Backup**

Step	Procedure	Result																																			
<p>9.</p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Using the vertical scroll bar in the right panel, scroll to the row containing the <b>hostname</b> of the next server from the list in Step 7.</p> <p>2) Verify that the <b>Upgrade State</b> shows “<b>Backup Needed</b>”.</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>Server Status</th> <th>Server Role</th> <th>Function</th> <th>Upgrade State</th> <th>Start Time</th> <th>Fin</th> </tr> </thead> <tbody> <tr> <td>dts3-sds-a</td> <td>Err Active</td> <td>Network OAM&amp;P</td> <td>OAM&amp;P</td> <td>Backup Needed</td> <td></td> <td></td> </tr> <tr> <td>dts3-sds-b</td> <td>Norm Standby Active</td> <td>Network OAM&amp;P</td> <td>OAM&amp;P</td> <td>Backup Needed</td> <td></td> <td></td> </tr> <tr> <td>dts3-qs-1</td> <td>Norm Observer Obsrvr</td> <td>Query Server</td> <td>QS</td> <td>Backup Needed</td> <td></td> <td></td> </tr> <tr> <td>dts3-drno-a</td> <td>Warn Active</td> <td>Network OAM&amp;P</td> <td>OAM&amp;P</td> <td>Backup Needed</td> <td></td> <td></td> </tr> </tbody> </table>	Hostname	Server Status	Server Role	Function	Upgrade State	Start Time	Fin	dts3-sds-a	Err Active	Network OAM&P	OAM&P	Backup Needed			dts3-sds-b	Norm Standby Active	Network OAM&P	OAM&P	Backup Needed			dts3-qs-1	Norm Observer Obsrvr	Query Server	QS	Backup Needed			dts3-drno-a	Warn Active	Network OAM&P	OAM&P	Backup Needed		
Hostname	Server Status	Server Role	Function	Upgrade State	Start Time	Fin																															
dts3-sds-a	Err Active	Network OAM&P	OAM&P	Backup Needed																																	
dts3-sds-b	Norm Standby Active	Network OAM&P	OAM&P	Backup Needed																																	
dts3-qs-1	Norm Observer Obsrvr	Query Server	QS	Backup Needed																																	
dts3-drno-a	Warn Active	Network OAM&P	OAM&P	Backup Needed																																	
<p>10.</p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Using the cursor, select the row containing the <b>hostname</b> of the next server from the list in Step 7.</p> <p>2) Click the “<b>Backup</b>” dialogue button located across the bottom left of the right panel.</p>	 <table border="1"> <tbody> <tr> <td>dts3-so-b</td> <td>Norm Standby Active</td> <td>System OAM</td> <td>OAM</td> <td>Backup Needed</td> <td></td> <td></td> </tr> <tr> <td>dts3-do-1</td> <td>Norm Active</td> <td>MP</td> <td>SDS</td> <td>Backup Needed</td> <td></td> <td></td> </tr> </tbody> </table> <p>Backup ISO Cleanup Prepare Initiate Complete</p>	dts3-so-b	Norm Standby Active	System OAM	OAM	Backup Needed			dts3-do-1	Norm Active	MP	SDS	Backup Needed																							
dts3-so-b	Norm Standby Active	System OAM	OAM	Backup Needed																																	
dts3-do-1	Norm Active	MP	SDS	Backup Needed																																	
<p>11.</p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><u>Main Menu</u>          → Administration          → Software Mangment          → Upgrade</p> <p>When this backup is finished, verify that the <b>Upgrade State</b> is “<b>Not Ready</b>”</p>	 <table border="1"> <tbody> <tr> <td>dts3-so-b</td> <td>Norm Standby Active</td> <td>System OAM</td> <td>OAM</td> <td>Not Ready</td> <td></td> <td></td> </tr> <tr> <td>dts3-do-1</td> <td>Norm Active</td> <td>MP</td> <td>SDS</td> <td>Not Ready</td> <td></td> <td></td> </tr> </tbody> </table>	dts3-so-b	Norm Standby Active	System OAM	OAM	Not Ready			dts3-do-1	Norm Active	MP	SDS	Not Ready																							
dts3-so-b	Norm Standby Active	System OAM	OAM	Not Ready																																	
dts3-do-1	Norm Active	MP	SDS	Not Ready																																	
<p>12.</p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Backup all remaining servers.</p>	<p>Repeat <b>Steps 8 - 11</b> of this Procedure for each additional server listed in Step 7. These operations may be performed in parallel for multiple servers.</p> <p>When all servers listed in Step 7 have had <b>Upgrade State</b> changed to “<b>Not Ready</b>”, then <b>this Procedure is completed.</b></p>																																			



## Procedure 8: Database Backup

Step	Procedure	Result
13. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP (SSH):</b></p> <p>1) Access the command prompt.</p> <p>2) Log into the server as the "root" user.</p> <p><b>NOTE:</b> This Step and all remaining Steps are <b>only</b> for a <b>MAJOR</b> upgrade from 4.x to 5.x.</p>	<p>CentOS release 5.7 (Final) Kernel 2.6.18-274.7.1.el5prere15.0.0_72.32.0 on an x86_64</p> <p>sds-mrsvnc-a login: <b>root</b> Password: <b>&lt;root_password&gt;</b></p>
14. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP (SSH):</b></p> <p>Output similar to that shown on the right may appear as the server accesses the command prompt.</p>	<p><b>*** TRUNCATED OUTPUT ***</b></p> <pre> VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpss7 PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=00 VPATH=/opt/TKLCcomcol/runcm5.13:/opt/TKLCcomcol/cm5.13 PRODPATH= RELEASE=5.13 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpss7:/usr/TKLC/sds PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=0 [root@sds-mrsvnc-a ~]# </pre>
<p> <b>NOTE:</b> The following Steps 15 - 23 provide a full backup of COMCOL run environment. These shall run from the command line of every server in the Network Element to be upgraded.</p> <p><b>NOTE:</b> The following Steps 15 - 23 may be performed in parallel on each server.</p>		
15. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Access each server on the Server Worksheet via SSH.</p>	<p><b>Note:</b> Skip this step for the Active Provisioning Site, Active NO server (which should be our local host at this point). No SSH session is required to reach this first server.</p> <pre> [root@sds-mrsvnc-a ~]# ssh &lt;server name&gt; </pre> <p>(Answer 'yes' if you are prompted to confirm the identity of the server.)</p>
16. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Change directory to exclude_parts.d/</p>	<pre> [root@sds-mrsvnc-a ~]# cd /usr/TKLC/appworks/etc/exclude_parts.d </pre>
17. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Edit Appworks.db_parts</p>	<pre> [root@sds-mrsvnc-a exclude_parts.d]# vim Appworks.db_parts </pre>

**Procedure 8: Database Backup**

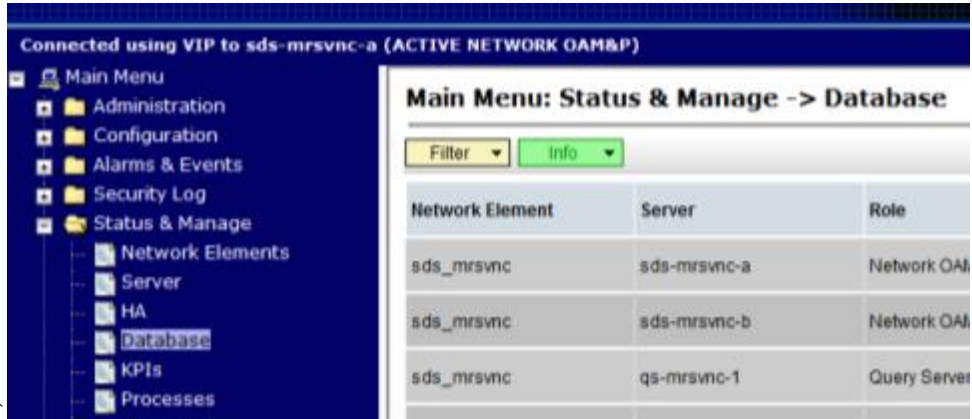
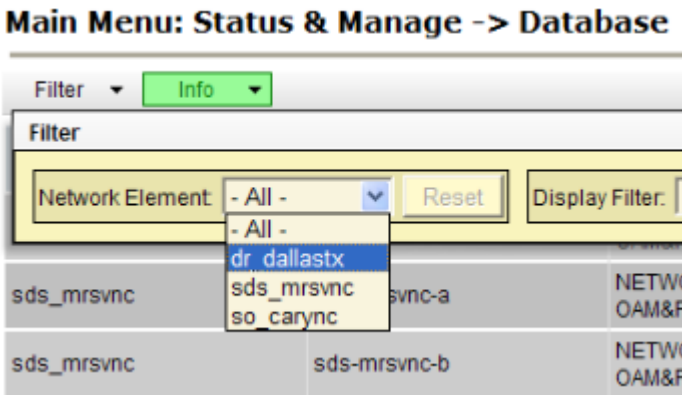
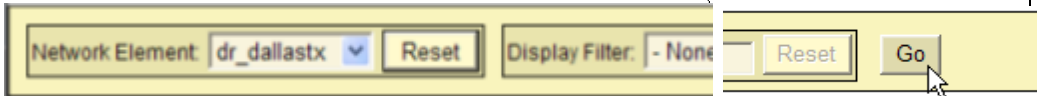
Step	Procedure	Result
<p>18.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Delete lines</p>	<p>Delete all lines after the header comments; the resulting file should look similar to this example:</p> <pre>##### #           Name:  Appworks.db_parts #           Title:  Lists the IDB database parts to be excluded from a full backup #                   of all COMCOL DB parts. #           Author:  J Crosson # Description: # This file lists the Comcol IDB parts that are to be excluded from a # pre-upgrade full backup of all COMCOL DB parts. # # The utility full_backup.pl reads this and any other Application supplied # files named &lt;some filename&gt;.db_parts (a db_parts suffix) and located in # the directory /usr/TKLC/appworks/etc/exclude_parts.d. # # File pattern: # # 1. Lines with leading # are treated as comments # 2. Blank lines are ignored # 3. Only ONE part name per line is allowed # # NOTE: Ref: TR005672 Section 3.2 for the parts listed below. # # Revision History # 25-Apr-2011      J Crosson      Initial version # 22-Sep-2011      R Kress        remove AppworksSNMPlog from list, table # modified in 40.11.0 ##### # Def parts</pre>
<p>19.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Save and exit</p>	<p>Save and exit:</p> <p><b>:wq!</b></p>
<p>20.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Change directory to root home.</p>	<p>[root@sds-mrsvnc-a exclude_parts.d]# <b>cd</b></p>
<p>21.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Run backup utility.</p>	<p>[root@sds-mrsvnc-a ~]# <b>/usr/TKLC/appworks/sbin/full_backup</b></p> <p>Output similar to the following will indicate successful completion:</p> <pre>Success: Full backup of COMCOL run env has completed. Archive file Backup.dsr.blade01.FullRunEnv.NETWORK_OAMP.20110417_021502.UPG.tar.gz written in /var/TKLC/db/filemgmt.</pre> <p>(Errors will also report back to the command line.)</p>
<p>22.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Mark this server's backup as complete.</p>	<p>Reference the list in Step 7 and check off the server which just completed backup.</p>
<p>23.</p> <input type="checkbox"/>	<p><b>Remote Server:</b></p> <p>Exit from the remote server to return to the Active Provisioning Site.</p>	<p>Unless you are already on the Active Provisioning Site active server, exit to return to the Active Provisioning Site.</p> <pre>[root@tk5039999 ~]# <b>exit</b> logout</pre>

### Procedure 8: Database Backup

Step	Procedure	Result
24. <input type="checkbox"/>	<b>Active Provisioning Site VIP:</b>  Backup all remaining servers.	<ul style="list-style-type: none"><li>Repeat <b>Steps 15 - 23</b> of this Procedure for each additional server in Step 7. These operations may be performed in parallel on multiple servers.</li></ul>
25. <input type="checkbox"/>	<b>Active Provisioning Site VIP (SSH):</b>  Exit from the server command line.  <b>NOTE: Steps 13 - 25 are <i>only</i> for a MAJOR upgrade from 4.x to 5.x.</b>	<pre>[root@sds-mrsvnc-a filemgmt]# exit logout</pre>
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>		

## 6.2.7 Upgrade DR Provisioning Site NE

### Procedure 9: Upgrade DR Provisioning Site NE

Step	Procedure	Result												
1. <input type="checkbox"/>	Using the <b>VIP</b> address, access the Primary Provisioning Site GUI.	<ul style="list-style-type: none"> <li>Access the Primary Provisioning Site GUI as specified in <b>Appendix A</b>.</li> </ul>												
2. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>Database</b></p> <p>...as shown on the right.</p>	 <p>The screenshot shows the GUI interface with a navigation tree on the left and a table on the right. The navigation tree includes: Main Menu, Administration, Configuration, Alarms &amp; Events, Security Log, Status &amp; Manage (expanded), Network Elements, Server, HA, Database (highlighted), KPIs, and Processes. The table on the right is titled 'Main Menu: Status &amp; Manage -&gt; Database' and contains the following data:</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>Network OAM</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>Network OAM</td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td>Query Server</td> </tr> </tbody> </table>	Network Element	Server	Role	sds_mrsvnc	sds-mrsvnc-a	Network OAM	sds_mrsvnc	sds-mrsvnc-b	Network OAM	sds_mrsvnc	qs-mrsvnc-1	Query Server
Network Element	Server	Role												
sds_mrsvnc	sds-mrsvnc-a	Network OAM												
sds_mrsvnc	sds-mrsvnc-b	Network OAM												
sds_mrsvnc	qs-mrsvnc-1	Query Server												
3. <input type="checkbox"/>	Record the name of the <b>DR Provisioning Site NE</b> in the space provided to the right.	<ul style="list-style-type: none"> <li>Using the information provided in Section 3.1.2 (<i>Logins, Passwords and Site Information</i>) record the name of the <b>DR Provisioning Site NE</b> in the space provided below:</li> </ul> <p>DR Provisioning Site NE: _____</p>												
4. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>From the “<b>Network Element</b>” filter pull-down, select the NE name for the <b>DR Provisioning Site</b>.</p>	 <p>The screenshot shows the 'Main Menu: Status &amp; Manage -&gt; Database' page with the 'Network Element' filter dropdown menu open. The dropdown menu lists: - All -, dr_dallastx (highlighted), sds_mrsvnc, and so_carync. The table below the dropdown shows the following data:</p> <table border="1"> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>NETWO OAM&amp;P</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>NETWO OAM&amp;P</td> </tr> </tbody> </table>	sds_mrsvnc	sds-mrsvnc-a	NETWO OAM&P	sds_mrsvnc	sds-mrsvnc-b	NETWO OAM&P						
sds_mrsvnc	sds-mrsvnc-a	NETWO OAM&P												
sds_mrsvnc	sds-mrsvnc-b	NETWO OAM&P												
5. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click on the “<b>GO</b>” dialogue button located on the right end of the filter bar.</p>	 <p>The screenshot shows a close-up of the filter bar with the 'Network Element' dropdown set to 'dr_dallastx' and the 'Go' button highlighted by a mouse cursor.</p>												

**Procedure 9: Upgrade DR Provisioning Site NE**

Step	Procedure	Result																				
6. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user should be presented with the list of servers associated with the <b>DR Provisioning Site NE</b>.</p> <p>Identify each <b>“Server”</b> and its associated <b>“Role”</b> and <b>“HA Role”</b>.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>NO_RLGHNC</td> <td>sds-rfghnc-a</td> <td>NETWORK OAM&amp;P</td> <td>Active</td> <td>Minor</td> </tr> <tr> <td>NO_RLGHNC</td> <td>sds-rfghnc-b</td> <td>NETWORK OAM&amp;P</td> <td>Standby</td> <td>Minor</td> </tr> <tr> <td>NO_RLGHNC</td> <td>sds-rfghnc-qs</td> <td>QUERY SERVER</td> <td>Not Applicable</td> <td>Minor</td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	NO_RLGHNC	sds-rfghnc-a	NETWORK OAM&P	Active	Minor	NO_RLGHNC	sds-rfghnc-b	NETWORK OAM&P	Standby	Minor	NO_RLGHNC	sds-rfghnc-qs	QUERY SERVER	Not Applicable	Minor
Network Element	Server	Role	HA Role	Status																		
NO_RLGHNC	sds-rfghnc-a	NETWORK OAM&P	Active	Minor																		
NO_RLGHNC	sds-rfghnc-b	NETWORK OAM&P	Standby	Minor																		
NO_RLGHNC	sds-rfghnc-qs	QUERY SERVER	Not Applicable	Minor																		
7. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Record the <b>“Server”</b> names appropriately in the space provided to the right.</p>	<ul style="list-style-type: none"> <li>Identify the <b>DR Provisioning Site “Server”</b> names and record them in the space provided below:</li> </ul> <p>Query Server: _____</p> <p>DR Provisioning Site Standby Server: _____</p> <p>DR Provisioning Site Active Server: _____</p>																				



**NOTE:** *In this Procedure, Steps 10 and 11 (below), to initiate upgrade, may be executed in parallel.*

8. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Prepare Upgrade for the <b>DR Provisioning Site Query Server</b>.</p>	<ul style="list-style-type: none"> <li><b>Prepare Upgrade</b> for the <b>DR Provisioning Site - Query Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.1 (Prepare Upgrade)</b>.</li> </ul>
9. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Prepare Upgrade for the <b>DR Provisioning Site Standby Server</b>.</p>	<ul style="list-style-type: none"> <li><b>Prepare Upgrade</b> for the <b>DR Provisioning Site - Standby Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.1 (Prepare Upgrade)</b>.</li> </ul>
10. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Initiate Upgrade for the <b>DR Provisioning Site Query Server</b>.</p>	<ul style="list-style-type: none"> <li><b>Initiate Upgrade</b> for the <b>DR Provisioning Site - Query Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.2 (Initiate Upgrade)</b>.</li> </ul>

**Procedure 9: Upgrade DR Provisioning Site NE**

Step	Procedure	Result
11. <input type="checkbox"/>	<b>Active Provisioning Site VIP:</b>  Initiate Upgrade for the <b>DR Provisioning Site Standby Server</b> .	<ul style="list-style-type: none"> <li>• <b>Initiate Upgrade</b> for the <b>DR Provisioning Site - Standby Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.2 (Initiate Upgrade)</b>.</li> </ul>
12. <input type="checkbox"/>	<b>Active Provisioning Site VIP:</b>  Monitor Upgrade for the <b>DR Provisioning Site Query Server</b> .	<ul style="list-style-type: none"> <li>• <b>Monitor Upgrade</b> for the <b>DR Provisioning Site - Query Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.3 (Monitor Upgrade)</b>.</li> </ul>
13. <input type="checkbox"/>	<b>Active Provisioning Site VIP:</b>  Monitor Upgrade for the <b>DR Provisioning Site Standby Server</b> .	<ul style="list-style-type: none"> <li>• <b>Monitor Upgrade</b> for the <b>DR Provisioning Site - Standby Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.3 (Monitor Upgrade)</b>.</li> </ul>
14. <input type="checkbox"/>	<b>Active Provisioning Site VIP:</b>  Complete Upgrade for the <b>DR Provisioning Site Query Server</b> .	<ul style="list-style-type: none"> <li>• <b>Complete Upgrade</b> for the <b>DR Provisioning Site - Query Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.4 (Complete Upgrade)</b>.</li> </ul>
15. <input type="checkbox"/>	<b>Active Provisioning Site VIP:</b>  Complete Upgrade for the <b>DR Provisioning Site Standby Server</b> .	<ul style="list-style-type: none"> <li>• <b>Complete Upgrade</b> for the <b>DR Provisioning Site - Standby Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.4 (Complete Upgrade)</b>.</li> </ul>



**!! WARNING !! STEPS 8-15 MUST BE COMPLETED BEFORE CONTINUING ON TO STEP 16.**

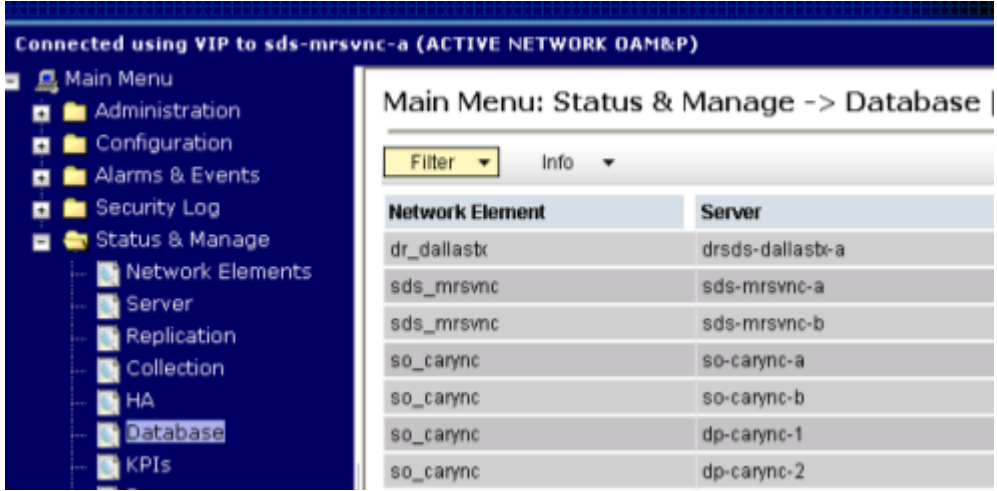
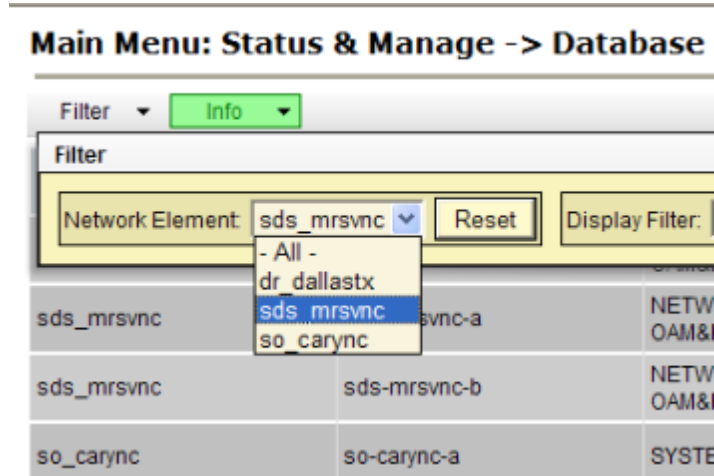
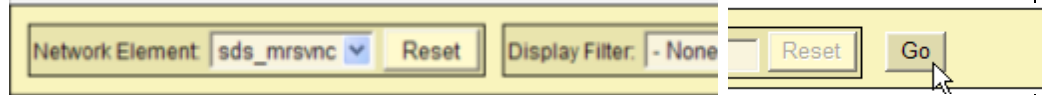
16. <input type="checkbox"/>	<b>Active Provisioning Site VIP:</b>  Prepare Upgrade for the <b>DR Provisioning Site Active Server</b> .	<ul style="list-style-type: none"> <li>• <b>Prepare Upgrade</b> for the <b>DR Provisioning Site - Active Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.1 (Prepare Upgrade)</b>.</li> </ul>
17. <input type="checkbox"/>	<b>Active Provisioning Site VIP:</b>  Initiate Upgrade for the <b>DR Provisioning Site Active Server</b> .	<ul style="list-style-type: none"> <li>• <b>Initiate Upgrade</b> for the <b>DR Provisioning Site - Active Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.2 (Initiate Upgrade)</b>.</li> </ul>

**Procedure 9: Upgrade DR Provisioning Site NE**

Step	Procedure	Result
<p>18.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Monitor Upgrade for the <b>DR Provisioning Site Active Server</b>.</p>	<ul style="list-style-type: none"> <li>• <b>Monitor Upgrade</b> for the <b>DR Provisioning Site - Active Server</b> (<i>identified in Step 7 of this Procedure</i>) as specified in <b>Appendix C.3 (Monitor Upgrade)</b>.</li> </ul>
<p>19.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Complete Upgrade for the <b>DR Provisioning Site Active Server</b>.</p>	<ul style="list-style-type: none"> <li>• <b>Complete Upgrade</b> for the <b>DR Provisioning Site - Active Server</b> (<i>identified in Step 7 of this Procedure</i>) as specified in <b>Appendix C.4 (Complete Upgrade)</b>.</li> </ul>
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>		

## 6.2.8 Upgrade Primary Provisioning Site NE

### Procedure 10: Upgrade Primary Provisioning Site NE

Step	Procedure	Result																
1. <input type="checkbox"/>	Using the <b>VIP</b> address, access the Primary Provisioning Site GUI.	<ul style="list-style-type: none"> <li>Access the Primary Provisioning Site GUI as specified in <b>Appendix A</b>.</li> </ul>																
2. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>Database</b></p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> </tr> </thead> <tbody> <tr> <td>dr_dallastx</td> <td>drdsds-dallastx-a</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-2</td> </tr> </tbody> </table>	Network Element	Server	dr_dallastx	drdsds-dallastx-a	sds_mrsvnc	sds-mrsvnc-a	sds_mrsvnc	sds-mrsvnc-b	so_carync	so-carync-a	so_carync	so-carync-b	so_carync	dp-carync-1	so_carync	dp-carync-2
Network Element	Server																	
dr_dallastx	drdsds-dallastx-a																	
sds_mrsvnc	sds-mrsvnc-a																	
sds_mrsvnc	sds-mrsvnc-b																	
so_carync	so-carync-a																	
so_carync	so-carync-b																	
so_carync	dp-carync-1																	
so_carync	dp-carync-2																	
3. <input type="checkbox"/>	Record the name of the <b>Primary Provisioning Site NE</b> in the space provided to the right.	<ul style="list-style-type: none"> <li>Using the information provided in Section 3.1.2 (<i>Logins, Passwords and Site Information</i>) record the name of the <b>Primary Provisioning Site NE</b> in the space provided below:</li> </ul> <p>Primary Provisioning Site NE: _____</p>																
4. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>From the “<b>Network Element</b>” filter pull-down, select the NE name for the <b>Primary Provisioning Site</b>.</p>																	
5. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click on the “<b>GO</b>” dialogue button located on the right end of the filter bar.</p>																	



**Procedure 10: Upgrade Primary Provisioning Site NE**

Step	Procedure	Result																																
6. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user should be presented with the list of servers associated with the <b>Primary Provisioning Site NE</b>.</p> <p>Identify each <b>“Server”</b> and its associated <b>“Role”</b> and <b>“HA Role”</b>.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> <th>DB Level</th> <th>DB Birthday</th> <th>Repl Status</th> </tr> </thead> <tbody> <tr> <td>sds_mrsync</td> <td>sds-mrsync-a</td> <td>NETWORK OAM&amp;P</td> <td>Active</td> <td>Minor</td> <td>51435</td> <td>2012-01-12 14:56:51.461 UTC</td> <td>Inhibited</td> </tr> <tr> <td>sds_mrsync</td> <td>sds-mrsync-b</td> <td>NETWORK OAM&amp;P</td> <td>Standby</td> <td>Minor</td> <td>Unknown</td> <td>2012-01-12 14:56:51.461 UTC</td> <td>Inhibited</td> </tr> <tr> <td>sds_mrsync</td> <td>sds-mrsync-1</td> <td>QUERY SERVER</td> <td>Not Applicable</td> <td>Minor</td> <td>Unknown</td> <td>2012-01-12 14:56:51.461 UTC</td> <td>Inhibited</td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	DB Level	DB Birthday	Repl Status	sds_mrsync	sds-mrsync-a	NETWORK OAM&P	Active	Minor	51435	2012-01-12 14:56:51.461 UTC	Inhibited	sds_mrsync	sds-mrsync-b	NETWORK OAM&P	Standby	Minor	Unknown	2012-01-12 14:56:51.461 UTC	Inhibited	sds_mrsync	sds-mrsync-1	QUERY SERVER	Not Applicable	Minor	Unknown	2012-01-12 14:56:51.461 UTC	Inhibited
Network Element	Server	Role	HA Role	Status	DB Level	DB Birthday	Repl Status																											
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sds_mrsync	sds-mrsync-1	QUERY SERVER	Not Applicable	Minor	Unknown	2012-01-12 14:56:51.461 UTC	Inhibited																											
7. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Record the <b>“Server”</b> names appropriately in the space provided to the right.</p>	<ul style="list-style-type: none"> <li>Identify the <b>Primary Provisioning Site “Server”</b> names and record them in the space provided below:</li> </ul> <p>Query Server: _____</p> <p>Provisioning Site Standby Server: _____</p> <p>Provisioning Site Active Server: _____</p>																																



**NOTE:** In this Procedure, Steps 10 and 11 (below), to initiate upgrade, may be executed in parallel.

8. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Prepare Upgrade for the <b>Primary Provisioning Site - Query Server</b>.</p>	<ul style="list-style-type: none"> <li><b>Prepare Upgrade</b> for the <b>PRIMARY Provisioning Site - Query Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.1 (Prepare Upgrade)</b>.</li> </ul>
9. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Prepare Upgrade for the <b>Primary Provisioning Site - Standby Server</b>.</p>	<ul style="list-style-type: none"> <li><b>Prepare Upgrade</b> for the <b>PRIMARY Provisioning Site - Standby Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.1 (Prepare Upgrade)</b>.</li> </ul>
10. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Initiate Upgrade for the <b>Primary Provisioning Site - Query Server</b>.</p>	<ul style="list-style-type: none"> <li><b>Initiate Upgrade</b> for the <b>Provisioning Site - Query Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.2 (Initiate Upgrade)</b>.</li> </ul>

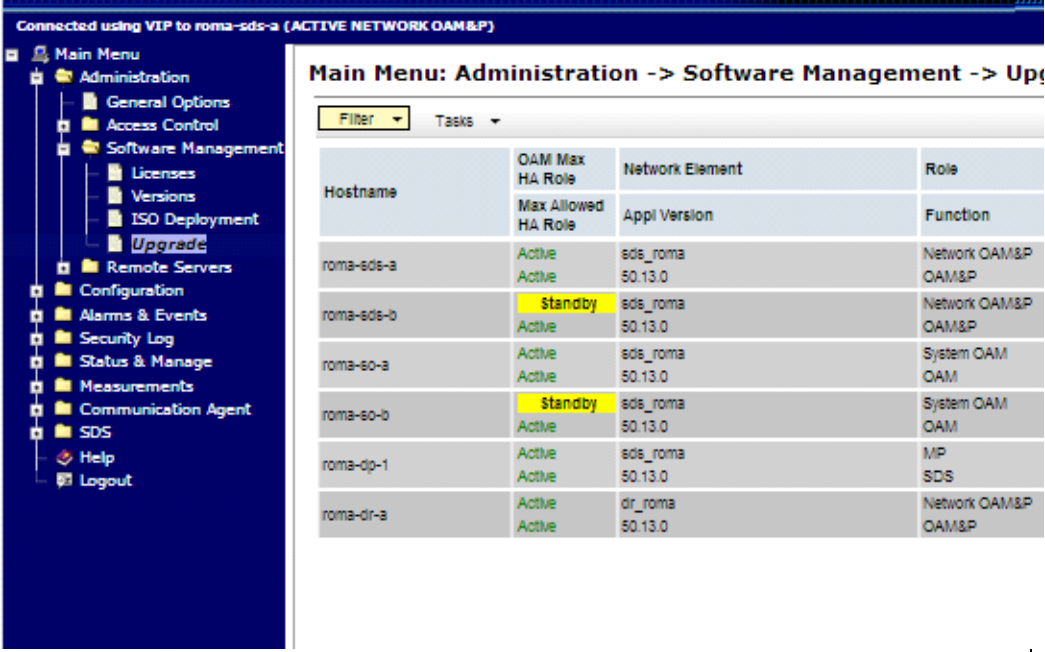
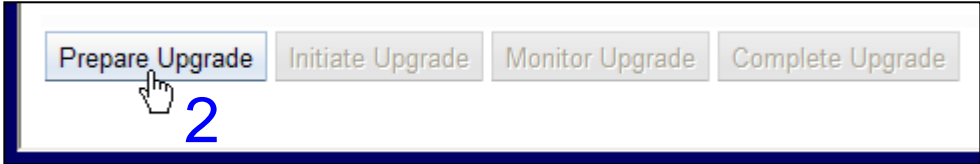
**Procedure 10: Upgrade Primary Provisioning Site NE**

Step	Procedure	Result
<p>11.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Initiate Upgrade for the <b>Primary Provisioning Site - Standby Server</b>.</p>	<ul style="list-style-type: none"> <li>• <b>Initiate Upgrade</b> for the <b>PRIMARY Provisioning Site - Standby Server</b> (<i>identified in Step 7 of this Procedure</i>) as specified in <b>Appendix C.2</b> (<i>Initiate Upgrade</i>).</li> </ul>
<p>12.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Monitor Upgrade for the <b>Primary Provisioning Site - Query Server</b>.</p> <p><b>NOTE:</b> <i>If performed in parallel with the Standby Provisioning Site Server upgrade (see previous STEP), the <b>Upgrade State</b> for the <b>Query server</b> may not show "<b>Success</b>" until after the Standby Server reaches the same state.</i></p>	<ul style="list-style-type: none"> <li>• <b>Monitor Upgrade</b> for the <b>PRIMARY Provisioning Site - Query Server</b> (<i>identified in Step 7 of this Procedure</i>) as specified in <b>Appendix C.3</b> (<i>Monitor Upgrade</i>).</li> </ul>
<p>13.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Monitor Upgrade for the <b>Primary Provisioning Site - Standby Server</b>.</p>	<ul style="list-style-type: none"> <li>• <b>Monitor Upgrade</b> for the <b>PRIMARY Provisioning Site - Standby Server</b> (<i>identified in Step 7 of this Procedure</i>) as specified in <b>Appendix C.3</b> (<i>Monitor Upgrade</i>).</li> </ul>
<p>14.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Complete Upgrade for the <b>Primary Provisioning Site - Query Server</b>.</p>	<ul style="list-style-type: none"> <li>• <b>Complete Upgrade</b> for the <b>PRIMARY Provisioning Site - Query Server</b> (<i>identified in Step 7 of this Procedure</i>) as specified in <b>Appendix C.4</b> (<i>Complete Upgrade</i>).</li> </ul>
<p>15.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Complete Upgrade for the <b>Primary Provisioning Site - Standby Server</b>.</p>	<ul style="list-style-type: none"> <li>• <b>Complete Upgrade</b> for the <b>PRIMARY Provisioning Site - Standby Server</b> (<i>identified in Step 7 of this Procedure</i>) as specified in <b>Appendix C.4</b> (<i>Complete Upgrade</i>).</li> </ul>

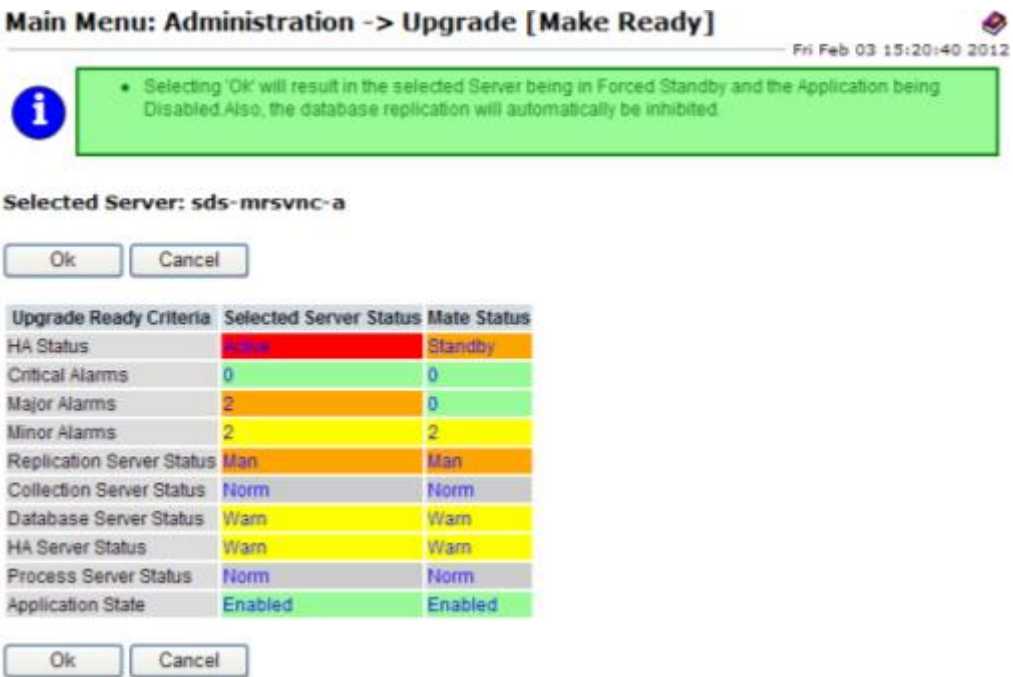


**!! WARNING !! STEPS 8 - 15 MUST BE COMPLETED BEFORE CONTINUING ON TO STEP 16.**

**Procedure 10: Upgrade Primary Provisioning Site NE**

Step	Procedure	Result																																
<p>16.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>            → Administration            → Software Managmnt            → Upgrade</p> <p>...as shown on the right.</p> <p><b>NOTE:</b> On 4.0 systems, select...  <b>Main Menu</b>            → Administration            → Upgrade</p>	 <p>Connected using VIP to roma-sds-a (ACTIVE NETWORK OAM&amp;P)</p> <p>Main Menu: Administration -&gt; Software Management -&gt; Upgrade</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM Max HA Role</th> <th>Network Element</th> <th>Role</th> </tr> <tr> <th></th> <th>Max Allowed HA Role</th> <th>Appl Version</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>roma-sds-a</td> <td>Active</td> <td>sds_roma</td> <td>Network OAM&amp;P</td> </tr> <tr> <td>roma-sds-b</td> <td>Standby</td> <td>sds_roma</td> <td>Network OAM&amp;P</td> </tr> <tr> <td>roma-so-a</td> <td>Active</td> <td>sds_roma</td> <td>System OAM</td> </tr> <tr> <td>roma-so-b</td> <td>Standby</td> <td>sds_roma</td> <td>System OAM</td> </tr> <tr> <td>roma-op-1</td> <td>Active</td> <td>sds_roma</td> <td>MP</td> </tr> <tr> <td>roma-or-a</td> <td>Active</td> <td>dr_roma</td> <td>Network OAM&amp;P</td> </tr> </tbody> </table>	Hostname	OAM Max HA Role	Network Element	Role		Max Allowed HA Role	Appl Version	Function	roma-sds-a	Active	sds_roma	Network OAM&P	roma-sds-b	Standby	sds_roma	Network OAM&P	roma-so-a	Active	sds_roma	System OAM	roma-so-b	Standby	sds_roma	System OAM	roma-op-1	Active	sds_roma	MP	roma-or-a	Active	dr_roma	Network OAM&P
Hostname	OAM Max HA Role	Network Element	Role																															
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roma-sds-a	Active	sds_roma	Network OAM&P																															
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roma-or-a	Active	dr_roma	Network OAM&P																															
<p>17.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Using the vertical scroll bar in the right panel, scroll to the row containing the <b>Primary Provisioning Site - Active Server</b> (identified in <b>Step 7</b> of this Procedure).</p> <p>2) Verify that the <b>Upgrade State</b> shows “Not Ready”.</p>	<table border="1"> <thead> <tr> <th>Hostname</th> <th>Network Element</th> <th>Role</th> <th>Upgrade State</th> </tr> <tr> <th></th> <th>Application Version</th> <th>Function</th> <th>Server Status</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>NO_MRSVNC 3.0.0-3.0.0_10.8.1</td> <td>NETWORK OAM&amp;P OAM&amp;P</td> <td>Not Ready Warn</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>NO_MRSVNC 3.0.0-3.0.0_10.8.1</td> <td>NETWORK OAM&amp;P OAM&amp;P</td> <td>Not Ready Err</td> </tr> <tr> <td>sds-mrsvnc-qs</td> <td>NO_MRSVNC 3.0.0-3.0.0_10.8.1</td> <td>QUERY_SERVER UNDEFINED</td> <td>Not Ready Warn</td> </tr> </tbody> </table>	Hostname	Network Element	Role	Upgrade State		Application Version	Function	Server Status	sds-mrsvnc-a	NO_MRSVNC 3.0.0-3.0.0_10.8.1	NETWORK OAM&P OAM&P	Not Ready Warn	sds-mrsvnc-b	NO_MRSVNC 3.0.0-3.0.0_10.8.1	NETWORK OAM&P OAM&P	Not Ready Err	sds-mrsvnc-qs	NO_MRSVNC 3.0.0-3.0.0_10.8.1	QUERY_SERVER UNDEFINED	Not Ready Warn												
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<p>18.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Using the cursor, select the row containing the <b>Primary Provisioning Site - Active Server</b> (identified in <b>Step 7</b> of this Procedure).</p> <p>2) Click the “<b>Prepare Upgrade</b>” dialogue button located in the bottom left of the right panel.</p>	<table border="1"> <thead> <tr> <th>Hostname</th> <th>Network Element</th> <th>Role</th> <th>Upgrade State</th> </tr> <tr> <th></th> <th>Application Version</th> <th>Function</th> <th>Server Status</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>NO_MRSVNC 3.0.0-3.0.0_10.8.0</td> <td>NETWORK OAM&amp;P OAM&amp;P</td> <td>Not Ready Err</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>NO_MRSVNC 3.0.0-3.0.0_10.8.1</td> <td>NETWORK OAM&amp;P OAM&amp;P</td> <td>Not Ready Warn</td> </tr> <tr> <td>sds-mrsvnc-qs</td> <td>NO_MRSVNC 3.0.0-3.0.0_10.8.1</td> <td>QUERY_SERVER UNDEFINED</td> <td>Not Ready Warn</td> </tr> </tbody> </table> 	Hostname	Network Element	Role	Upgrade State		Application Version	Function	Server Status	sds-mrsvnc-a	NO_MRSVNC 3.0.0-3.0.0_10.8.0	NETWORK OAM&P OAM&P	Not Ready Err	sds-mrsvnc-b	NO_MRSVNC 3.0.0-3.0.0_10.8.1	NETWORK OAM&P OAM&P	Not Ready Warn	sds-mrsvnc-qs	NO_MRSVNC 3.0.0-3.0.0_10.8.1	QUERY_SERVER UNDEFINED	Not Ready Warn												
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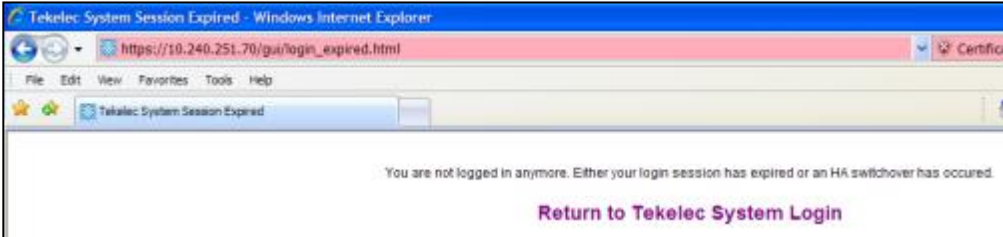
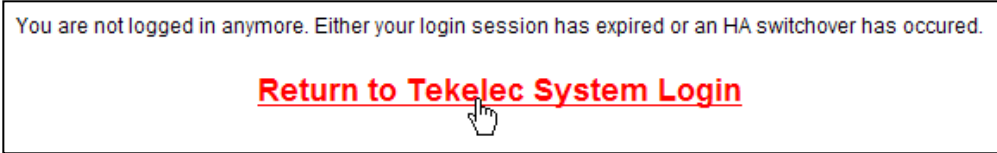
**Procedure 10: Upgrade Primary Provisioning Site NE**

Step	Procedure	Result																																	
<p>19.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user should be presented with the <b>Upgrade [Make Ready]</b> Administration screen.</p> <p>Click any “Ok” dialogue button.</p>	 <table border="1"> <thead> <tr> <th>Upgrade Ready Criteria</th> <th>Selected Server Status</th> <th>Mate Status</th> </tr> </thead> <tbody> <tr> <td>HA Status</td> <td>Active</td> <td>Standby</td> </tr> <tr> <td>Critical Alarms</td> <td>0</td> <td>0</td> </tr> <tr> <td>Major Alarms</td> <td>2</td> <td>0</td> </tr> <tr> <td>Minor Alarms</td> <td>2</td> <td>2</td> </tr> <tr> <td>Replication Server Status</td> <td>Man</td> <td>Man</td> </tr> <tr> <td>Collection Server Status</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>Database Server Status</td> <td>Warn</td> <td>Warn</td> </tr> <tr> <td>HA Server Status</td> <td>Warn</td> <td>Warn</td> </tr> <tr> <td>Process Server Status</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>Application State</td> <td>Enabled</td> <td>Enabled</td> </tr> </tbody> </table>	Upgrade Ready Criteria	Selected Server Status	Mate Status	HA Status	Active	Standby	Critical Alarms	0	0	Major Alarms	2	0	Minor Alarms	2	2	Replication Server Status	Man	Man	Collection Server Status	Norm	Norm	Database Server Status	Warn	Warn	HA Server Status	Warn	Warn	Process Server Status	Norm	Norm	Application State	Enabled	Enabled
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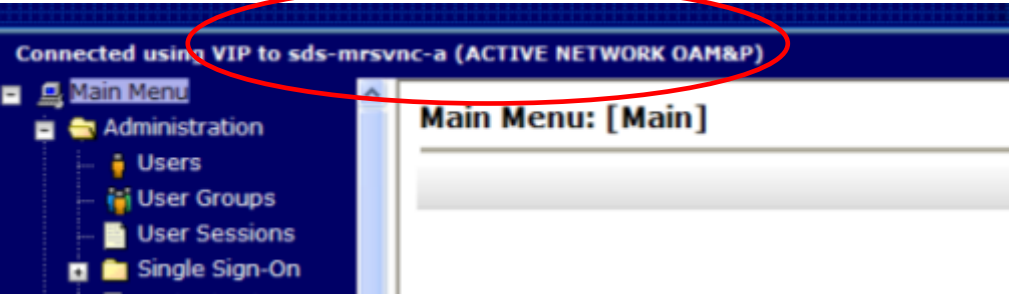


**!! IMPORTANT !! THE USER SESSION WILL AUTOMATICALLY END AT THIS TIME AND THE USER WILL BE LOGGED OUT OF THE GUI.**

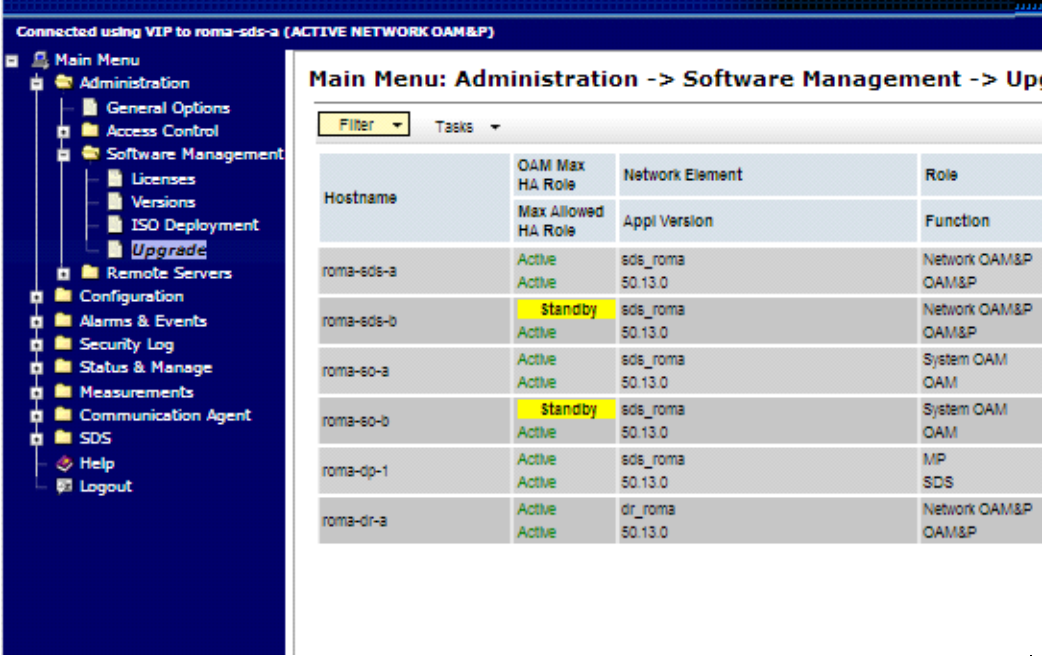

**Procedure 10: Upgrade Primary Provisioning Site NE**

Step	Procedure	Result
<p>20.</p> <p><input type="checkbox"/></p>	<p>The “<b>Security Alert</b>” dialogue box shown to the right may or may not appear at this time depending on “<b>Internet Explorer</b>” settings.</p> <p>If experienced, click the “<b>Yes</b>” dialogue button to continue.</p> <p><b>Otherwise:</b> Select “<b>Logout</b>” at the top right of the screen.</p>	 
<p>21.</p> <p><input type="checkbox"/></p>	<p><b>Active OAM VIP:</b></p> <p>The user’s session will end and the screen shown to the right may appear as the <b>Standby Server</b> goes through <b>HA switchover</b> and becomes the “<b>Active</b>” server.</p>	
<p>22.</p> <p><input type="checkbox"/></p>	<p>Wait at least <b>30 seconds</b> before continuing on to the next Step.</p>	<ul style="list-style-type: none"> <li>Wait at least 30 seconds for the <b>PRIMARY Provisioning Site - Standby Server</b> to transition to the “<b>Active</b>” <b>Server</b> and take control of the <b>VIP</b> address.</li> </ul>
<p>23.</p> <p><input type="checkbox"/></p>	<p><b>Active OAM VIP:</b></p> <p>Newer systems skip directly to the next step.</p> <p>On older systems, click the <b>Return to Tekelec System Login</b> link located on the top center of the right panel.</p>	

**Procedure 10: Upgrade Primary Provisioning Site NE**

Step	Procedure	Result
<p>24.</p> <p><input type="checkbox"/></p>	<p><b>Active OAM VIP:</b></p> <p>The user should be presented a login screen similar to the one shown on the right.</p> <p>Login to the GUI using the default user and password.</p>	
<p>25.</p> <p><input type="checkbox"/></p>	<p><b>Active OAM VIP:</b></p> <p>The user should be presented the SDS Main Menu as shown on the right.</p> <p>Verify that the message shown across the top of the right panel indicates that the browser is using the “VIP” connected to the <b>Active OAM</b> server.</p> <p><b>NOTE:</b> The message may show connection to either a “<b>NETWORK OAM&amp;P</b>” or a “<b>SYSTEM OAM</b>” depending on the selected NE.</p>	

**Procedure 10: Upgrade Primary Provisioning Site NE**

Step	Procedure	Result																												
<p>26.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>            → Administration            → Software Managmnt            → Upgrade</p> <p>...as shown on the right.</p> <p><b>NOTE: On 4.0 systems, select...</b>  <b>Main Menu</b>            → Administration            → Upgrade</p>	 <p>The screenshot shows the 'Main Menu' on the left with 'Administration' selected, leading to 'Software Management' and 'Upgrade'. The right pane shows a table of network elements:</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM Max HA Role</th> <th>Network Element</th> <th>Role</th> </tr> </thead> <tbody> <tr> <td>roma-sds-a</td> <td>Active</td> <td>sds_roma</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> <tr> <td>roma-sds-b</td> <td>Standby</td> <td>sds_roma</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> <tr> <td>roma-so-a</td> <td>Active</td> <td>sds_roma</td> <td>System OAM OAM</td> </tr> <tr> <td>roma-so-b</td> <td>Standby</td> <td>sds_roma</td> <td>System OAM OAM</td> </tr> <tr> <td>roma-dp-1</td> <td>Active</td> <td>sds_roma</td> <td>I/P SDS</td> </tr> <tr> <td>roma-dr-a</td> <td>Active</td> <td>dr_roma</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> </tbody> </table>	Hostname	OAM Max HA Role	Network Element	Role	roma-sds-a	Active	sds_roma	Network OAM&P OAM&P	roma-sds-b	Standby	sds_roma	Network OAM&P OAM&P	roma-so-a	Active	sds_roma	System OAM OAM	roma-so-b	Standby	sds_roma	System OAM OAM	roma-dp-1	Active	sds_roma	I/P SDS	roma-dr-a	Active	dr_roma	Network OAM&P OAM&P
Hostname	OAM Max HA Role	Network Element	Role																											
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roma-dp-1	Active	sds_roma	I/P SDS																											
roma-dr-a	Active	dr_roma	Network OAM&P OAM&P																											
<p>27.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Using the vertical scroll bar in the right panel, scroll to the row containing the <b>Primary Provisioning Site - Active Provisioning Site Server</b> (identified in <b>Step 7</b> of this Procedure).</p> <p>2) Verify that the <b>Upgrade State</b> shows "Ready".</p>	 <p>The screenshot shows a row in the table with the following data: <b>sds-mrsvnc-a</b>, sds_mrsvnc, 3.0.0-3.0.0_10.9.0, NETWORK OAM&amp;P OAM&amp;P, and Ready. A red circle highlights the hostname 'sds-mrsvnc-a' and the 'Ready' status. A blue '1' is placed below the hostname, and a blue '2' is placed below the 'Ready' status.</p>																												
<p>28.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Initiate Upgrade for the <b>Primary Provisioning Site - Active Server</b>.</p>	<ul style="list-style-type: none"> <li>• <b>Initiate Upgrade</b> for the <b>PRIMARY Provisioning Site - Active Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.2 (Initiate Upgrade)</b>.</li> </ul>																												
<p>29.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Monitor Upgrade for the <b>Primary Provisioning Site - Active Server</b>.</p>	<ul style="list-style-type: none"> <li>• <b>Monitor Upgrade</b> for the <b>PRIMARY Provisioning Site - Active Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.3 (Monitor Upgrade)</b>.</li> </ul>																												

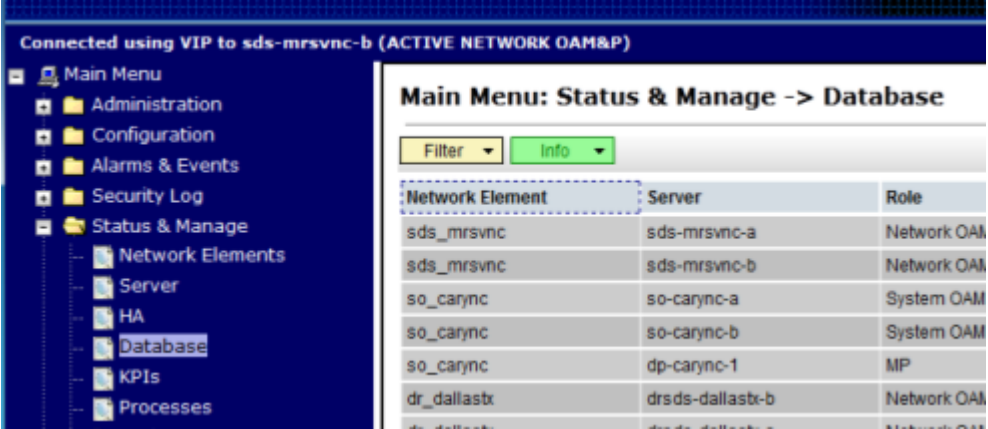
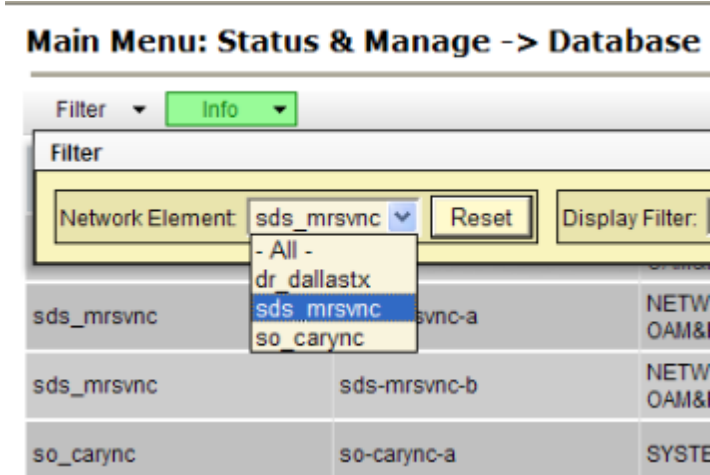
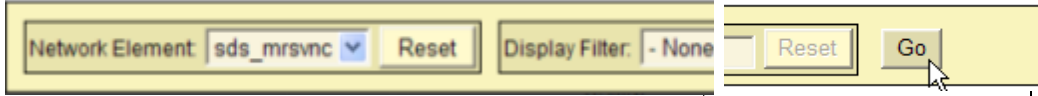
**Procedure 10: Upgrade Primary Provisioning Site NE**

Step	Procedure	Result
<p><b>30.</b> <input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Complete Upgrade for the <b>Primary Provisioning Site - Active Server.</b></p>	<ul style="list-style-type: none"> <li>• <b>Complete Upgrade</b> for the <b>PRIMARY Provisioning Site - Active Server</b> (identified in <b>Step 7 of this Procedure</b>) as specified in <b>Appendix C.4 (Complete Upgrade)</b>.</li> </ul>
<p><b>31.</b> <input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP (SSH):</b></p> <p>1) Access the active server command prompt.</p> <p>2) Log into the server as the "root" user.</p>	<pre>CentOS release 5.7 (Final) Kernel 2.6.18-274.7.1.el5prere15.0.0_72.32.0 on an x86_64  sds-mrsvnc-a login: root Password: &lt;root_password&gt;</pre>
<p><b>32.</b> <input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP (SSH):</b></p> <p>Change a ComAgent setting.</p>	<pre>[root@sds-mrsvnc-a ~]# iset -fvalue=0 LongParam where "name='CAConnectToCLevel' " === changed 1 records === [root@sds-mrsvnc-a ~]#</pre>
<p><b>33.</b> <input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP (SSH):</b></p> <p>Exit from the server command line.</p>	<pre>[root@sds-mrsvnc-a filemgmt]# exit logout</pre>
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>		


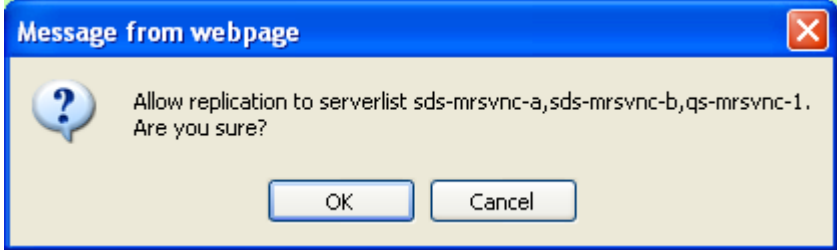


## 6.2.9 Allow Primary Provisioning Site Servers



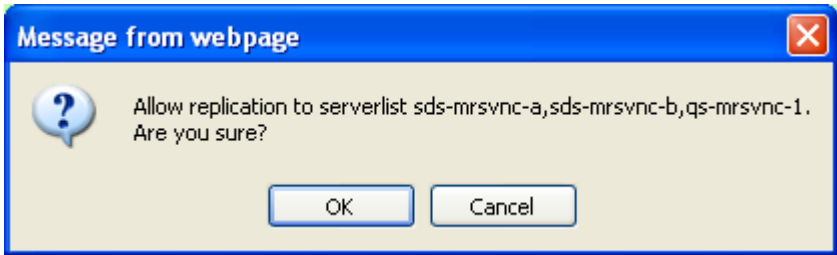
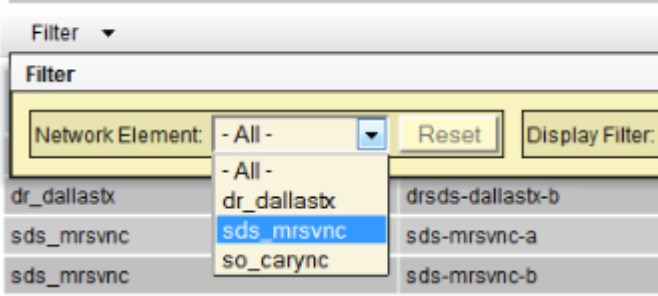
### Procedure 11: Allow Primary Provisioning Site Servers

Step	Procedure	Result																					
1. <input type="checkbox"/>	Using the <b>VIP</b> address, access the Primary Provisioning Site GUI.	<ul style="list-style-type: none"> <li>Access the Primary Provisioning Site GUI as specified in <b>Appendix A</b>.</li> </ul>																					
2. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>Database</b></p> <p>...as shown on the right.</p>	 <p>The screenshot shows the GUI interface. On the left is a 'Main Menu' tree with 'Database' selected. On the right is a table titled 'Main Menu: Status &amp; Manage -&gt; Database' with columns for Network Element, Server, and Role.</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> </tr> </thead> <tbody> <tr> <td>sds_mrvnc</td> <td>sds-mrvnc-a</td> <td>Network OAM</td> </tr> <tr> <td>sds_mrvnc</td> <td>sds-mrvnc-b</td> <td>Network OAM</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>System OAM</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>System OAM</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> <td>MP</td> </tr> <tr> <td>dr_dallastx</td> <td>drds-dallastx-b</td> <td>Network OAM</td> </tr> </tbody> </table>	Network Element	Server	Role	sds_mrvnc	sds-mrvnc-a	Network OAM	sds_mrvnc	sds-mrvnc-b	Network OAM	so_carync	so-carync-a	System OAM	so_carync	so-carync-b	System OAM	so_carync	dp-carync-1	MP	dr_dallastx	drds-dallastx-b	Network OAM
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dr_dallastx	drds-dallastx-b	Network OAM																					
3. <input type="checkbox"/>	Record the name of the <b>Primary Provisioning Site NE</b> in the space provided to the right.	<ul style="list-style-type: none"> <li>Using the information provided in Section 3.1.2 (<i>Logins, Passwords and Site Information</i>) record the name of the <b>Primary Provisioning Site NE</b> in the space provided below:</li> </ul> <p>Primary Provisioning Site NE: _____</p>																					
4. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click “<b>Filter</b>” pull-down. From the “<b>Network Element</b>” filter pull-down, select the NE name for the <b>Primary Provisioning Site</b>.</p>	 <p>The screenshot shows the 'Filter' dropdown menu open, displaying a list of network elements: '- All -', 'dr_dallastx', 'sds_mrvnc' (highlighted), and 'so_carync'. The table below shows the filtered results.</p> <table border="1"> <tbody> <tr> <td>sds_mrvnc</td> <td>sds-mrvnc-a</td> <td>NETW OAM&amp;I</td> </tr> <tr> <td>sds_mrvnc</td> <td>sds-mrvnc-b</td> <td>NETW OAM&amp;I</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>SYSTE</td> </tr> </tbody> </table>	sds_mrvnc	sds-mrvnc-a	NETW OAM&I	sds_mrvnc	sds-mrvnc-b	NETW OAM&I	so_carync	so-carync-a	SYSTE												
sds_mrvnc	sds-mrvnc-a	NETW OAM&I																					
sds_mrvnc	sds-mrvnc-b	NETW OAM&I																					
so_carync	so-carync-a	SYSTE																					
5. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click on the “<b>GO</b>” dialogue button located on the right end of the filter bar.</p>	 <p>The screenshot shows the filter bar with 'Network Element' set to 'sds_mrvnc', 'Display Filter' set to '- None', and the 'Go' button being clicked.</p>																					

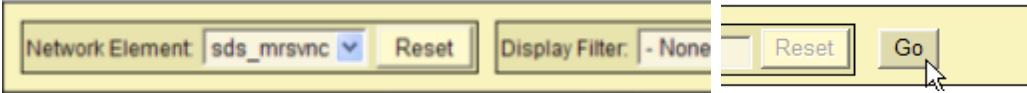
**Procedure 11: Allow Primary Provisioning Site Servers**

Step	Procedure	Result																																
6. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user should be presented with the list of servers associated with the <b>Primary Provisioning Site NE</b>.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> <th>DB Level</th> <th>DB Birthday</th> <th>Repl Status</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>NETWORK OAM&amp;P</td> <td>Active</td> <td>Minor</td> <td>61435</td> <td>2012-01-12 14:56:51.461 UTC</td> <td>Inhibited</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>NETWORK OAM&amp;P</td> <td>Standby</td> <td>Minor</td> <td>Unknown</td> <td>2012-01-12 14:56:51.461 UTC</td> <td>Inhibited</td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td>QUERY SERVER</td> <td>Not Applicable</td> <td>Minor</td> <td>Unknown</td> <td>2012-01-12 14:56:51.461 UTC</td> <td>Inhibited</td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	DB Level	DB Birthday	Repl Status	sds_mrsvnc	sds-mrsvnc-a	NETWORK OAM&P	Active	Minor	61435	2012-01-12 14:56:51.461 UTC	Inhibited	sds_mrsvnc	sds-mrsvnc-b	NETWORK OAM&P	Standby	Minor	Unknown	2012-01-12 14:56:51.461 UTC	Inhibited	sds_mrsvnc	qs-mrsvnc-1	QUERY SERVER	Not Applicable	Minor	Unknown	2012-01-12 14:56:51.461 UTC	Inhibited
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7. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Using the cursor, select the server which displays <b>“Active”</b> under the <b>“OAM Max HA Role”</b> column.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>OAM Max HA Role</th> <th>Applicati Max HA Role</th> <th>Status</th> <th>DB Level</th> <th>OAM Repl Status</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td>Active</td> <td>OOS</td> <td>Normal</td> <td>683064</td> <td>Normal</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>Network OAM&amp;P</td> <td>Standby</td> <td>OOS</td> <td>Normal</td> <td>683064</td> <td>Normal</td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td>Query Server</td> <td>Observe</td> <td>OOS</td> <td>Normal</td> <td>683064</td> <td>Normal</td> </tr> </tbody> </table>	Network Element	Server	Role	OAM Max HA Role	Applicati Max HA Role	Status	DB Level	OAM Repl Status	sds_mrsvnc	sds-mrsvnc-a	Network OAM&P	Active	OOS	Normal	683064	Normal	sds_mrsvnc	sds-mrsvnc-b	Network OAM&P	Standby	OOS	Normal	683064	Normal	sds_mrsvnc	qs-mrsvnc-1	Query Server	Observe	OOS	Normal	683064	Normal
Network Element	Server	Role	OAM Max HA Role	Applicati Max HA Role	Status	DB Level	OAM Repl Status																											
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8. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Click on the <b>“Allow Replication”</b> dialogue button in the bottom left of the right panel.</p> <p>2) In the pop-up window, click on the <b>“OK”</b> dialogue button.</p> <p><b>NOTE:</b> As a result of Allowing Replication to the server, Minor Alarm (<b>Event ID 31113</b>): <b>“Replication Manually Disabled”</b> should clear momentarily.</p>	 																																
9. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>It may take a minute or more for servers to transition from <b>“Inhibited”</b> state.</p>	<ul style="list-style-type: none"> <li>Note: It may take a minute or more for the servers to transition from <b>“Inhibited”</b> state.</li> </ul>																																
10. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Using the cursor, select the server which displays <b>“QUERY SERVER”</b> under the <b>“Role”</b> column.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> <th>DB Level</th> <th>DB Birthday</th> <th>Repl Status</th> </tr> </thead> <tbody> <tr> <td>NO_RLGHNC</td> <td>sds-rlghnc-a</td> <td>NETWORK OAM&amp;P</td> <td>Standby</td> <td>Minor</td> <td>Unknown</td> <td>2012-01-25 21:11:32.418 UTC</td> <td>Inhibited</td> </tr> <tr> <td>NO_RLGHNC</td> <td>sds-rlghnc-b</td> <td>NETWORK OAM&amp;P</td> <td>Active</td> <td>Minor</td> <td>Unknown</td> <td>2012-01-25 21:11:32.418 UTC</td> <td>Inhibited</td> </tr> <tr> <td>NO_RLGHNC</td> <td>sds-rlghnc-qs</td> <td>QUERY SERVER</td> <td>Not Applicable</td> <td>Minor</td> <td>Unknown</td> <td>2012-01-25 21:11:32.418 UTC</td> <td>Inhibited</td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	DB Level	DB Birthday	Repl Status	NO_RLGHNC	sds-rlghnc-a	NETWORK OAM&P	Standby	Minor	Unknown	2012-01-25 21:11:32.418 UTC	Inhibited	NO_RLGHNC	sds-rlghnc-b	NETWORK OAM&P	Active	Minor	Unknown	2012-01-25 21:11:32.418 UTC	Inhibited	NO_RLGHNC	sds-rlghnc-qs	QUERY SERVER	Not Applicable	Minor	Unknown	2012-01-25 21:11:32.418 UTC	Inhibited
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**Procedure 11: Allow Primary Provisioning Site Servers**

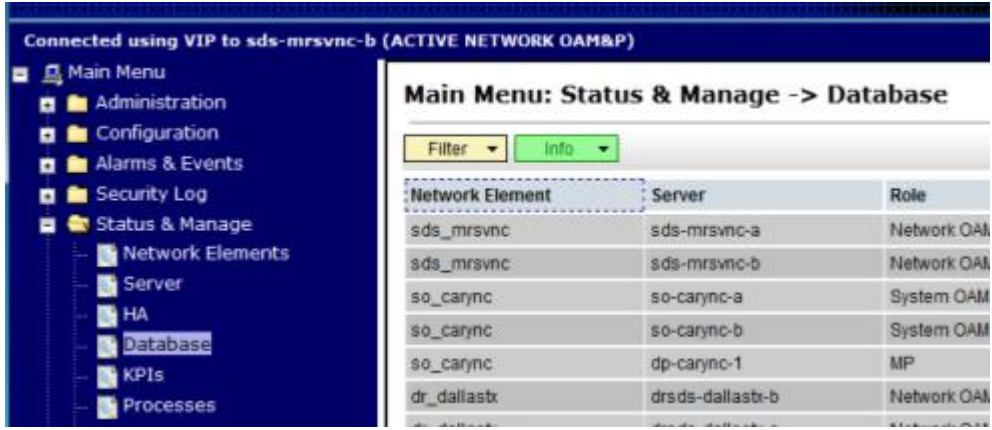
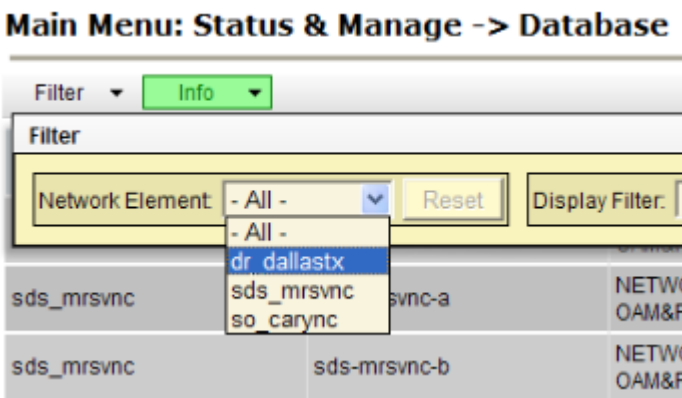
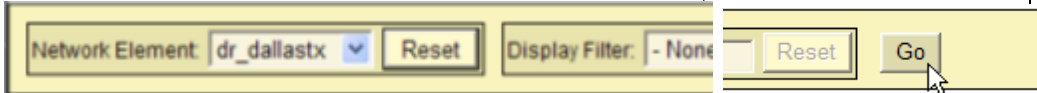
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<p>12.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Click on the <b>“Allow Replication”</b> dialogue button in the bottom left of the right panel.</p> <p>2) In the pop-up window, click on the <b>“OK”</b> dialogue button.</p> <p><b>NOTE:</b> As a result of Allowing Replication to the server, Minor Alarm (<b>Event ID 31113</b>): <i>“Replication Manually Disabled”</i> should clear momentarily.</p>	  <p style="text-align: right; font-size: 2em; color: blue;">2</p>																																
<p>13.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>It may take a minute or more for servers to transition from <b>“Inhibited”</b> state.</p>	<ul style="list-style-type: none"> <li>Note: It may take a minute or more for the servers to transition from <b>“Inhibited”</b> state.</li> <li>Note: You may be required to log back in to the Active Provisioning Site VIP.</li> </ul>																																
<p>14.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>From the <b>“Network Element”</b> filter pull-down, select the NE name for the <b>Primary Provisioning Site</b>.</p>	<p><b>Main Menu: Status &amp; Manage -&gt; Server</b></p> 																																

**Procedure 11: Allow Primary Provisioning Site Servers**

Step	Procedure	Result																								
<p>15.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click on the “GO” dialogue button located on the right end of the filter bar.</p>																									
<p>16.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Verify that every server in this Network Element is now <b>blank</b> under the “Repl Status” column.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>PH</th> <th>Birthday</th> <th>Repl Status</th> </tr> </thead> <tbody> <tr> <td>sds_mvsvnc</td> <td>sds-mvsvnc-a</td> <td>NETWORK OAM&amp;P</td> <td>A</td> <td>2-02-21 20:56:484 UTC</td> <td>Allowed</td> </tr> <tr> <td>sds_mvsvnc</td> <td>sds-mvsvnc-b</td> <td>NETWORK OAM&amp;P</td> <td>S</td> <td>2-02-21 20:56:484 UTC</td> <td>Allowed</td> </tr> <tr> <td>sds_mvsvnc</td> <td>qs-mvsvnc-1</td> <td>QUERY SERVER</td> <td>N</td> <td>2-02-21 20:56:484 UTC</td> <td>Allowed</td> </tr> </tbody> </table>	Network Element	Server	Role	PH	Birthday	Repl Status	sds_mvsvnc	sds-mvsvnc-a	NETWORK OAM&P	A	2-02-21 20:56:484 UTC	Allowed	sds_mvsvnc	sds-mvsvnc-b	NETWORK OAM&P	S	2-02-21 20:56:484 UTC	Allowed	sds_mvsvnc	qs-mvsvnc-1	QUERY SERVER	N	2-02-21 20:56:484 UTC	Allowed
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<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>																										

## 6.2.10 Allow DR Provisioning Site Servers


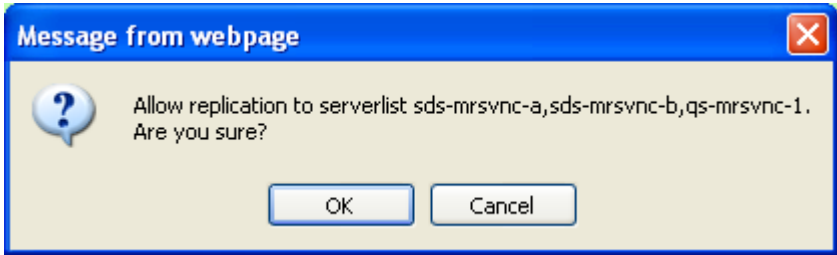
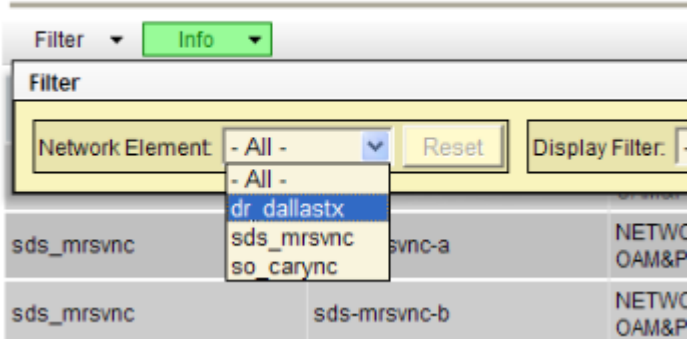

### Procedure 12: Allow DR Provisioning Site Servers

Step	Procedure	Result																					
1. <input type="checkbox"/>	Using the <b>VIP</b> address, access the Primary Provisioning Site GUI.	<ul style="list-style-type: none"> <li>Access the Primary Provisioning Site GUI as specified in <b>Appendix A</b>.</li> </ul>																					
2. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>Database</b></p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>Network OAM</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>Network OAM</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>System OAM</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>System OAM</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> <td>MP</td> </tr> <tr> <td>dr_dallastx</td> <td>drds-dallastx-b</td> <td>Network OAM</td> </tr> </tbody> </table>	Network Element	Server	Role	sds_mrsvnc	sds-mrsvnc-a	Network OAM	sds_mrsvnc	sds-mrsvnc-b	Network OAM	so_carync	so-carync-a	System OAM	so_carync	so-carync-b	System OAM	so_carync	dp-carync-1	MP	dr_dallastx	drds-dallastx-b	Network OAM
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so_carync	dp-carync-1	MP																					
dr_dallastx	drds-dallastx-b	Network OAM																					
3. <input type="checkbox"/>	Record the name of the Primary <b>DR Provisioning Site NE</b> in the space provided to the right.	<ul style="list-style-type: none"> <li>Using the information provided in Section 3.1.2 (<i>Logins, Passwords and Site Information</i>) record the name of the <b>DR Provisioning Site NE</b> in the space provided below:</li> </ul> <p>DR Provisioning Site NE: _____</p>																					
4. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>From the “<b>Network Element</b>” filter pull-down, select the NE name for the <b>DR Provisioning Site</b>.</p>																						
5. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click on the “<b>GO</b>” dialogue button located on the right end of the filter bar.</p>																						

**Procedure 12: Allow DR Provisioning Site Servers**

Step	Procedure	Result																																
6. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user should be presented with the list of servers associated with the <b>DR Provisioning Site NE</b>.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> <th>DB Level</th> <th>DB Birthday</th> <th>Repl Status</th> </tr> </thead> <tbody> <tr> <td>NO_RLGHNC</td> <td>sds-righnc-a</td> <td>NETWORK OAM&amp;P</td> <td>Standby</td> <td>Minor</td> <td>Unknown</td> <td>2012-01-25 21:11:32.418 UTC</td> <td>Inhibited</td> </tr> <tr> <td>NO_RLGHNC</td> <td>sds-righnc-b</td> <td>NETWORK OAM&amp;P</td> <td>Active</td> <td>Minor</td> <td>Unknown</td> <td>2012-01-25 21:11:32.418 UTC</td> <td>Inhibited</td> </tr> <tr> <td>NO_RLGHNC</td> <td>sds-righnc-qs</td> <td>QUERY SERVER</td> <td>Not Applicable</td> <td>Minor</td> <td>Unknown</td> <td>2012-01-25 21:11:32.418 UTC</td> <td>Inhibited</td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	DB Level	DB Birthday	Repl Status	NO_RLGHNC	sds-righnc-a	NETWORK OAM&P	Standby	Minor	Unknown	2012-01-25 21:11:32.418 UTC	Inhibited	NO_RLGHNC	sds-righnc-b	NETWORK OAM&P	Active	Minor	Unknown	2012-01-25 21:11:32.418 UTC	Inhibited	NO_RLGHNC	sds-righnc-qs	QUERY SERVER	Not Applicable	Minor	Unknown	2012-01-25 21:11:32.418 UTC	Inhibited
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**Procedure 12: Allow DR Provisioning Site Servers**

Step	Procedure	Result
<p>10.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Click on the “<b>Allow Replication</b>” dialogue button in the bottom left of the right panel.</p> <p>2) In the pop-up window, click on the “<b>OK</b>” dialogue button.</p> <p><b>NOTE:</b> As a result of Allowing Replication to the server, Minor Alarm (<b>Event ID 31113</b>): “Replication Manually Disabled” should clear momentarily.</p>	 
<p>11.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>It may take a minute or more for servers to transition from “<b>Inhibited</b>” state.</p>	<ul style="list-style-type: none"> <li>Note: It may take a minute or more for the servers to transition from “<b>Inhibited</b>” state.</li> </ul>
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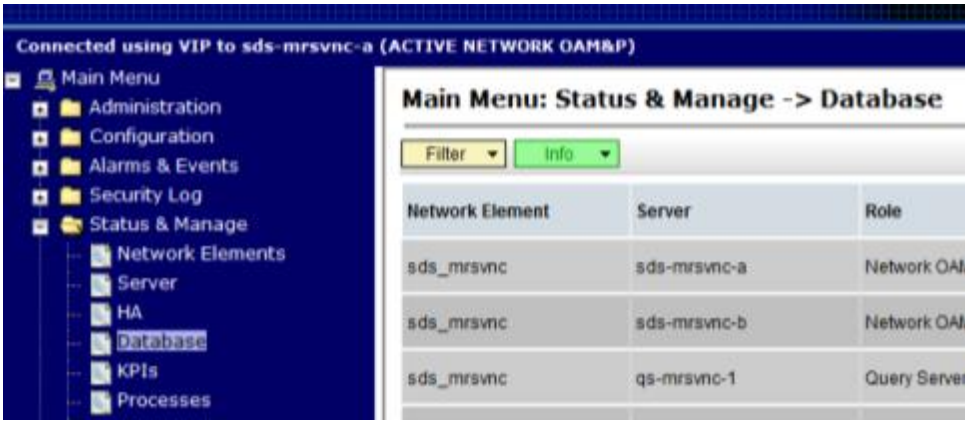
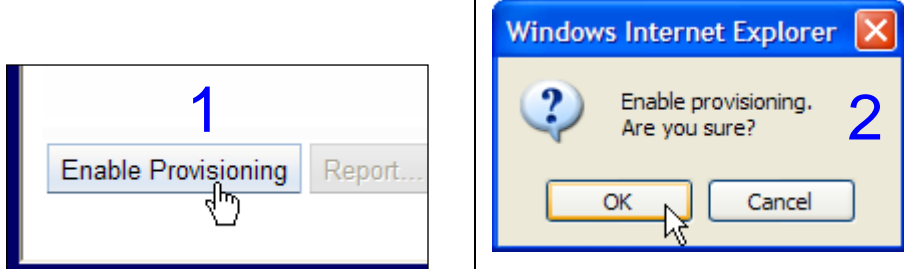
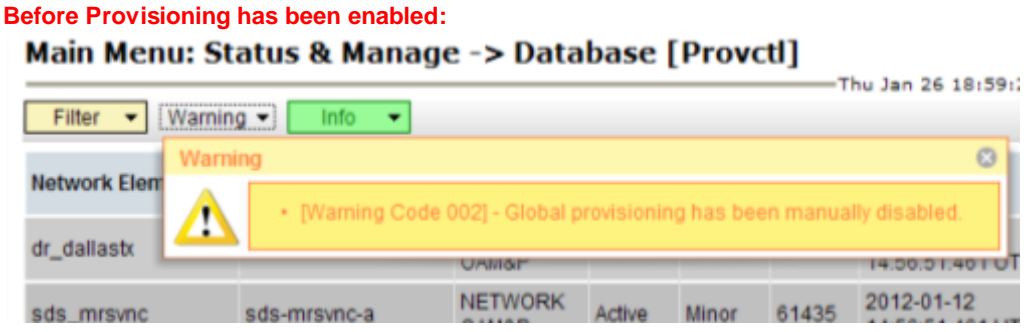
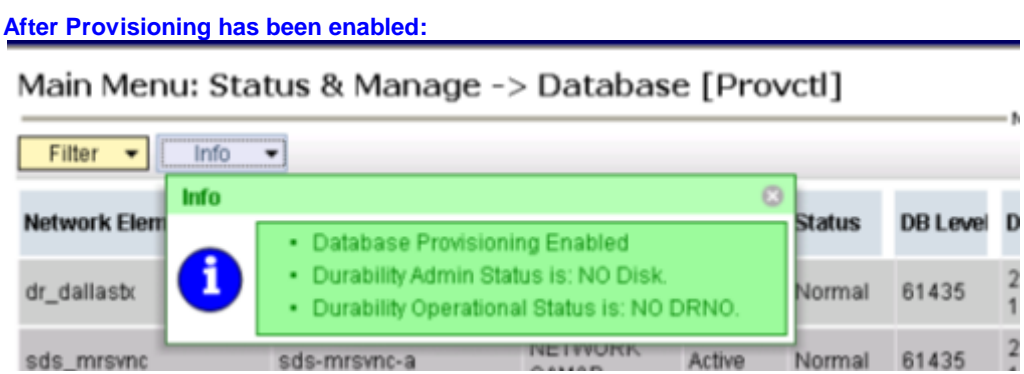
**Procedure 12: Allow DR Provisioning Site Servers**

Step	Procedure	Result																													
<p>14.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Verify that every server in this Network Element is now <b>blank</b> under the “<b>Repl Status</b>” column.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>day</th> <th>Repl Status</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>NETWORK OAM&amp;P</td> <td>Active</td> <td>-21,484 UTC</td> <td>Allowed</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>NETWORK OAM&amp;P</td> <td>Standb</td> <td>-21,484 UTC</td> <td>Allowed</td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td>QUERY SERVER</td> <td>Not Applica</td> <td>-21,484 UTC</td> <td>Allowed</td> </tr> </tbody> </table>						Network Element	Server	Role	HA Role	day	Repl Status	sds_mrsvnc	sds-mrsvnc-a	NETWORK OAM&P	Active	-21,484 UTC	Allowed	sds_mrsvnc	sds-mrsvnc-b	NETWORK OAM&P	Standb	-21,484 UTC	Allowed	sds_mrsvnc	qs-mrsvnc-1	QUERY SERVER	Not Applica	-21,484 UTC	Allowed
Network Element	Server	Role	HA Role	day	Repl Status																										
sds_mrsvnc	sds-mrsvnc-a	NETWORK OAM&P	Active	-21,484 UTC	Allowed																										
sds_mrsvnc	sds-mrsvnc-b	NETWORK OAM&P	Standb	-21,484 UTC	Allowed																										
sds_mrsvnc	qs-mrsvnc-1	QUERY SERVER	Not Applica	-21,484 UTC	Allowed																										
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>																															



## 6.2.11 Enable Global Provisioning and Remote Import

### Procedure 13: Enable Global Provisioning and Remote Import

<p>1.</p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>          → <b>Status &amp; Manage</b>          → <b>Database</b></p> <p>...as shown on the right.</p>	
<p>2.</p>	<p><b>Active SDS VIP:</b></p> <p>1) Click on the “<b>Enable Provisioning</b>” dialogue button in the bottom left corner of the right panel.</p> <p>2) In the pop-up window, click on the “<b>OK</b>” dialogue button.</p>	
<p>3.</p>	<p><b>Active Provisioning Site VIP:</b></p> <p>After re-enabling Provisioning, the screen will refresh and the previous “Warning Code” message shown in the banner area (<b>Global Provisioning has been manually disabled</b>) will be removed.</p> <p><b>NOTE:</b> As a result of enabling Global Provisioning, Minor Alarm (<b>Event ID 10008</b>): “Provisioning Manually Disabled” will be cleared.</p>	<p><b>Before Provisioning has been enabled:</b></p>  <p><b>After Provisioning has been enabled:</b></p> 

**Procedure 13: Enable Global Provisioning and Remote Import**

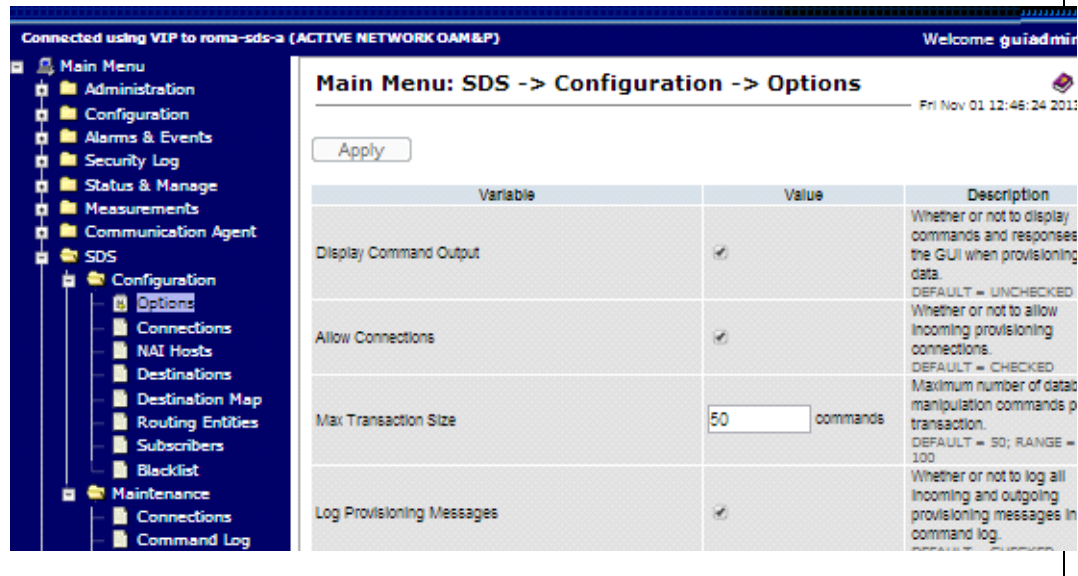
4.

**Active Provisioning Site VIP:**

Select...

**Main Menu**  
 → **SDS**  
 → **Configuration**  
 → **Options**

...as shown on the right.

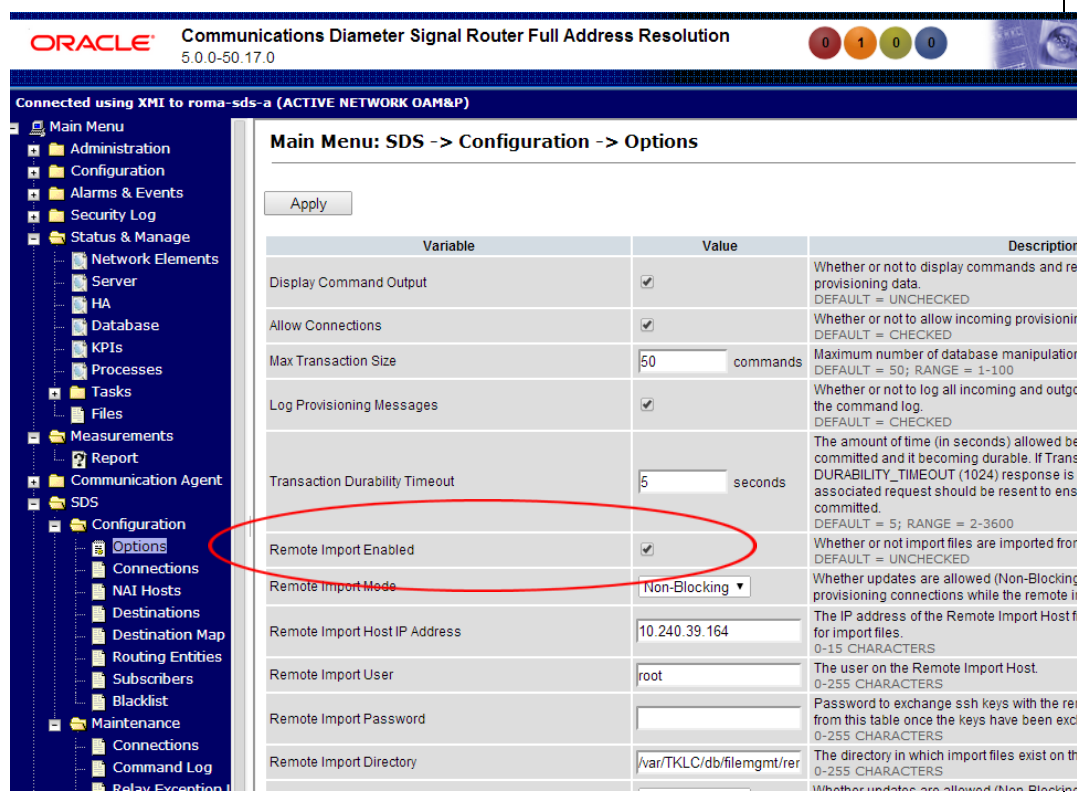


5.

**Active Provisioning Site VIP:**

Re-enable Remote Import:

- 1) If the “Remote Import Enabled” check box was checked before the upgrade (Step 2 on page 36), then check it now.
- 2) Click on the “Apply” dialogue button



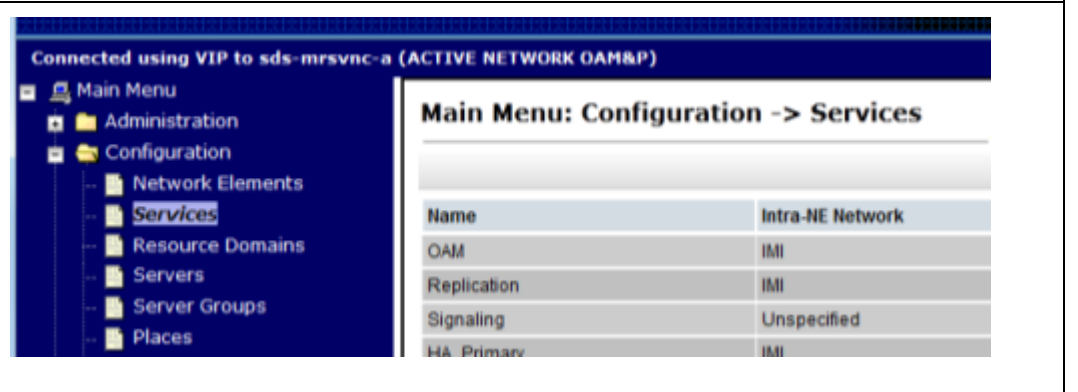
6.

**Active Provisioning Site VIP:**

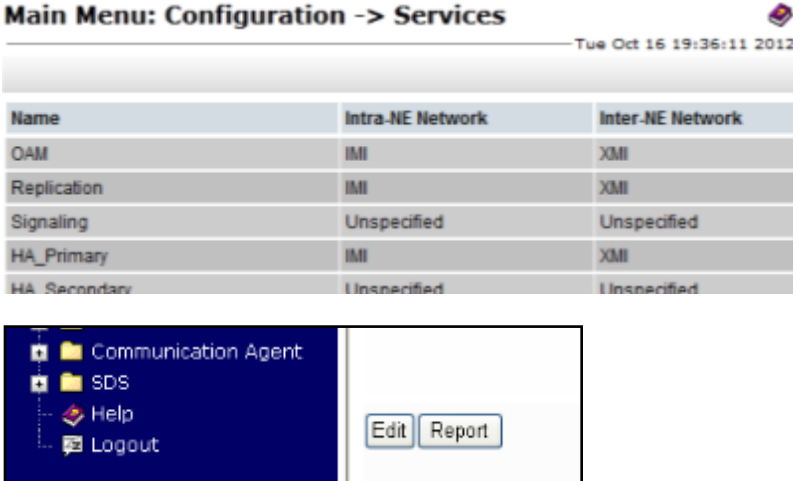
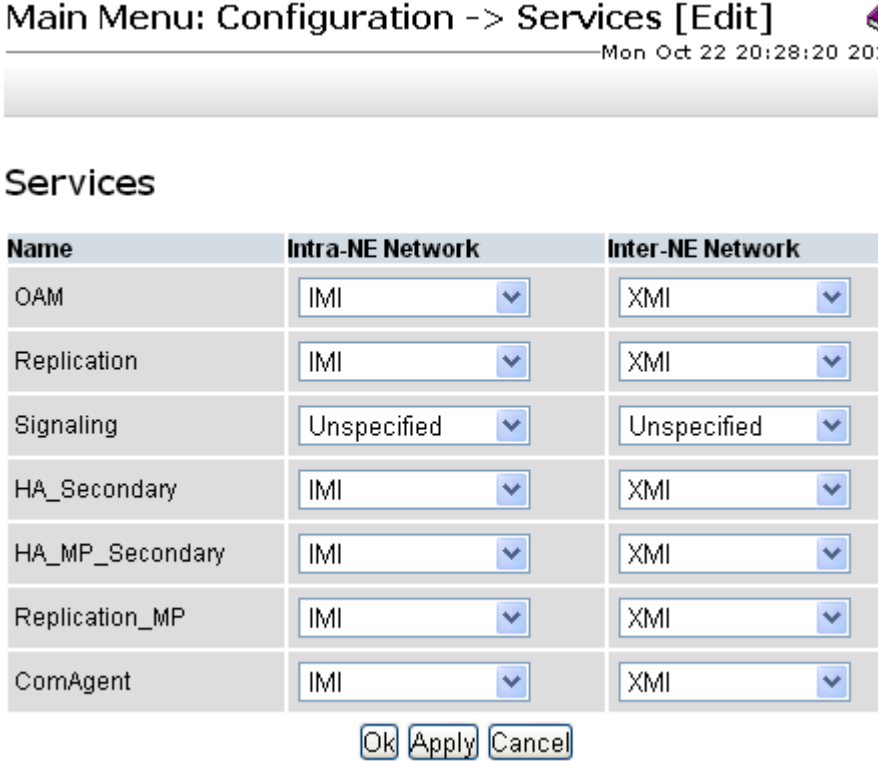
Select...

**Main Menu**  
 → **Configuration**  
 → **Services**

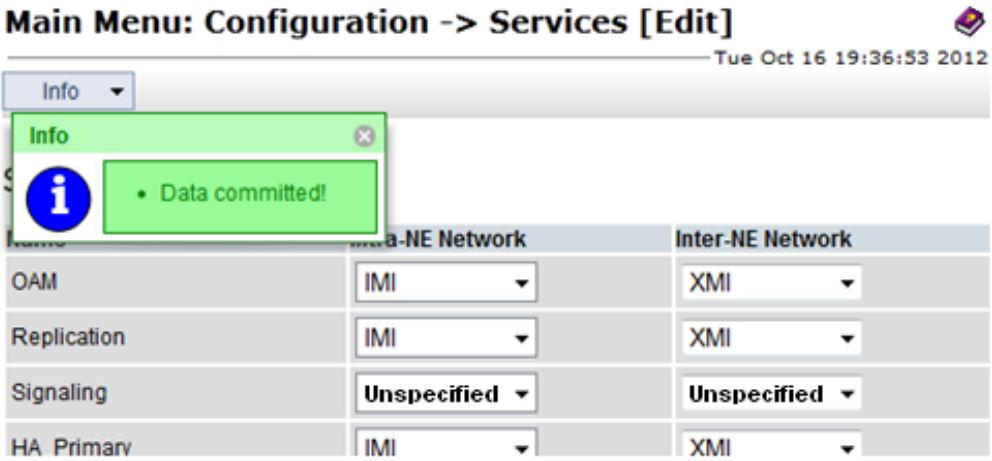
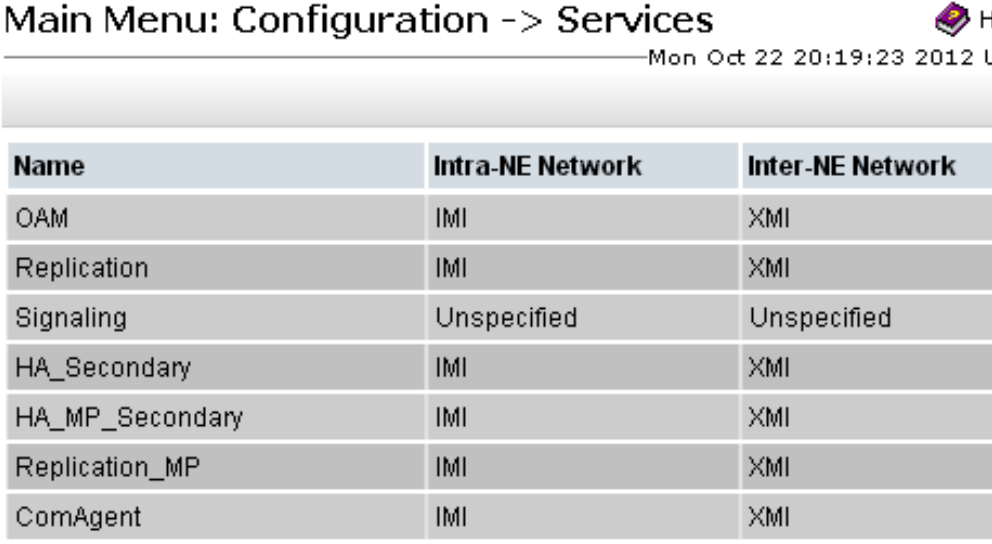
...as shown on the right.



**Procedure 13: Enable Global Provisioning and Remote Import**

<p>7.</p> <input type="checkbox"/>	<p>Check Services.</p>	<p>If there are no <b>Services</b> (other than <b>Signaling</b>) listed as “<b>Unspecified</b>,” skip the remainder of this procedure. <i>Otherwise, continue with the next step.</i></p>																								
<p>8.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) The user will be presented with the “<b>Services</b>” configuration screen as shown on the right.</p> <p>2) Select the “<b>Edit</b>” dialogue button.</p>	 <p><b>Main Menu: Configuration -&gt; Services</b> Tue Oct 16 19:36:11 2012</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Intra-NE Network</th> <th>Inter-NE Network</th> </tr> </thead> <tbody> <tr> <td>OAM</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>Replication</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>Signaling</td> <td>Unspecified</td> <td>Unspecified</td> </tr> <tr> <td>HA_Primary</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>HA_Secondary</td> <td>Unspecified</td> <td>Unspecified</td> </tr> </tbody> </table> <p>Navigation: Communication Agent, SDS, Help, Logout. Buttons: Edit, Report.</p>	Name	Intra-NE Network	Inter-NE Network	OAM	IMI	XMI	Replication	IMI	XMI	Signaling	Unspecified	Unspecified	HA_Primary	IMI	XMI	HA_Secondary	Unspecified	Unspecified						
Name	Intra-NE Network	Inter-NE Network																								
OAM	IMI	XMI																								
Replication	IMI	XMI																								
Signaling	Unspecified	Unspecified																								
HA_Primary	IMI	XMI																								
HA_Secondary	Unspecified	Unspecified																								
<p>9.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Leave “<b>Signaling</b>” set to “<b>Unspecified</b>” and set the other services values so all <b>Intra-NE Network</b> traffic is directed across <b>IMI</b> and all <b>Inter-NE Network</b> traffic is across <b>XMI</b>.</p> <p>2) Select the “<b>Apply</b>” dialogue button.</p> <p><b>NOTE:</b> These are recommended names. Service names may vary according to those used during installation.</p>	 <p><b>Main Menu: Configuration -&gt; Services [Edit]</b> Mon Oct 22 20:28:20 2012</p> <p><b>Services</b></p> <table border="1"> <thead> <tr> <th>Name</th> <th>Intra-NE Network</th> <th>Inter-NE Network</th> </tr> </thead> <tbody> <tr> <td>OAM</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>Replication</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>Signaling</td> <td>Unspecified</td> <td>Unspecified</td> </tr> <tr> <td>HA_Secondary</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>HA_MP_Secondary</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>Replication_MP</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>ComAgent</td> <td>IMI</td> <td>XMI</td> </tr> </tbody> </table> <p>Buttons: Ok, Apply, Cancel.</p>	Name	Intra-NE Network	Inter-NE Network	OAM	IMI	XMI	Replication	IMI	XMI	Signaling	Unspecified	Unspecified	HA_Secondary	IMI	XMI	HA_MP_Secondary	IMI	XMI	Replication_MP	IMI	XMI	ComAgent	IMI	XMI
Name	Intra-NE Network	Inter-NE Network																								
OAM	IMI	XMI																								
Replication	IMI	XMI																								
Signaling	Unspecified	Unspecified																								
HA_Secondary	IMI	XMI																								
HA_MP_Secondary	IMI	XMI																								
Replication_MP	IMI	XMI																								
ComAgent	IMI	XMI																								

**Procedure 13: Enable Global Provisioning and Remote Import**

<p>10.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) The user should be presented with a banner information message stating “<b>Data committed</b>”</p> <p>2) Select the “<b>Ok</b>” dialogue button.</p>	 <p><b>Main Menu: Configuration -&gt; Services [Edit]</b></p> <p>Tue Oct 16 19:36:53 2012</p> <table border="1"> <thead> <tr> <th></th> <th>Intra-NE Network</th> <th>Inter-NE Network</th> </tr> </thead> <tbody> <tr> <td>OAM</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>Replication</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>Signaling</td> <td>Unspecified</td> <td>Unspecified</td> </tr> <tr> <td>HA Primary</td> <td>IMI</td> <td>XMI</td> </tr> </tbody> </table>		Intra-NE Network	Inter-NE Network	OAM	IMI	XMI	Replication	IMI	XMI	Signaling	Unspecified	Unspecified	HA Primary	IMI	XMI									
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OAM	IMI	XMI																								
Replication	IMI	XMI																								
Signaling	Unspecified	Unspecified																								
HA Primary	IMI	XMI																								
<p>11.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user will be presented with the “<b>Services</b>” configuration screen as shown on the right</p>	 <p><b>Main Menu: Configuration -&gt; Services</b></p> <p>Mon Oct 22 20:19:23 2012 L</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Intra-NE Network</th> <th>Inter-NE Network</th> </tr> </thead> <tbody> <tr> <td>OAM</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>Replication</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>Signaling</td> <td>Unspecified</td> <td>Unspecified</td> </tr> <tr> <td>HA_Secondary</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>HA_MP_Secondary</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>Replication_MP</td> <td>IMI</td> <td>XMI</td> </tr> <tr> <td>ComAgent</td> <td>IMI</td> <td>XMI</td> </tr> </tbody> </table>	Name	Intra-NE Network	Inter-NE Network	OAM	IMI	XMI	Replication	IMI	XMI	Signaling	Unspecified	Unspecified	HA_Secondary	IMI	XMI	HA_MP_Secondary	IMI	XMI	Replication_MP	IMI	XMI	ComAgent	IMI	XMI
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Replication_MP	IMI	XMI																								
ComAgent	IMI	XMI																								
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>																										

**6.3 Perform Health Check (Post Upgrade of Primary / DR Provisioning Sites)**

- This procedure is part of Software Upgrade Preparation and is used to determine the health and status of the SDS network and servers.
- Execute SDS Health Check procedures as specified in **Appendix B**.

**NOTE:** As a result of disabling Global Provisioning, Minor Alarm (Event ID 10008): “Provisioning Manually Disabled” will alarm until Global Provisioning is re-enabled. It may be ignored for this Health Check.

**NOTE:** For major upgrade only: As a result of operating NO and DP layers at different software versions, Minor Alarm (Event ID 31216): “SysMetric configuration error” may alarm for each sublevel DP until the entire SDS network has been upgraded. It may be ignored for this Health Check.

## 6.4 SOAM Upgrade Execution

Call Oracle's **Tekelec Customer Care Center** at **1-888-FOR-TKLC** (1-888-367-8552); or 1-919-460-2150 (international) and inform them of your plans to upgrade this system prior to executing this upgrade.

Before upgrade, users must perform the system Health Check **Appendix B**. This check ensures that the system to be upgraded is in an upgrade-ready state. Performing the system health check determines which alarms are present in the system and if upgrade 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 upgrade process is started. The sequence of upgrade is such that servers providing support services to other servers will be upgraded first.

### \*\*\*\* WARNING \*\*\*\*

Please read the following notes on this procedure:

Procedure completion times shown here are estimates. Times may vary due to differences in database size, user experience, and user preparation.

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 upgrade must mark the provided Check Box.

For procedures which are executed multiple times, a mark can be made below the Check Box (in the same column) for each additional iteration that is executed.

Retention of Captured data is required as a future support reference if this procedure is executed by someone other than Oracle's Tekelec Customer Care Center.

**NOTE:** For large systems containing multiple Signaling Network Elements, it may not be feasible to apply the software upgrade to every Network Element within a single maintenance window. However, whenever possible, Primary and DR Provisioning Site Network Elements should be upgraded within the same maintenance window. If multiple maintenance windows are required, replication may be allowed and provisioning re-enabled between scheduled maintenance windows.

## 6.5 Perform Health Check (Pre Upgrade)

This procedure is part of Software Upgrade Preparation and is used to determine the health and status of the SDS 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 a maintenance window.

- Execute SDS Health Check procedures as specified in **Appendix B**.

## 6.6 SOAM Upgrade

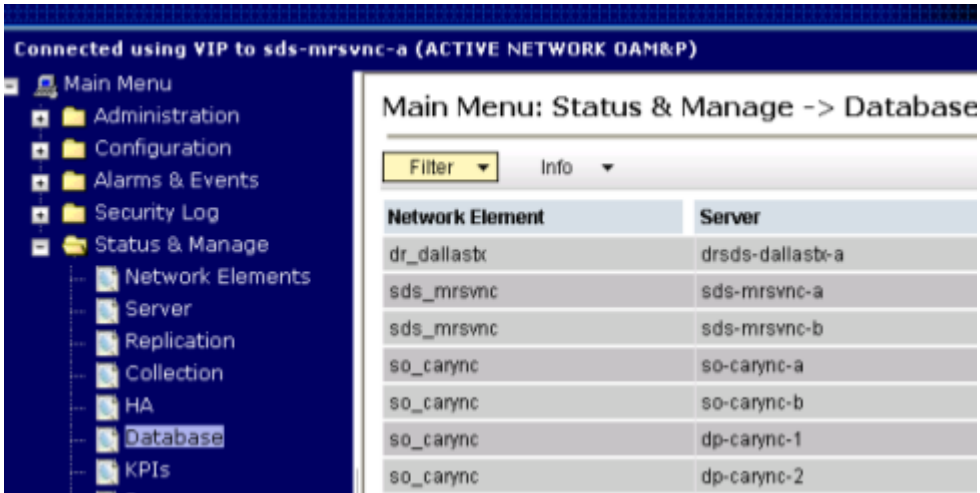
The following procedure details how to upgrade SDS SOAM sites.

Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

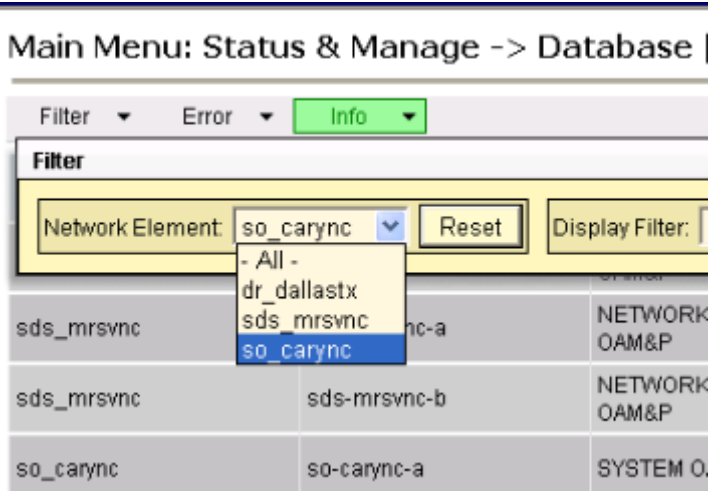

SHOULD ANY STEP IN THIS PROCEDURE FAIL, STOP AND CONTACT ORACLE'S TEKELEC CUSTOMER CARE CENTER FOR ASSISTANCE BEFORE CONTINUING!

### 6.6.1 Inhibit SOAM Servers and Perform Server Backup

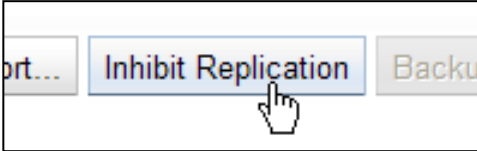
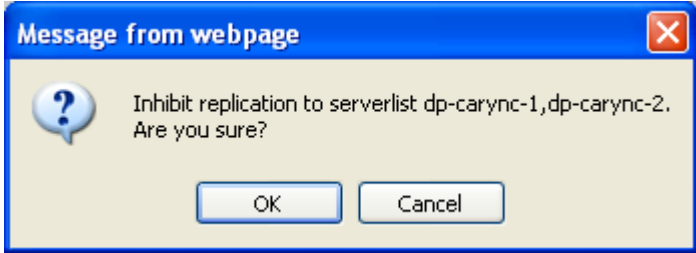
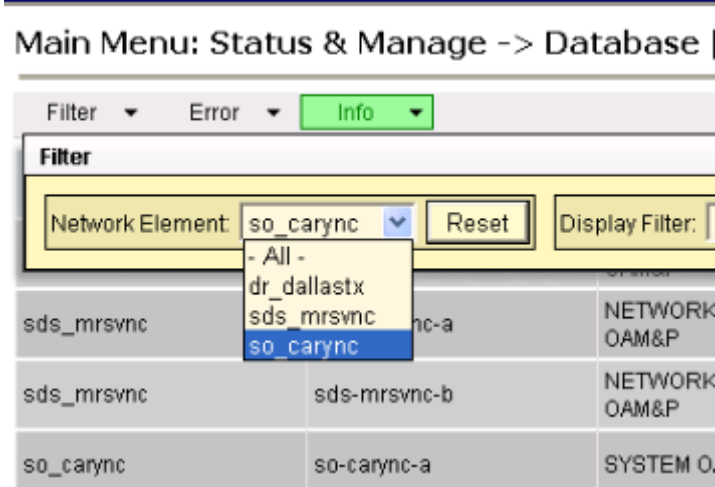
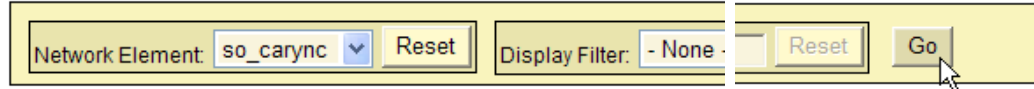
#### Procedure 14: Inhibit SOAM Servers

Step	Procedure	Result																
1. <input type="checkbox"/>	Using the <b>VIP</b> address, access the Primary Provisioning Site GUI.	<ul style="list-style-type: none"> <li>Access the Primary Provisioning Site GUI as specified in <b>Appendix A</b>.</li> </ul>																
2. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>Database</b></p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> </tr> </thead> <tbody> <tr> <td>dr_dallastx</td> <td>drsds-dallastx-a</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-2</td> </tr> </tbody> </table>	Network Element	Server	dr_dallastx	drsds-dallastx-a	sds_mrsvnc	sds-mrsvnc-a	sds_mrsvnc	sds-mrsvnc-b	so_carync	so-carync-a	so_carync	so-carync-b	so_carync	dp-carync-1	so_carync	dp-carync-2
Network Element	Server																	
dr_dallastx	drsds-dallastx-a																	
sds_mrsvnc	sds-mrsvnc-a																	
sds_mrsvnc	sds-mrsvnc-b																	
so_carync	so-carync-a																	
so_carync	so-carync-b																	
so_carync	dp-carync-1																	
so_carync	dp-carync-2																	
3. <input type="checkbox"/>	Record the name of the <b>SOAM NE</b> to be upgraded.	<ul style="list-style-type: none"> <li>Using the information provided in Section 3.1.2 (<i>Logins, Passwords and Site Information</i>) record the name of the <b>SOAM NE</b> to be upgraded in the space provided below:</li> </ul> <p>SOAM NE: _____</p>																

**Procedure 14: Inhibit SOAM Servers**


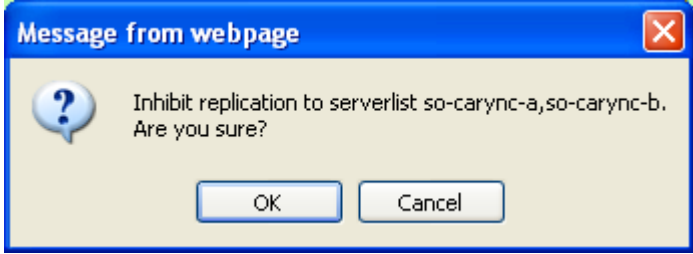
Step	Procedure	Result																									
<p>4.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>From the “<b>Network Element</b>” filter pull-down, select the name for the <b>SOAM</b> NE.</p>	 <p>Main Menu: Status &amp; Manage -&gt; Database</p> <p>Filter Error Info</p> <p>Filter</p> <p>Network Element: so_carync Reset Display Filter:</p> <table border="1"> <tr> <td>sds_mrsync</td> <td></td> <td>nc-a</td> <td>NETWORK OAM&amp;P</td> </tr> <tr> <td>sds_mrsync</td> <td>sds-mrsync-b</td> <td></td> <td>NETWORK OAM&amp;P</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> <td></td> <td>SYSTEM O</td> </tr> </table>	sds_mrsync		nc-a	NETWORK OAM&P	sds_mrsync	sds-mrsync-b		NETWORK OAM&P	so_carync	so-carync-a		SYSTEM O													
sds_mrsync		nc-a	NETWORK OAM&P																								
sds_mrsync	sds-mrsync-b		NETWORK OAM&P																								
so_carync	so-carync-a		SYSTEM O																								
<p>5.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click on the “<b>GO</b>” dialogue button located on the right end of the filter bar.</p>	 <p>Network Element: so_carync Reset Display Filter: - None Reset Go</p>																									
<p>6.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user should be presented with the list of servers associated with the <b>SOAM</b> NE.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>SYSTEM OAM</td> <td>Active</td> <td>Normal</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>SYSTEM OAM</td> <td>Standby</td> <td>Normal</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> <td>MP</td> <td>Active</td> <td>Normal</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-2</td> <td>MP</td> <td>Active</td> <td>Normal</td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	so_carync	so-carync-a	SYSTEM OAM	Active	Normal	so_carync	so-carync-b	SYSTEM OAM	Standby	Normal	so_carync	dp-carync-1	MP	Active	Normal	so_carync	dp-carync-2	MP	Active	Normal
Network Element	Server	Role	HA Role	Status																							
so_carync	so-carync-a	SYSTEM OAM	Active	Normal																							
so_carync	so-carync-b	SYSTEM OAM	Standby	Normal																							
so_carync	dp-carync-1	MP	Active	Normal																							
so_carync	dp-carync-2	MP	Active	Normal																							
<p>7.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Using the <b>Ctrl</b> key to select multiple rows, select each server which displays “<b>MP</b>” under the “<b>Role</b>” column.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>SYSTEM OAM</td> <td>Active</td> <td>Normal</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>SYSTEM OAM</td> <td>Standby</td> <td>Normal</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> <td>MP</td> <td>Active</td> <td>Normal</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-2</td> <td>MP</td> <td>Active</td> <td>Normal</td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	so_carync	so-carync-a	SYSTEM OAM	Active	Normal	so_carync	so-carync-b	SYSTEM OAM	Standby	Normal	so_carync	dp-carync-1	MP	Active	Normal	so_carync	dp-carync-2	MP	Active	Normal
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**Procedure 14: Inhibit SOAM Servers**

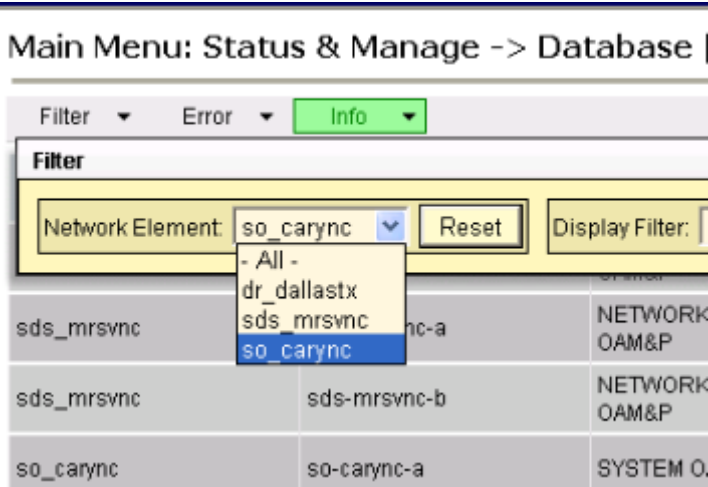

Step	Procedure	Result
<p>8.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Click on the “<b>Inhibit Replication</b>” dialogue button in the bottom left of the right panel.</p> <p>2) In the pop-up window, click on the “<b>OK</b>” dialogue button.</p> <p><b>NOTE:</b> As a result of inhibiting Replication to the server, Minor Alarm (<b>Event ID 31113</b>): “Replication Manually Disabled” will alarm until Replication is once again allowed.</p>	 <p>1</p>  <p>2</p>
<p>9.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>From the “<b>Network Element</b>” filter pull-down, select the name for the <b>SOAM NE</b>.</p>	
<p>10.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click on the “<b>GO</b>” dialogue button located on the right end of the filter bar.</p>	



**Procedure 14: Inhibit SOAM Servers**

Step	Procedure	Result																																								
11. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Verify that all <b>MP</b> servers now show <b>"Inhibited"</b> under the <b>"Repl Status"</b> column.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Day</th> <th>Repl Status</th> </tr> </thead> <tbody> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>SYSTEM OAM</td> <td>Active</td> <td>2-21 6.484 UTC</td> <td></td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>SYSTEM OAM</td> <td>Standby</td> <td>2-21 6.484 UTC</td> <td></td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> <td>MP</td> <td>Active</td> <td>2-21 6.484 UTC</td> <td><i>Inhibited</i></td> </tr> <tr> <td>so_carync</td> <td>dp-carync-2</td> <td>MP</td> <td>Active</td> <td>2-21 6.484 UTC</td> <td><i>Inhibited</i></td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Day	Repl Status	so_carync	so-carync-a	SYSTEM OAM	Active	2-21 6.484 UTC		so_carync	so-carync-b	SYSTEM OAM	Standby	2-21 6.484 UTC		so_carync	dp-carync-1	MP	Active	2-21 6.484 UTC	<i>Inhibited</i>	so_carync	dp-carync-2	MP	Active	2-21 6.484 UTC	<i>Inhibited</i>										
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12. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Holding the Ctrl key to select multiple rows, select the servers which display <b>"SYSTEM OAM"</b> under the <b>"Role"</b> column.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> <th>DB Level</th> <th>DB Birthday</th> <th>Repl Status</th> </tr> </thead> <tbody> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>SYSTEM OAM</td> <td>Active</td> <td>Normal</td> <td>3161241</td> <td>2012-02-21 18:20:56.484 UTC</td> <td></td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>SYSTEM OAM</td> <td>Standby</td> <td>Normal</td> <td>3161241</td> <td>2012-02-21 18:20:56.484 UTC</td> <td></td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> <td>MP</td> <td>Active</td> <td>Minor</td> <td>Unknown</td> <td>2012-02-21 18:20:56.484 UTC</td> <td><i>Inhibited</i></td> </tr> <tr> <td>so_carync</td> <td>dp-carync-2</td> <td>MP</td> <td>Active</td> <td>Minor</td> <td>Unknown</td> <td>2012-02-21 18:20:56.484 UTC</td> <td><i>Inhibited</i></td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	DB Level	DB Birthday	Repl Status	so_carync	so-carync-a	SYSTEM OAM	Active	Normal	3161241	2012-02-21 18:20:56.484 UTC		so_carync	so-carync-b	SYSTEM OAM	Standby	Normal	3161241	2012-02-21 18:20:56.484 UTC		so_carync	dp-carync-1	MP	Active	Minor	Unknown	2012-02-21 18:20:56.484 UTC	<i>Inhibited</i>	so_carync	dp-carync-2	MP	Active	Minor	Unknown	2012-02-21 18:20:56.484 UTC	<i>Inhibited</i>
Network Element	Server	Role	HA Role	Status	DB Level	DB Birthday	Repl Status																																			
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13. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Click on the <b>"Inhibit Replication"</b> dialogue button in the bottom left of the right panel.</p> <p>2) In the pop-up window, click on the <b>"OK"</b> dialogue button.</p> <p><b>NOTE:</b> As a result of inhibiting Replication to the server, Minor Alarm (<b>Event ID 31113</b>): "Replication Manually Disabled" will alarm until Replication is once again allowed.</p>	 <p>1</p>  <p>2</p>																																								

**Procedure 14: Inhibit SOAM Servers**

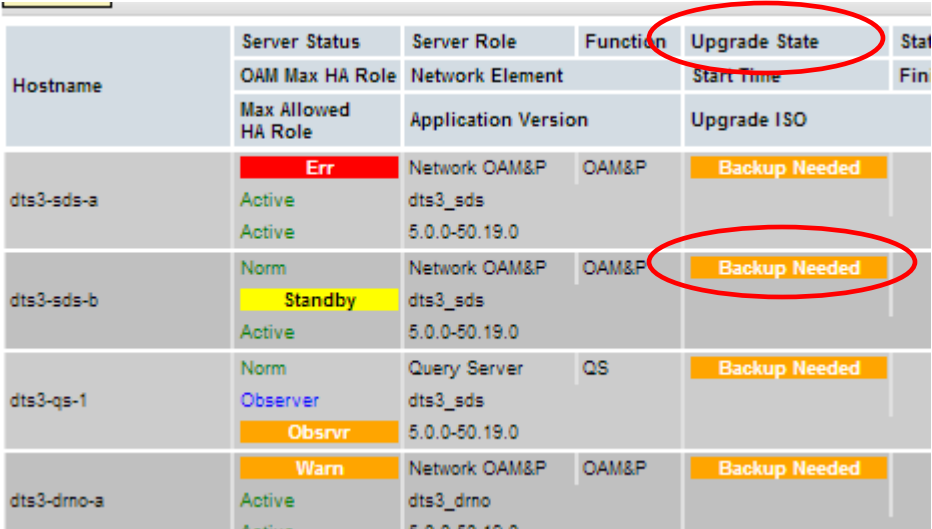
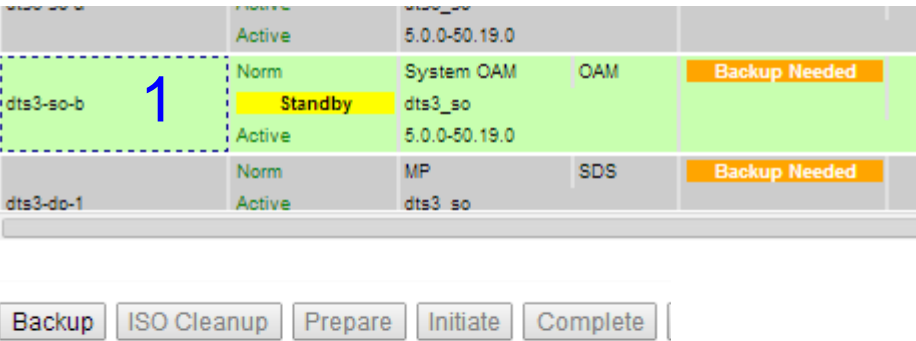
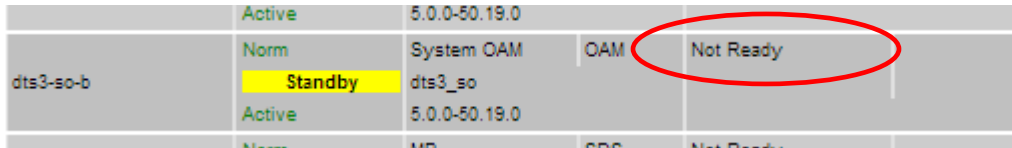
Step	Procedure	Result																														
<p>14.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>From the “<b>Network Element</b>” filter pull-down, select the name for the <b>SOAM</b> NE.</p>	 <p>Main Menu: Status &amp; Manage -&gt; Database  </p> <p>Filter ▼ Error ▼ Info ▼</p> <p>Filter</p> <p>Network Element: so_carync ▼ Reset Display Filter:  </p> <p>- All -</p> <p>dr_dallastx</p> <p>sds_mrsvnc</p> <p>so_carync</p> <p>sds_mrsvnc sds-mrsvnc-a NETWORK OAM&amp;P</p> <p>sds_mrsvnc sds-mrsvnc-b NETWORK OAM&amp;P</p> <p>so_carync so-carync-a SYSTEM O</p>																														
<p>15.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click on the “<b>GO</b>” dialogue button located on the right end of the filter bar.</p>	 <p>Network Element: so_carync ▼ Reset Display Filter: - None Reset Go</p>																														
<p>16.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Verify all servers in this Network Element now show “<b>Inhibited</b>” under the “<b>Repl Status</b>” column.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Day</th> <th>Repl Status</th> </tr> </thead> <tbody> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>SYSTEM OAM</td> <td>Active</td> <td>2-21 16:484 UTC</td> <td><i>Inhibited</i></td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>SYSTEM OAM</td> <td>Standb</td> <td>2-21 16:484 UTC</td> <td><i>Inhibited</i></td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> <td>MP</td> <td>Active</td> <td>2-21 16:484 UTC</td> <td><i>Inhibited</i></td> </tr> <tr> <td>so_carync</td> <td>dp-carync-2</td> <td>MP</td> <td>Active</td> <td>2-21 16:484 UTC</td> <td><i>Inhibited</i></td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Day	Repl Status	so_carync	so-carync-a	SYSTEM OAM	Active	2-21 16:484 UTC	<i>Inhibited</i>	so_carync	so-carync-b	SYSTEM OAM	Standb	2-21 16:484 UTC	<i>Inhibited</i>	so_carync	dp-carync-1	MP	Active	2-21 16:484 UTC	<i>Inhibited</i>	so_carync	dp-carync-2	MP	Active	2-21 16:484 UTC	<i>Inhibited</i>
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**Procedure 14: Inhibit SOAM Servers**


Step	Procedure	Result
17. <input type="checkbox"/>	<p>1) Record the hostname of each server associated with the <b>SOAM NE</b> (identified in <b>Step 3</b> of this Procedure).</p> <p>2) Repeat <b>Steps 24 - 34</b> of this Procedure for each Server listed to the right.</p> <p>3) <b>“Check off”</b> each Check Box as <b>Steps 24 - 34</b> are completed for each Server listed to the right.</p>	<ul style="list-style-type: none"> <li>Using the worksheet provided in Appendix C.5, record the hostnames for each server (<b>SO, DP</b>) associated with the SOAM NE to be upgraded.</li> <li><b>“Check off”</b> the associated <b>Check Box</b> for each server as backup is completed by executing <b>Steps 24 - 34</b> shown below.</li> </ul> <p><input type="checkbox"/> SOAM-A: _____</p> <p><input type="checkbox"/> SOAM-B: _____</p> <p><input type="checkbox"/> DP1: _____</p> <p><input type="checkbox"/> DP2: _____</p> <p><input type="checkbox"/> DP3: _____</p> <p><input type="checkbox"/> DP4: _____</p>

18. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p><i>NOTE: If this is a MAJOR upgrade from 4.x to 5.x, then skip to Step 23. Otherwise, continue with this step.</i></p> <p>Select...</p> <p><b>Main Menu</b>            → Administration            → Software Mangment            → Upgrade</p> <p>...as shown on the right.</p>	<table border="1"> <caption>ORACLE Communications Diameter Signal Router Full Address Resolution 5.0.0-50.19.0</caption> <thead> <tr> <th>Hostname</th> <th>Server Status</th> <th>Server Role</th> <th>Function</th> <th>Upgrade S</th> </tr> </thead> <tbody> <tr> <td>dts3-sds-a</td> <td>Active</td> <td>Network OAM&amp;P</td> <td>OAM&amp;P</td> <td>Backup</td> </tr> <tr> <td>dts3-sds-b</td> <td>Standby</td> <td>Network OAM&amp;P</td> <td>OAM&amp;P</td> <td>Backup</td> </tr> <tr> <td>dts3-qs-1</td> <td>Observer</td> <td>Query Server</td> <td>QS</td> <td>Backup</td> </tr> <tr> <td>dts3-dmo-a</td> <td>Active</td> <td>Network OAM&amp;P</td> <td>OAM&amp;P</td> <td>Backup</td> </tr> <tr> <td>dts3-so-a</td> <td>Active</td> <td>System OAM</td> <td>OAM</td> <td>Backup</td> </tr> </tbody> </table>	Hostname	Server Status	Server Role	Function	Upgrade S	dts3-sds-a	Active	Network OAM&P	OAM&P	Backup	dts3-sds-b	Standby	Network OAM&P	OAM&P	Backup	dts3-qs-1	Observer	Query Server	QS	Backup	dts3-dmo-a	Active	Network OAM&P	OAM&P	Backup	dts3-so-a	Active	System OAM	OAM	Backup
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dts3-qs-1	Observer	Query Server	QS	Backup																												
dts3-dmo-a	Active	Network OAM&P	OAM&P	Backup																												
dts3-so-a	Active	System OAM	OAM	Backup																												

**Procedure 14: Inhibit SOAM Servers**

Step	Procedure	Result																																			
<p>19.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Using the vertical scroll bar in the right panel, scroll to the row containing the <b>hostname</b> of the next server from the list in Step 17.</p> <p>2) Verify that the <b>Upgrade State</b> shows “<b>Backup Needed</b>”.</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>Server Status</th> <th>Server Role</th> <th>Function</th> <th>Upgrade State</th> <th>Start Time</th> <th>Fin</th> </tr> </thead> <tbody> <tr> <td>dts3-sds-a</td> <td>Err Active</td> <td>Network OAM&amp;P</td> <td>OAM&amp;P</td> <td>Backup Needed</td> <td></td> <td></td> </tr> <tr> <td>dts3-sds-b</td> <td>Norm Standby Active</td> <td>Network OAM&amp;P</td> <td>OAM&amp;P</td> <td>Backup Needed</td> <td></td> <td></td> </tr> <tr> <td>dts3-qs-1</td> <td>Norm Observer Obsrvr</td> <td>Query Server</td> <td>QS</td> <td>Backup Needed</td> <td></td> <td></td> </tr> <tr> <td>dts3-drno-a</td> <td>Warn Active</td> <td>Network OAM&amp;P</td> <td>OAM&amp;P</td> <td>Backup Needed</td> <td></td> <td></td> </tr> </tbody> </table>	Hostname	Server Status	Server Role	Function	Upgrade State	Start Time	Fin	dts3-sds-a	Err Active	Network OAM&P	OAM&P	Backup Needed			dts3-sds-b	Norm Standby Active	Network OAM&P	OAM&P	Backup Needed			dts3-qs-1	Norm Observer Obsrvr	Query Server	QS	Backup Needed			dts3-drno-a	Warn Active	Network OAM&P	OAM&P	Backup Needed		
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<p>20.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Using the cursor, select the row containing the <b>hostname</b> of the next server from the list in Step 17.</p> <p>2) Click the “<b>Backup</b>” dialogue button located across the bottom left of the right panel.</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>Server Status</th> <th>Server Role</th> <th>Function</th> <th>Upgrade State</th> <th>Start Time</th> <th>Fin</th> </tr> </thead> <tbody> <tr> <td>dts3-so-b</td> <td>Norm Standby Active</td> <td>System OAM</td> <td>OAM</td> <td>Backup Needed</td> <td></td> <td></td> </tr> <tr> <td>dts3-do-1</td> <td>Norm Active</td> <td>MP</td> <td>SDS</td> <td>Backup Needed</td> <td></td> <td></td> </tr> </tbody> </table> <p>Backup ISO Cleanup Prepare Initiate Complete</p>	Hostname	Server Status	Server Role	Function	Upgrade State	Start Time	Fin	dts3-so-b	Norm Standby Active	System OAM	OAM	Backup Needed			dts3-do-1	Norm Active	MP	SDS	Backup Needed																
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<p>21.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>  → Administration  → Software Mangment  → Upgrade</p> <p>When this backup is finished, verify that the <b>Upgrade State</b> is “<b>Not Ready</b>”</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>Server Status</th> <th>Server Role</th> <th>Function</th> <th>Upgrade State</th> <th>Start Time</th> <th>Fin</th> </tr> </thead> <tbody> <tr> <td>dts3-so-b</td> <td>Norm Standby Active</td> <td>System OAM</td> <td>OAM</td> <td>Not Ready</td> <td></td> <td></td> </tr> <tr> <td>dts3-do-1</td> <td>Norm Active</td> <td>MP</td> <td>SDS</td> <td>Not Ready</td> <td></td> <td></td> </tr> </tbody> </table>	Hostname	Server Status	Server Role	Function	Upgrade State	Start Time	Fin	dts3-so-b	Norm Standby Active	System OAM	OAM	Not Ready			dts3-do-1	Norm Active	MP	SDS	Not Ready																
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<p>22.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Backup all remaining servers.</p>	<p>Repeat <b>Steps 18 - 21</b> of this Procedure for each additional server listed in Step 17. These operations may be performed in parallel for multiple servers.</p> <p>When all servers listed in Step 17 have had <b>Upgrade State</b> changed to “<b>Not Ready</b>”, then <b>this Procedure is completed.</b></p>																																			

**Procedure 14: Inhibit SOAM Servers**

Step	Procedure	Result
<p><b>23.</b> <input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Access the command prompt.</p> <p>2) Log into the server as the “root” user.</p> <p><b>NOTE:</b> This Step and all remaining Steps are <b>only</b> for a <b>MAJOR</b> upgrade from 4.x to 5.x.</p>	<p>CentOS release 5.7 (Final) Kernel 2.6.18-274.7.1.el5prere15.0.0_72.32.0 on an x86_64</p> <p>sds-mrsvnc-a login: <b>root</b> Password: <b>&lt;root_password&gt;</b></p>
<p> <b>NOTE:</b> The following Steps 24 - 34 provide a full backup of COMCOL run environment. These shall run from the command line of every server in the SOAM Network Element to be upgraded.</p> <p><b>NOTE:</b> The following Steps 24 - 34 may be performed in parallel on each server.</p>		
<p><b>24.</b> <input type="checkbox"/></p>	<p><b>Server to be Upgraded (SSH):</b></p> <p>1) Access the command prompt.</p> <p>2) Log into the server as the “root” user.</p>	<p>CentOS release 5.7 (Final) Kernel 2.6.18-274.7.1.el5prere15.0.0_72.32.0 on an x86_64</p> <p>sdsSO-carync-a-a login: <b>root</b> Password: <b>&lt;root_password&gt;</b></p>
<p><b>25.</b> <input type="checkbox"/></p>	<p><b>Server to be Upgraded (SSH):</b></p> <p>Output similar to that shown on the right may appear as the server accesses the command prompt.</p>	<p><b>*** TRUNCATED OUTPUT ***</b></p> <pre> VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpss7 PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=00 VPATH=/opt/TKLCcomcol/runcm5.13:/opt/TKLCcomcol/cm5.13 PRODPATH= RELEASE=5.13 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpss7:/usr/TKLC/sds PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=0 [root@sdsSO-carync-a-a ~]#                     </pre>
<p><b>26.</b> <input type="checkbox"/></p>	<p><b>Server to be Upgraded (SSH):</b></p> <p>Change directory to “exclude_parts.d”.</p>	<pre>[root@sdsSO-carync-a-a ~]# cd /usr/TKLC/appworks/etc/exclude_parts.d</pre>
<p><b>27.</b> <input type="checkbox"/></p>	<p><b>Server to be Upgraded (SSH):</b></p> <p>Edit file “Appworks.db_parts”.</p>	<pre>[root@sdsSO-carync-a-a exclude_parts.d]# vim Appworks.db_parts</pre>

**Procedure 14: Inhibit SOAM Servers**

Step	Procedure	Result
<p>28.</p> <input type="checkbox"/>	<p><b>Server to be Upgraded (SSH):</b></p> <p>Delete lines</p>	<p>Delete all lines after the header comments; the resulting file should look similar to this example:</p> <pre>##### # #       Name:  Appworks.db_parts #       Title:  Lists the IDB database parts to be excluded from a full backup #              of all COMCOL DB parts. #       Author: J Crosson # Description: # This file lists the Comcol IDB parts that are to be excluded from a # pre-upgrade full backup of all COMCOL DB parts. # # The utility full_backup.pl reads this and any other Application supplied # files named &lt;some filename&gt;.db_parts (a db_parts suffix) and located in # the directory /usr/TKLC/appworks/etc/exclude_parts.d. # # File pattern: # # 1. Lines with leading # are treated as comments # 2. Blank lines are ignored # 3. Only ONE part name per line is allowed # # NOTE: Ref: TR005672 Section 3.2 for the parts listed below. # # Revision History # 25-Apr-2011      J Crosson      Initial version # 22-Sep-2011      R Kress       remove AppworksSNMPlog from list, table modified in 40.11.0 ##### # # Def parts</pre>
<p>29.</p> <input type="checkbox"/>	<p><b>Server to be Upgraded (SSH):</b></p> <p>Save and exit</p>	<p>Save and exit:</p> <pre>:wq!</pre>
<p>30.</p> <input type="checkbox"/>	<p><b>Server to be Upgraded (SSH):</b></p> <p>Change directory to root home.</p>	<pre>[root@sdsSO-carync-a-a exclude_parts.d]# cd /root/</pre>
<p>31.</p> <input type="checkbox"/>	<p><b>Server to be Upgraded (SSH):</b></p> <p>Run backup utility.</p>	<pre>[root@sdsSO-carync-a-a ~]# /usr/TKLC/appworks/sbin/full_backup</pre> <p>Output similar to the following will indicate successful completion:</p> <pre>Success: Full backup of COMCOL run env has completed. Archive file Backup.dsr.blade01.FullRunEnv.NETWORK_OAMP.20110417_021502.UPG.tar.gz written in /var/TKLC/db/filemgmt.  (Errors will also report back to the command line.)</pre>
<p>32.</p>	<p><b>Server to be Upgraded (SSH):</b></p> <p>Exit from the server command line.</p>	<pre>[root@sdsSO-carync-a-a filemgmt]# exit logout</pre>

**Procedure 14: Inhibit SOAM Servers**

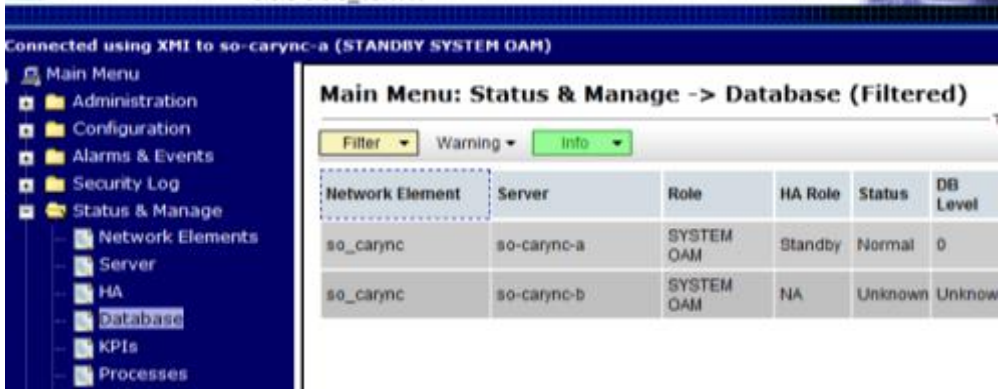
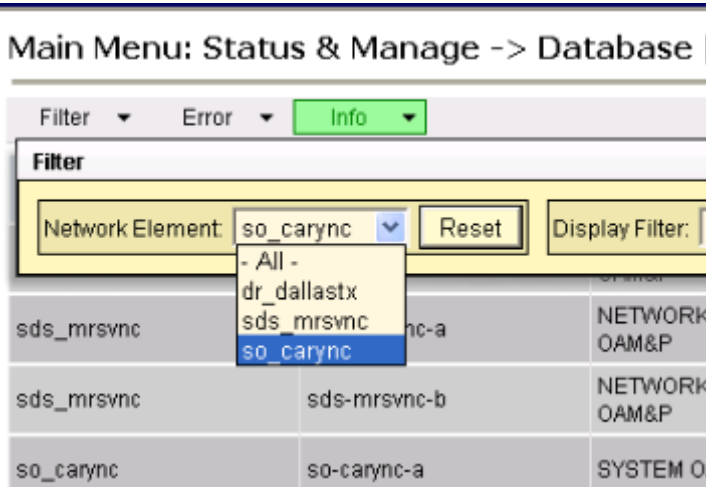
Step	Procedure	Result
<p><b>33.</b> <input type="checkbox"/></p>	<p><b>Server to be Upgraded (SSH):</b> Mark this server's backup as complete.</p>	<ul style="list-style-type: none"> <li>Reference the list in Step 17 and check off the server which just completed backup.</li> </ul>
<p><b>34.</b> <input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b> Backup all remaining servers to be upgraded.  <b>NOTE: Steps 23 - 34 are <i>only</i> for a MAJOR upgrade from 4.x to 5.x.</b></p>	<ul style="list-style-type: none"> <li>Repeat <b>Steps 24 - 33</b> of this Procedure for each additional server in the SOAM NE to be upgraded referencing the list in Step 17. These operations may be performed in parallel on multiple servers.</li> </ul>
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>		

## 6.6.2 Upgrade SOAM NE (SOAM Servers)




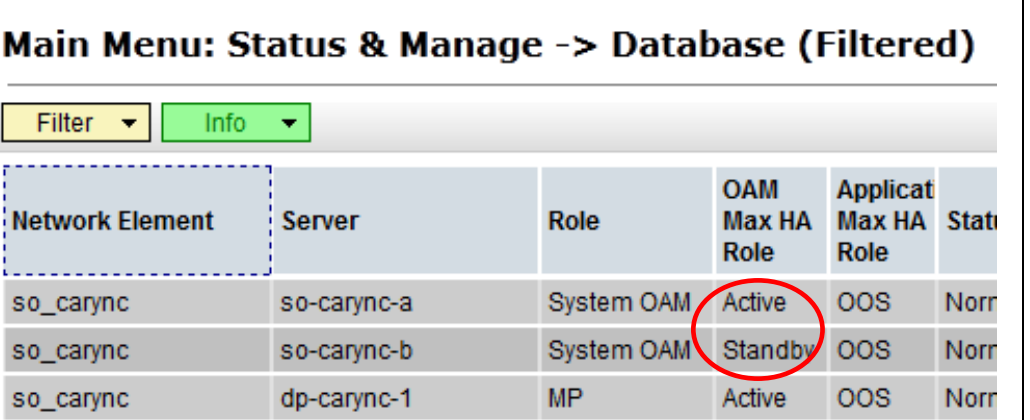
**NOTE:** *Be sure to run Appendix F (Disable Hyperthreading) on each DP of this SOAM NE if hyperthreading has not been disabled there during installation or prior upgrade.*

### Procedure 15: Upgrade SOAM NE (SOAM Servers)


Step	Procedure	Result																		
1. <input type="checkbox"/>	Record the name of the <b>SOAM NE</b> in the space provided to the right.	<ul style="list-style-type: none"> <li>Using the information provided in Section 3.1.2 (<i>Logins, Passwords and Site Information</i>) record the name of the <b>SOAM NE</b> in the space provided below:</li> </ul> <p>SOAM NE: _____</p>																		
2. <input type="checkbox"/>	Using the <b>VIP</b> address, access the Primary Provisioning Site GUI.	Access the Primary Provisioning Site GUI as specified in <b>Appendix A</b> .																		
3. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>Database</b></p> <p>...as shown on the right.</p>	 <p>The screenshot shows the GUI interface. On the left is a tree view of the Main Menu with 'Database' selected. On the right is a table titled 'Main Menu: Status &amp; Manage -&gt; Database (Filtered)'. The table has columns: Network Element, Server, Role, HA Role, Status, and DB Level. It contains two rows of data for 'so_carync'.</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> <th>DB Level</th> </tr> </thead> <tbody> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>SYSTEM OAM</td> <td>Standby</td> <td>Normal</td> <td>0</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>SYSTEM OAM</td> <td>NA</td> <td>Unknown</td> <td>Unknown</td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	DB Level	so_carync	so-carync-a	SYSTEM OAM	Standby	Normal	0	so_carync	so-carync-b	SYSTEM OAM	NA	Unknown	Unknown
Network Element	Server	Role	HA Role	Status	DB Level															
so_carync	so-carync-a	SYSTEM OAM	Standby	Normal	0															
so_carync	so-carync-b	SYSTEM OAM	NA	Unknown	Unknown															
4. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>From the “<b>Network Element</b>” filter pull-down, select the name for the <b>SOAM NE</b>.</p>	 <p>The screenshot shows the 'Main Menu: Status &amp; Manage -&gt; Database' page. A yellow box highlights the 'Filter' section, which includes a 'Network Element' dropdown menu. The dropdown menu is open, showing options: '- All -', 'dr_dallastx', 'sds_mrsvnc', and 'so_carync'. The 'so_carync' option is highlighted in blue.</p>																		



**Procedure 15: Upgrade SOAM NE (SOAM Servers)**

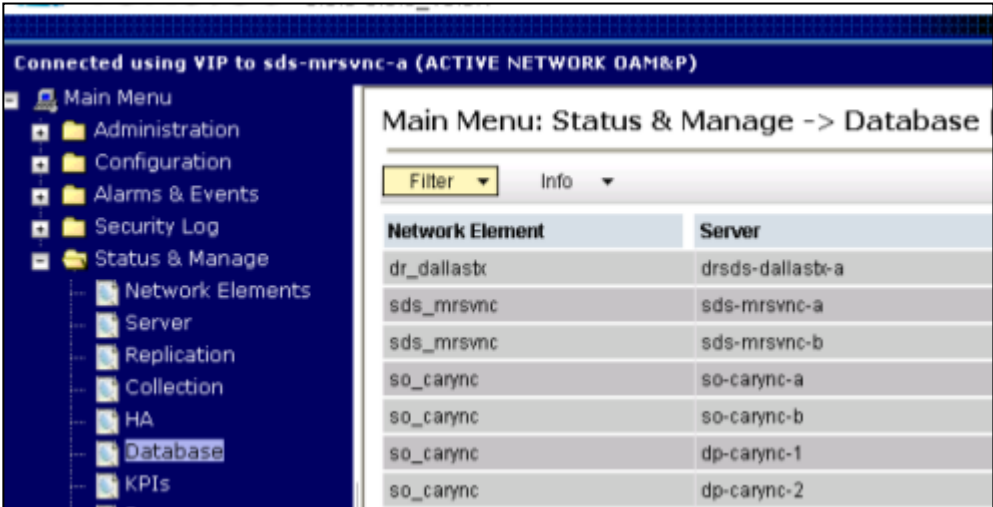
Step	Procedure	Result																								
5. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click on the “GO” dialogue button located on the right end of the filter bar.</p>																									
6. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Record the names of the Standby and Active SOAM in <b>Step 7</b> below.</p>	<p><b>Main Menu: Status &amp; Manage -&gt; Database (Filtered)</b></p>  <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>OAM Max HA Role</th> <th>Applicat Max HA Role</th> <th>Stat</th> </tr> </thead> <tbody> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>System OAM</td> <td>Active</td> <td>OOS</td> <td>Norr</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>System OAM</td> <td>Standby</td> <td>OOS</td> <td>Norr</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> <td>MP</td> <td>Active</td> <td>OOS</td> <td>Norr</td> </tr> </tbody> </table>	Network Element	Server	Role	OAM Max HA Role	Applicat Max HA Role	Stat	so_carync	so-carync-a	System OAM	Active	OOS	Norr	so_carync	so-carync-b	System OAM	Standby	OOS	Norr	so_carync	dp-carync-1	MP	Active	OOS	Norr
Network Element	Server	Role	OAM Max HA Role	Applicat Max HA Role	Stat																					
so_carync	so-carync-a	System OAM	Active	OOS	Norr																					
so_carync	so-carync-b	System OAM	Standby	OOS	Norr																					
so_carync	dp-carync-1	MP	Active	OOS	Norr																					
7. <input type="checkbox"/>	<p>Using the list of servers associated with the <b>SOAM</b> NE shown in the above steps...</p> <p>Record the Server names of the <b>SOAM Servers</b> associated with the <b>SOAM</b> NE.</p>	<ul style="list-style-type: none"> <li>Identify the “<b>SOAM</b>” <b>Server</b> names and record them in the space provided below:</li> </ul> <p>Standby SOAM: _____</p> <p>Active SOAM: _____</p>																								
8. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Prepare Upgrade for the <b>Standby SOAM Server</b>.</p>	<ul style="list-style-type: none"> <li>Prepare Upgrade for the <b>Standby SOAM Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.1 (Prepare Upgrade)</b>.</li> </ul>																								
9. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Initiate Upgrade for the <b>Standby SOAM Server</b>.</p>	<ul style="list-style-type: none"> <li>Initiate Upgrade for the <b>Standby SOAM Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.2 (Initiate Upgrade)</b>.</li> </ul>																								
10. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Monitor Upgrade for the <b>Standby SOAM Server</b>.</p>	<ul style="list-style-type: none"> <li>Monitor Upgrade for the <b>Standby SOAM Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.3 (Monitor Upgrade)</b>.</li> </ul>																								
11. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Complete Upgrade for the <b>Standby SOAM Server</b>.</p>	<ul style="list-style-type: none"> <li>Complete Upgrade for the <b>Standby SOAM Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.4 (Complete Upgrade)</b>.</li> </ul>																								

**Procedure 15: Upgrade SOAM NE (SOAM Servers)**

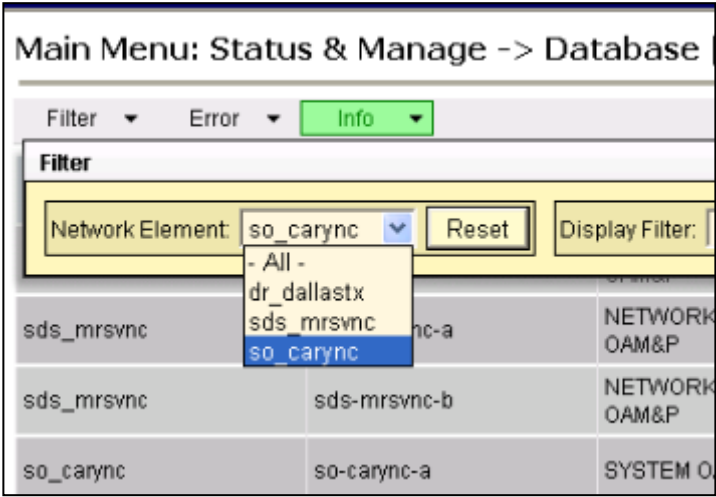

Step	Procedure	Result
 <b>!! WARNING !! STEPS 8-11 MUST BE COMPLETED BEFORE CONTINUING ON TO STEP 12.</b>		

<b>12.</b> <input type="checkbox"/>	<b>Active Provisioning Site VIP:</b>  Prepare Upgrade for the <b>Active SOAM Server</b> .	<ul style="list-style-type: none"> <li>Prepare Upgrade for the <b>Active SOAM Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.1 (Prepare Upgrade)</b>.</li> </ul>
<b>13.</b> <input type="checkbox"/>	<b>Active Provisioning Site VIP:</b>  Initiate Upgrade for the <b>Active SOAM Server</b> .	<ul style="list-style-type: none"> <li>Initiate Upgrade for the <b>Active SOAM Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.2 (Initiate Upgrade)</b>.</li> </ul>
<b>14.</b> <input type="checkbox"/>	<b>Active Provisioning Site VIP:</b>  Monitor Upgrade for the <b>Active SOAM Server</b> .	<ul style="list-style-type: none"> <li>Monitor Upgrade for the <b>Active SOAM Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.3 (Monitor Upgrade)</b>.</li> </ul>
<b>15.</b> <input type="checkbox"/>	<b>Active Provisioning Site VIP:</b>  Complete Upgrade for the <b>Active SOAM Server</b> .	<ul style="list-style-type: none"> <li>Complete Upgrade for the <b>Active SOAM Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.4 (Complete Upgrade)</b>.</li> </ul>


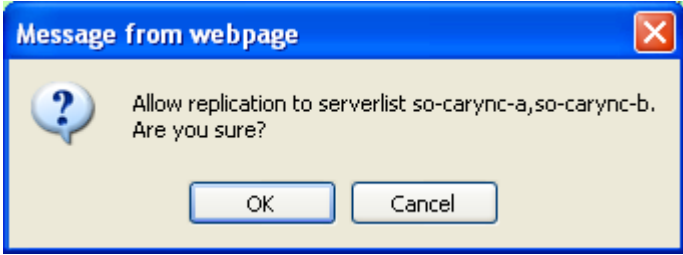
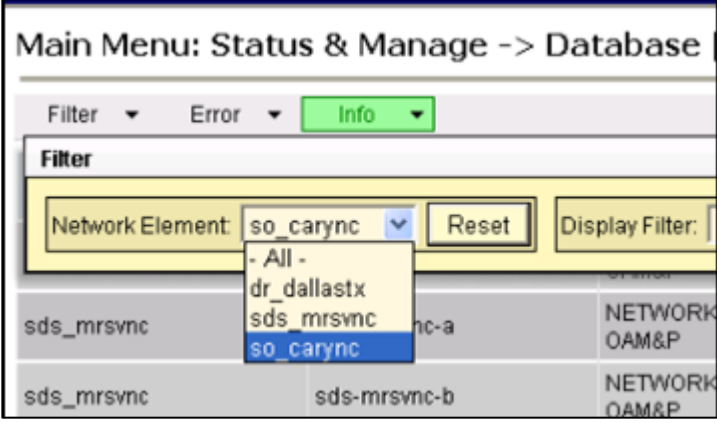
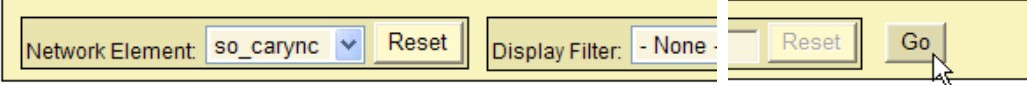
 <b>!! WARNING !! STEPS 12 - 15 MUST BE COMPLETED BEFORE CONTINUING ON TO STEP 16.</b>		
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<b>16.</b> <input type="checkbox"/>	<b>Active Provisioning Site VIP:</b>  Select...  <b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>Database</b>  ...as shown on the right.	 <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> </tr> </thead> <tbody> <tr> <td>dr_dallastx</td> <td>drsds-dallastx-a</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-2</td> </tr> </tbody> </table>	Network Element	Server	dr_dallastx	drsds-dallastx-a	sds_mrsvnc	sds-mrsvnc-a	sds_mrsvnc	sds-mrsvnc-b	so_carync	so-carync-a	so_carync	so-carync-b	so_carync	dp-carync-1	so_carync	dp-carync-2
Network Element	Server																	
dr_dallastx	drsds-dallastx-a																	
sds_mrsvnc	sds-mrsvnc-a																	
sds_mrsvnc	sds-mrsvnc-b																	
so_carync	so-carync-a																	
so_carync	so-carync-b																	
so_carync	dp-carync-1																	
so_carync	dp-carync-2																	

**Procedure 15: Upgrade SOAM NE (SOAM Servers)**

Step	Procedure	Result																																								
17. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>From the “<b>Network Element</b>” filter pull-down, select the name for the <b>SOAM NE</b>.</p>	 <p>Main Menu: Status &amp; Manage -&gt; Database</p> <p>Filter Error Info</p> <p>Filter</p> <p>Network Element: so_carync [Reset] Display Filter: [ ]</p> <p>- All - dr_dallastx sds_mrsvnc so_carync</p> <table border="1"> <tr> <td>sds_mrsvnc</td> <td></td> <td>nc-a</td> <td>NETWORK OAM&amp;P</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td></td> <td>NETWORK OAM&amp;P</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> <td></td> <td>SYSTEM O</td> </tr> </table>	sds_mrsvnc		nc-a	NETWORK OAM&P	sds_mrsvnc	sds-mrsvnc-b		NETWORK OAM&P	so_carync	so-carync-a		SYSTEM O																												
sds_mrsvnc		nc-a	NETWORK OAM&P																																							
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so_carync	so-carync-a		SYSTEM O																																							
18. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click on the “<b>GO</b>” dialogue button located on the right end of the filter bar.</p>	 <p>Network Element: so_carync [Reset] Display Filter: - None [Reset] [Go]</p>																																								
19. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user should be presented with the list of servers associated with the <b>SOAM NE</b>.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> <th>DB Level</th> </tr> </thead> <tbody> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>SYSTEM OAM</td> <td>Active</td> <td>Minor</td> <td>Unknown</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>SYSTEM OAM</td> <td>Standby</td> <td>Minor</td> <td>Unknown</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> <td>MP</td> <td>Active</td> <td>Normal</td> <td>Unknown</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-2</td> <td>MP</td> <td>Active</td> <td>Minor</td> <td>Unknown</td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	DB Level	so_carync	so-carync-a	SYSTEM OAM	Active	Minor	Unknown	so_carync	so-carync-b	SYSTEM OAM	Standby	Minor	Unknown	so_carync	dp-carync-1	MP	Active	Normal	Unknown	so_carync	dp-carync-2	MP	Active	Minor	Unknown										
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so_carync	dp-carync-2	MP	Active	Minor	Unknown																																					
20. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Holding the <b>Ctrl</b> key, select the servers that display “<b>SYSTEM OAM</b>” under the “<b>Role</b>” column.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> <th>DB Level</th> <th>DB Birthday</th> <th>Repl Status</th> </tr> </thead> <tbody> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>SYSTEM OAM</td> <td>Active</td> <td>Minor</td> <td>Unknown</td> <td>2012-02-21 18:20:56.484 UTC</td> <td>Inhibited</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>SYSTEM OAM</td> <td>Standby</td> <td>Minor</td> <td>Unknown</td> <td>2012-02-21 18:20:56.484 UTC</td> <td>Inhibited</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> <td>MP</td> <td>Active</td> <td>Minor</td> <td>Unknown</td> <td>2012-02-21 18:20:56.484 UTC</td> <td>Inhibited</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-2</td> <td>MP</td> <td>Active</td> <td>Minor</td> <td>Unknown</td> <td>2012-02-21 18:20:56.484 UTC</td> <td>Inhibited</td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	DB Level	DB Birthday	Repl Status	so_carync	so-carync-a	SYSTEM OAM	Active	Minor	Unknown	2012-02-21 18:20:56.484 UTC	Inhibited	so_carync	so-carync-b	SYSTEM OAM	Standby	Minor	Unknown	2012-02-21 18:20:56.484 UTC	Inhibited	so_carync	dp-carync-1	MP	Active	Minor	Unknown	2012-02-21 18:20:56.484 UTC	Inhibited	so_carync	dp-carync-2	MP	Active	Minor	Unknown	2012-02-21 18:20:56.484 UTC	Inhibited
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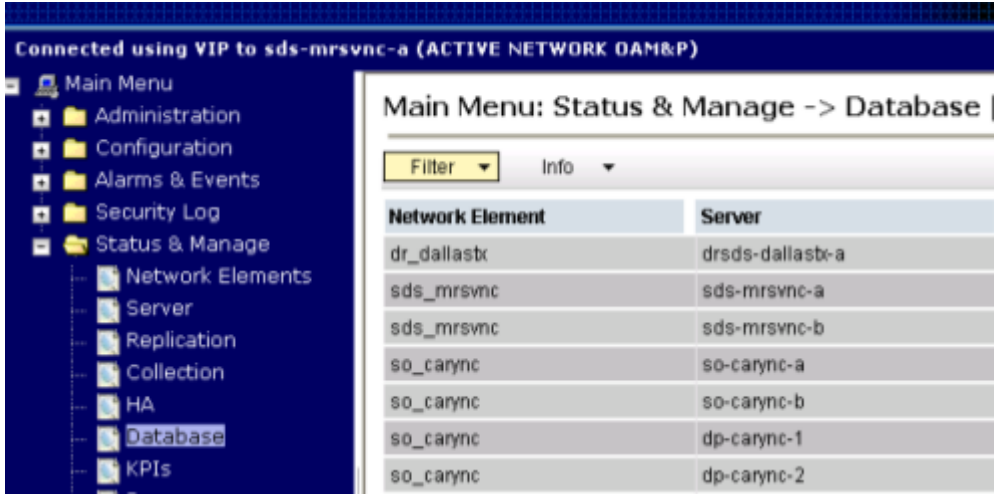
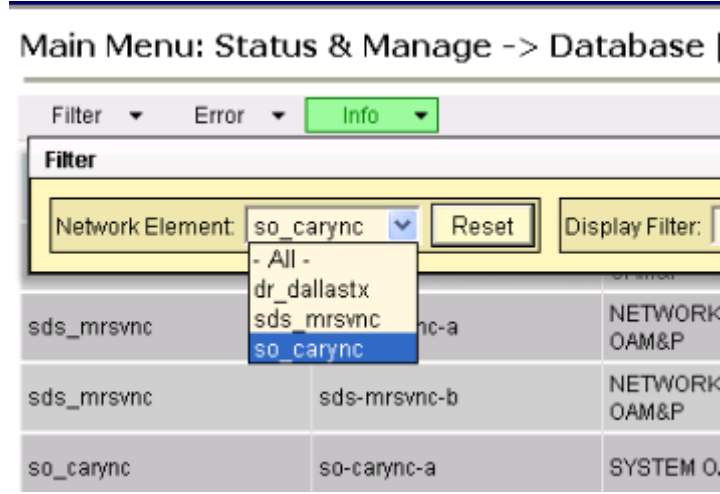

**Procedure 15: Upgrade SOAM NE (SOAM Servers)**

Step	Procedure	Result																				
<p>21.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Click on the <b>“Allow Replication”</b> dialogue button in the bottom left of the right panel.</p> <p>2) In the pop-up window, click on the <b>“OK”</b> dialogue button.</p> <p><b>NOTE:</b> As a result of Allowing Replication to the server, <i>Minor Alarm (Event ID 31113): “Replication Manually Disabled”</i> should clear momentarily.</p>	 																				
<p>22.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>From the <b>“Network Element”</b> filter pull-down, select the name for the <b>SOAM NE</b>.</p>																					
<p>23.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click on the <b>“GO”</b> dialogue button located on the right end of the filter bar.</p>																					
<p>24.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Verify that the servers which display <b>“SYSTEM OAM”</b> under the <b>“Role”</b> column now show <b>“Allowed”</b> under the <b>“Repl Status”</b> column.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Repl Status</th> </tr> </thead> <tbody> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>SYSTEM OAM</td> <td>Active</td> <td>Allowed</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>SYSTEM OAM</td> <td>Standby</td> <td>Allowed</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> <td>MP</td> <td>Active</td> <td>Inhibited</td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Repl Status	so_carync	so-carync-a	SYSTEM OAM	Active	Allowed	so_carync	so-carync-b	SYSTEM OAM	Standby	Allowed	so_carync	dp-carync-1	MP	Active	Inhibited
Network Element	Server	Role	HA Role	Repl Status																		
so_carync	so-carync-a	SYSTEM OAM	Active	Allowed																		
so_carync	so-carync-b	SYSTEM OAM	Standby	Allowed																		
so_carync	dp-carync-1	MP	Active	Inhibited																		

**THIS PROCEDURE HAS BEEN COMPLETED**

### 6.6.3 Upgrade SOAM NE (DP Servers)

#### Procedure 16: Upgrade SOAM NE (DP Servers)

Step	Procedure	Result																
<p>1.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>  → Status &amp; Manage  → Database</p> <p>...as shown on the right.</p>	 <p>Connected using VIP to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P)</p> <p>Main Menu: Status &amp; Manage -&gt; Database</p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> </tr> </thead> <tbody> <tr> <td>dr_dallastx</td> <td>drds-dallastx-a</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-2</td> </tr> </tbody> </table>	Network Element	Server	dr_dallastx	drds-dallastx-a	sds_mrsvnc	sds-mrsvnc-a	sds_mrsvnc	sds-mrsvnc-b	so_carync	so-carync-a	so_carync	so-carync-b	so_carync	dp-carync-1	so_carync	dp-carync-2
Network Element	Server																	
dr_dallastx	drds-dallastx-a																	
sds_mrsvnc	sds-mrsvnc-a																	
sds_mrsvnc	sds-mrsvnc-b																	
so_carync	so-carync-a																	
so_carync	so-carync-b																	
so_carync	dp-carync-1																	
so_carync	dp-carync-2																	
<p>2.</p> <input type="checkbox"/>	<p>Record the name of the <b>SOAM NE</b> which was upgraded in <b>Procedure 15</b>.</p>	<ul style="list-style-type: none"> <li>Using the information provided in Section 3.1.2 (<i>Logins, Passwords and Site Information</i>) record the name of the <b>SOAM NE</b> in the space provided below:</li> </ul> <p>SOAM NE: _____</p>																
<p>3.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>From the “<b>Network Element</b>” filter pull-down, select the name for the <b>SOAM NE</b>.</p>	 <p>Main Menu: Status &amp; Manage -&gt; Database</p> <p>Filter Error Info</p> <p>Filter</p> <p>Network Element: so_carync [Reset] Display Filter: [ ]</p> <p>- All -  dr_dallastx  sds_mrsvnc  so_carync</p> <table border="1"> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>NETWORK OAM&amp;P</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>NETWORK OAM&amp;P</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>SYSTEM O</td> </tr> </tbody> </table>	sds_mrsvnc	sds-mrsvnc-a	NETWORK OAM&P	sds_mrsvnc	sds-mrsvnc-b	NETWORK OAM&P	so_carync	so-carync-a	SYSTEM O							
sds_mrsvnc	sds-mrsvnc-a	NETWORK OAM&P																
sds_mrsvnc	sds-mrsvnc-b	NETWORK OAM&P																
so_carync	so-carync-a	SYSTEM O																
<p>4.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click on the “<b>GO</b>” dialogue button located on the right end of the filter bar.</p>	 <p>Network Element: so_carync [Reset] Display Filter: - None [Reset] [Go]</p>																

**Procedure 16: Upgrade SOAM NE (DP Servers)**

Step	Procedure	Result																														
5. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user should be presented with the list of servers associated with the <b>SOAM</b> NE.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> <th>DB Level</th> </tr> </thead> <tbody> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>SYSTEM OAM</td> <td>Active</td> <td>Minor</td> <td>Unknown</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>SYSTEM OAM</td> <td>Standby</td> <td>Minor</td> <td>Unknown</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> <td>MP</td> <td>Active</td> <td>Normal</td> <td>Unknown</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-2</td> <td>MP</td> <td>Active</td> <td>Minor</td> <td>Unknown</td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	DB Level	so_carync	so-carync-a	SYSTEM OAM	Active	Minor	Unknown	so_carync	so-carync-b	SYSTEM OAM	Standby	Minor	Unknown	so_carync	dp-carync-1	MP	Active	Normal	Unknown	so_carync	dp-carync-2	MP	Active	Minor	Unknown
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so_carync	dp-carync-2	MP	Active	Minor	Unknown																											
6. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Record the names of each DP Server (Role = MP) in <b>Step 7</b> below</p>	<p><b>Main Menu: Status &amp; Manage -&gt; Database (Filtered)</b></p> <p>Filter <input type="button" value="Filter"/> Info <input type="button" value="Info"/></p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>OAM Max HA Role</th> <th>Applicat Max HA Role</th> <th>Stat</th> </tr> </thead> <tbody> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>System OAM</td> <td>Active</td> <td>OOS</td> <td>Norr</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>System OAM</td> <td>Standby</td> <td>OOS</td> <td>Norr</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> <td><b>MP</b></td> <td>Active</td> <td>OOS</td> <td>Norr</td> </tr> </tbody> </table>	Network Element	Server	Role	OAM Max HA Role	Applicat Max HA Role	Stat	so_carync	so-carync-a	System OAM	Active	OOS	Norr	so_carync	so-carync-b	System OAM	Standby	OOS	Norr	so_carync	dp-carync-1	<b>MP</b>	Active	OOS	Norr						
Network Element	Server	Role	OAM Max HA Role	Applicat Max HA Role	Stat																											
so_carync	so-carync-a	System OAM	Active	OOS	Norr																											
so_carync	so-carync-b	System OAM	Standby	OOS	Norr																											
so_carync	dp-carync-1	<b>MP</b>	Active	OOS	Norr																											
7. <input type="checkbox"/>	<p>Using the list of servers associated with the <b>SOAM</b> NE shown in the above steps...</p> <p>Record the Server names of the <b>DPS</b> associated with the <b>SOAM</b> NE.</p>	<ul style="list-style-type: none"> <li>Identify the "<b>DP</b>" <b>Server</b> names and record them in the space provided below:</li> </ul> <p>DP1: _____ DP6: _____</p> <p>DP2: _____ DP7: _____</p> <p>DP3: _____ DP8: _____</p> <p>DP4: _____ DP9: _____</p> <p>DP5: _____ DP10: _____</p>																														

**Procedure 16: Upgrade SOAM NE (DP Servers)**

Step	Procedure	Result
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**!! WARNING !!**

**Steps 8 - 11 of this Procedure may only be executed in parallel for up to ½ of the DP Servers associated with the SOAM NE being upgraded.**

<p><b>8.</b></p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Prepare Upgrade for the <b>DP1 Server</b>.</p>	<ul style="list-style-type: none"> <li>Prepare Upgrade for the <b>DP1 Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.1 (Prepare Upgrade)</b>.</li> </ul> <p><b>NOTE:</b> If executing upgrade for multiple DPs in parallel, repeat this "Prepare Upgrade" step for the other DPs before continuing to the next Step.</p>
<p><b>9.</b></p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Initiate Upgrade for the <b>DP1 Server</b>.</p>	<ul style="list-style-type: none"> <li>Initiate Upgrade for the <b>DP1 Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.2 (Initiate Upgrade)</b>.</li> </ul> <p><b>NOTE:</b> If executing upgrade for multiple DPs in parallel, DPs can be multi-selected using the <b>[CTRL]</b> key.</p>
<p><b>10.</b></p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Monitor Upgrade for the <b>DP1 Server</b>.</p>	<p>Monitor Upgrade for the <b>DP1 Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.3 (Monitor Upgrade)</b>.</p>
<p><b>11.</b></p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Complete Upgrade for the <b>DP1 Server</b>.</p>	<p>Complete Upgrade for the <b>DP1 Server</b> (identified in <b>Step 7</b> of this Procedure) as specified in <b>Appendix C.4 (Complete Upgrade)</b>.</p>

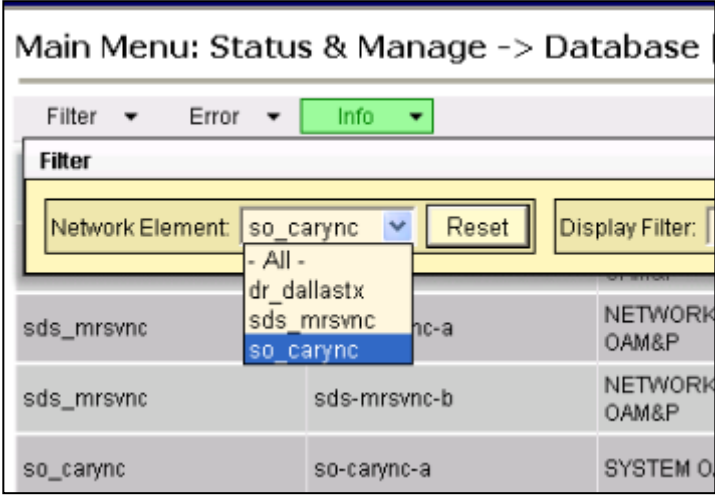



**!! WARNING !!**

**STEPS 8 - 11 MUST BE COMPLETED BEFORE CONTINUING ON TO STEP 12 OF THIS PROCEDURE.**


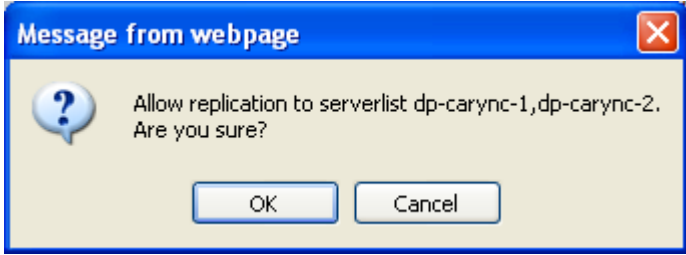
<p><b>12.</b></p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>  → <b>Status &amp; Manage</b>  → <b>Database</b></p> <p>...as shown on the right.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> </tr> </thead> <tbody> <tr> <td>dr_dallastx</td> <td>drsds-dallastx-a</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-2</td> </tr> </tbody> </table>	Network Element	Server	dr_dallastx	drsds-dallastx-a	sds_mrsvnc	sds-mrsvnc-a	sds_mrsvnc	sds-mrsvnc-b	so_carync	so-carync-a	so_carync	so-carync-b	so_carync	dp-carync-1	so_carync	dp-carync-2
Network Element	Server																	
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**Procedure 16: Upgrade SOAM NE (DP Servers)**

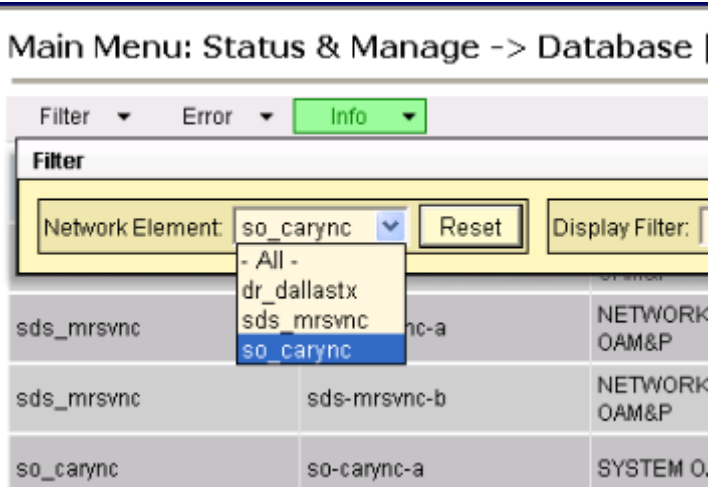

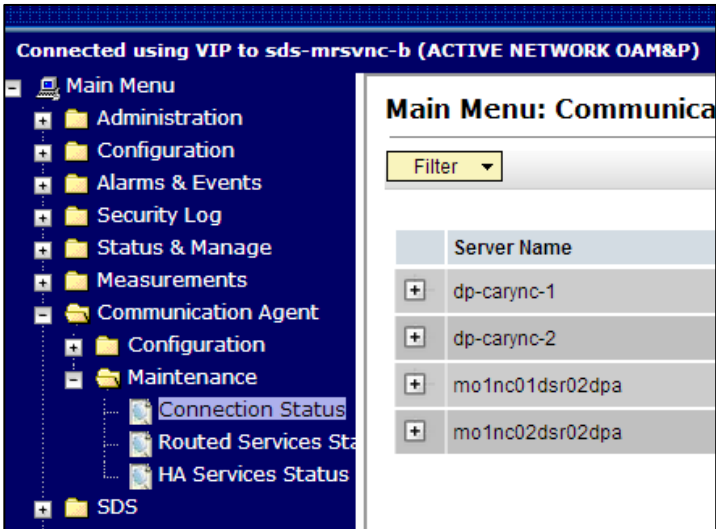
Step	Procedure	Result																														
<p>13.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>From the “<b>Network Element</b>” filter pull-down, select the name for the <b>SOAM NE</b>.</p>	 <p>Main Menu: Status &amp; Manage -&gt; Database</p> <p>Filter Error Info</p> <p>Filter</p> <p>Network Element: so_carync Reset Display Filter:</p> <table border="1"> <tr> <td>sds_mrsvnc</td> <td></td> <td>nc-a</td> <td>NETWORK OAM&amp;P</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td></td> <td>NETWORK OAM&amp;P</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> <td></td> <td>SYSTEM O</td> </tr> </table>	sds_mrsvnc		nc-a	NETWORK OAM&P	sds_mrsvnc	sds-mrsvnc-b		NETWORK OAM&P	so_carync	so-carync-a		SYSTEM O																		
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<p>14.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click on the “<b>GO</b>” dialogue button located on the right end of the filter bar.</p>	 <p>Network Element: so_carync Reset Display Filter: - None Reset Go</p>																														
<p>15.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user should be presented with the list of servers associated with the <b>SOAM NE</b>.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> <th>DB Level</th> </tr> </thead> <tbody> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>SYSTEM OAM</td> <td>Active</td> <td>Minor</td> <td>Unknown</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>SYSTEM OAM</td> <td>Standby</td> <td>Minor</td> <td>Unknown</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> <td>MP</td> <td>Active</td> <td>Normal</td> <td>Unknown</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-2</td> <td>MP</td> <td>Active</td> <td>Minor</td> <td>Unknown</td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	DB Level	so_carync	so-carync-a	SYSTEM OAM	Active	Minor	Unknown	so_carync	so-carync-b	SYSTEM OAM	Standby	Minor	Unknown	so_carync	dp-carync-1	MP	Active	Normal	Unknown	so_carync	dp-carync-2	MP	Active	Minor	Unknown
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**Procedure 16:** Upgrade SOAM NE (DP Servers)

Step	Procedure	Result																																								
<p>16.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Holding the <b>Ctrl</b> key, select the <b>“MP” servers</b> which completed upgrade during <b>Steps 8 - 11</b>.</p> <p><b>CAUTION:</b></p> <p><i>If upgrading in phases (e.g. 1/2 of the installed MPs during each phase), then the user should be careful to select only those MPs which completed upgrade during the current phase.</i></p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> <th>DB Level</th> <th>DB Birthday</th> <th>Repl Status</th> </tr> </thead> <tbody> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>SYSTEM OAM</td> <td>Active</td> <td>Normal</td> <td>3161241</td> <td>2012-02-21 18:20:56.484 UTC</td> <td>Allowed</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>SYSTEM OAM</td> <td>Standby</td> <td>Normal</td> <td>3161241</td> <td>2012-02-21 18:20:56.484 UTC</td> <td>Allowed</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> <td>MP</td> <td>Active</td> <td>Minor</td> <td>Unknown</td> <td>2012-02-21 18:20:56.484 UTC</td> <td>Inhibited</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-2</td> <td>MP</td> <td>Active</td> <td>Minor</td> <td>Unknown</td> <td>2012-02-21 18:20:56.484 UTC</td> <td>Inhibited</td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	DB Level	DB Birthday	Repl Status	so_carync	so-carync-a	SYSTEM OAM	Active	Normal	3161241	2012-02-21 18:20:56.484 UTC	Allowed	so_carync	so-carync-b	SYSTEM OAM	Standby	Normal	3161241	2012-02-21 18:20:56.484 UTC	Allowed	so_carync	dp-carync-1	MP	Active	Minor	Unknown	2012-02-21 18:20:56.484 UTC	Inhibited	so_carync	dp-carync-2	MP	Active	Minor	Unknown	2012-02-21 18:20:56.484 UTC	Inhibited
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<p>17.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Click on the <b>“Allow Replication”</b> dialogue button in the bottom left of the right panel.</p> <p>2) In the pop-up window, click on the <b>“OK”</b> dialogue button.</p> <p><b>NOTE:</b> <i>As a result of Allowing Replication to the server, Minor Alarm (Event ID 31113): “Replication Manually Disabled” should clear momentarily.</i></p>	 																																								

**Procedure 16: Upgrade SOAM NE (DP Servers)**

Step	Procedure	Result																				
<p>18.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>From the “<b>Network Element</b>” filter pull-down, select the name for the <b>SOAM NE</b>.</p>																					
<p>19.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click on the “<b>GO</b>” dialogue button located on the right end of the filter bar.</p>																					
<p>20.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Verify that all servers in this Network Element now show “<b>Allowed</b>” under the “<b>Repl Status</b>” column.</p>	<table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>Repl Status</th> </tr> </thead> <tbody> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>SYSTEM OAM</td> <td>Allowed</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>SYSTEM OAM</td> <td>Allowed</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> <td>MP</td> <td>Allowed</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-2</td> <td>MP</td> <td>Allowed</td> </tr> </tbody> </table>	Network Element	Server	Role	Repl Status	so_carync	so-carync-a	SYSTEM OAM	Allowed	so_carync	so-carync-b	SYSTEM OAM	Allowed	so_carync	dp-carync-1	MP	Allowed	so_carync	dp-carync-2	MP	Allowed
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so_carync	so-carync-a	SYSTEM OAM	Allowed																			
so_carync	so-carync-b	SYSTEM OAM	Allowed																			
so_carync	dp-carync-1	MP	Allowed																			
so_carync	dp-carync-2	MP	Allowed																			
<p>21.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b></p> <p>→ <b>Communication Agent</b></p> <p>    → <b>Maintenance</b></p> <p>        → <b>Connection Status</b></p> <p>...as shown on the right.</p>																					

**Procedure 16: Upgrade SOAM NE (DP Servers)**

Step	Procedure	Result																				
<p>22.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Verify that all expected <b>“comAgent” Connections</b> for the <b>DPs “Allowed”</b> in <b>Steps 16- 20</b> of this procedure are present before continuing to the next step.</p>	<div style="border: 1px solid black; padding: 5px;"> <p><b>Main Menu: Communication Agent -&gt; Maintenance -&gt; Connector</b></p> <p>Filter <input type="text"/></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;"></th> <th style="width: 40%;">Server Name</th> <th style="width: 25%;">Automatic Connections Count</th> <th style="width: 25%;">Configured Connections Count</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">+</td> <td>dp-carync-1</td> <td style="border: 2px solid red; border-radius: 50%;">1 of 1 InService</td> <td style="border: 2px solid red; border-radius: 50%;">1 of 2 InService</td> </tr> <tr> <td style="text-align: center;">+</td> <td>dp-carync-2</td> <td style="border: 2px solid red; border-radius: 50%;">1 of 1 InService</td> <td style="border: 2px solid red; border-radius: 50%;">1 of 2 InService</td> </tr> <tr> <td style="text-align: center;">+</td> <td>mo1nc01dsr02dpa</td> <td>1 of 1 InService</td> <td style="border: 2px solid red; border-radius: 50%;">2 of 2 InService</td> </tr> <tr> <td style="text-align: center;">+</td> <td>mo1nc02dsr02dpa</td> <td>1 of 1 InService</td> <td style="border: 2px solid red; border-radius: 50%;">2 of 2 InService</td> </tr> </tbody> </table> </div> <ol style="list-style-type: none"> <li>1. Verify that the <b>“Automatic Connections Count”</b> shows <b>“x of x”</b> for all entries (<i>i.e. matching numbers</i>).</li> <li>2. <b>Active/Active MPs:</b> Verify that the <b>“Configured Connections Count”</b> shows <b>“y of y”</b> for all entries (<i>i.e. matching numbers</i>).</li> <li>3. <b>Active/Standby MPs:</b> Verify that the <b>“Configured Connections Count”</b> shows <b>“1 of 2”</b> for all entries.</li> </ol>		Server Name	Automatic Connections Count	Configured Connections Count	+	dp-carync-1	1 of 1 InService	1 of 2 InService	+	dp-carync-2	1 of 1 InService	1 of 2 InService	+	mo1nc01dsr02dpa	1 of 1 InService	2 of 2 InService	+	mo1nc02dsr02dpa	1 of 1 InService	2 of 2 InService
	Server Name	Automatic Connections Count	Configured Connections Count																			
+	dp-carync-1	1 of 1 InService	1 of 2 InService																			
+	dp-carync-2	1 of 1 InService	1 of 2 InService																			
+	mo1nc01dsr02dpa	1 of 1 InService	2 of 2 InService																			
+	mo1nc02dsr02dpa	1 of 1 InService	2 of 2 InService																			
<p>23.</p> <p><input type="checkbox"/></p>	<p>1) Transfer the Server names of the <b>DPs</b> associated with the <b>SOAM NE</b> (identified in <b>Step 7</b> of this Procedure).</p> <p>2) <b>“Check off”</b> each Check Box as <b>Steps 8 - 22</b> are completed for the <b>DP</b> listed to the right.</p>	<ul style="list-style-type: none"> <li>• Transfer the Server names of each <b>DP</b> recorded in <b>Step 7</b> in the space provided below:</li> <li>• <b>“Check off”</b> the associated <b>Check Box</b> as <b>Steps 8 - 22</b> are completed for each <b>DP</b>.</li> </ul> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"><input checked="" type="checkbox"/> DP1: _____</td> <td style="width: 50%; border: none;"><input type="checkbox"/> DP6: _____</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> DP2: _____</td> <td style="border: none;"><input type="checkbox"/> DP7: _____</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> DP3: _____</td> <td style="border: none;"><input type="checkbox"/> DP8: _____</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> DP4: _____</td> <td style="border: none;"><input type="checkbox"/> DP9: _____</td> </tr> <tr> <td style="border: none;"><input type="checkbox"/> DP5: _____</td> <td style="border: none;"><input type="checkbox"/> DP10: _____</td> </tr> </table>	<input checked="" type="checkbox"/> DP1: _____	<input type="checkbox"/> DP6: _____	<input type="checkbox"/> DP2: _____	<input type="checkbox"/> DP7: _____	<input type="checkbox"/> DP3: _____	<input type="checkbox"/> DP8: _____	<input type="checkbox"/> DP4: _____	<input type="checkbox"/> DP9: _____	<input type="checkbox"/> DP5: _____	<input type="checkbox"/> DP10: _____										
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<input type="checkbox"/> DP5: _____	<input type="checkbox"/> DP10: _____																					
<p>24.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Perform SW Upgrade for the remaining <b>DP Servers</b>.</p>	<p>Repeat <b>Steps 8 - 23</b> of this procedure for the remaining <b>DP Servers</b> associated with the <b>SOAM NE</b> being upgraded.</p>																				
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>																						



!!! WARNING !!!

*Procedures in Appendix G ( Finalizing Upgrade) should only be executed after all SOAM sites/servers on the network have been upgraded to the target release.*

## 6.7 Perform Health Check (Post SOAM Upgrade)



This procedure is part of Software Upgrade Preparation and is used to determine the health and status of the SDS network and servers.

- Execute SDS Health Check procedures as specified in **Appendix B**.

## 7. RECOVERY PROCEDURES

Upgrade procedure recovery issues should be directed to Oracle’s Tekelec Customer Care Center. Before executing any of these procedures, contact Oracle’s Tekelec Customer Care Center at 1-888-FOR-TKLC (1-888-367-8552); or 1-919-460-2150 (International). Persons performing the upgrade should be familiar with these documents.

Execute this section only if there is a problem and it is desired to revert back to the pre-upgrade version of the software.

### Warning

*Do not attempt to perform these backout procedures without first contacting Oracle’s Tekelec Customer Care Center at 1-888-FOR-TKLC or 1-888-367-8552; or for international callers 1-919-460-2150.*

### Warning

*Backout procedures WILL cause traffic loss.*

**NOTE:** *These recovery procedures are provided for the Backout of an Upgrade ONLY! (i.e. Backout from a failed target release to the previously installed release). Backout of an initial installation is not supported.*

The reason to execute a backout has a direct impact on any additional backout preparation that must be done. Backout procedure **WILL** cause traffic loss. Since all possible reasons cannot be predicted ahead of time, contact Oracle’s Tekelec Customer Care Center as stated in the **Warning** box above.

**NOTE:** Verify that the two backup archive files created using Procedure 8 in Section 6.2.6 “Database Backup (Provisioning)” are present on every server that is to be backed-out. These archive files are located in the /var/TKLC/db/filemgmt directory and have different filenames than other database backup files. The filenames will have the format

Backup.<application>.<server>.FullDBParts.<role>.<date\_time>.UPG.tar.bz2

and

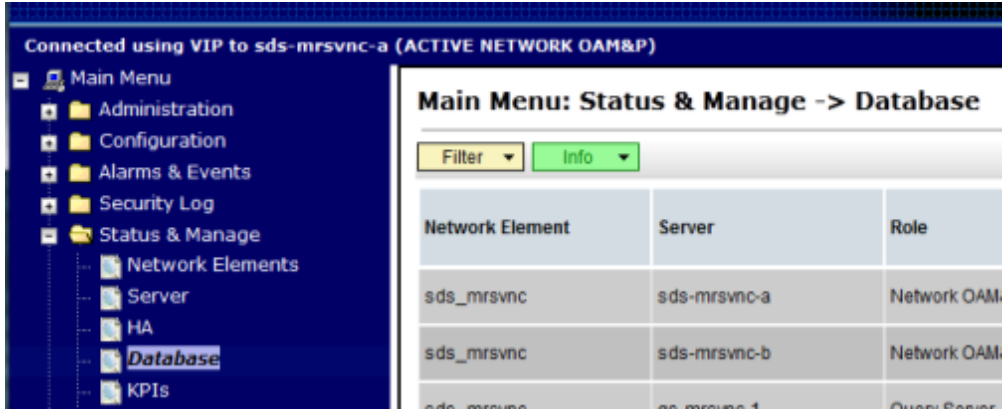
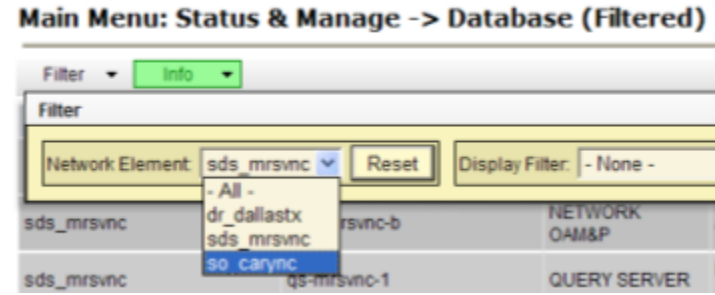
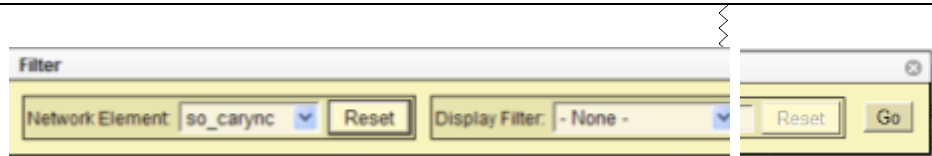
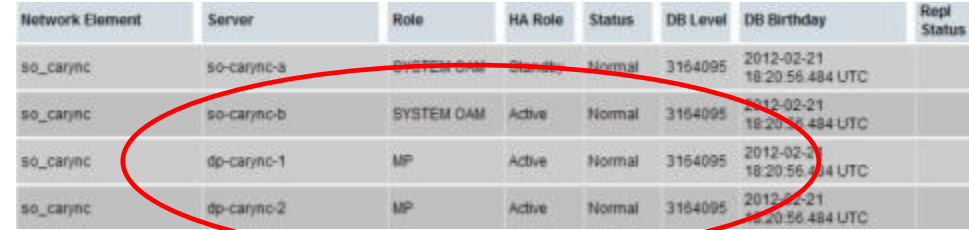
Backup. <application>.<server>.FullRunEnv.<role>.<date\_time>.UPG.tar.bz2

### 7.1 Backout DP SOAM NE

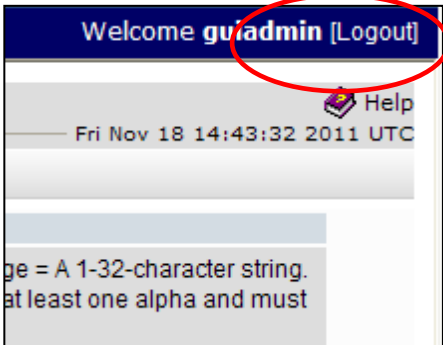
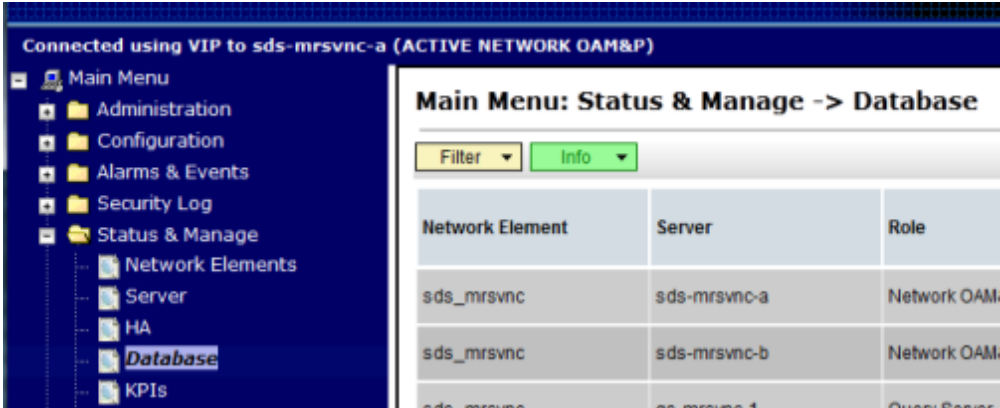
#### Procedure 17: Backout DP SOAM NE

Step	Procedure	Result
1. <input type="checkbox"/>	Using the <b>VIP</b> address, access the Primary Provisioning Site Active NO command prompt.	<ul style="list-style-type: none"> <li>Execute <b>Procedure 3</b> “Disable AppProcControl Table Replication”</li> </ul>
2. <input type="checkbox"/>	Using the <b>VIP</b> address, access the Primary Provisioning Site GUI.	<ul style="list-style-type: none"> <li>Access the Primary Provisioning Site GUI as specified in <b>Appendix A</b>.</li> </ul>

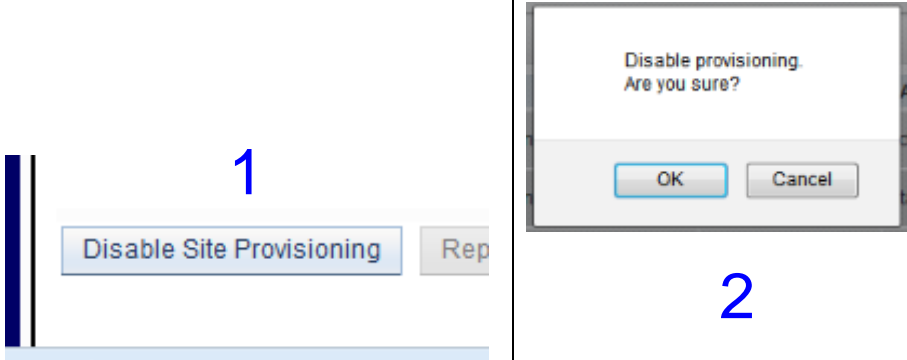
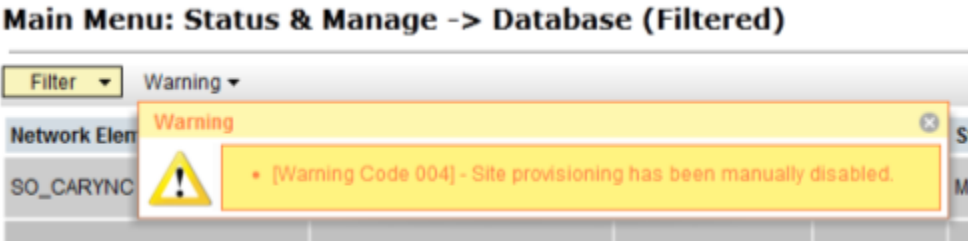
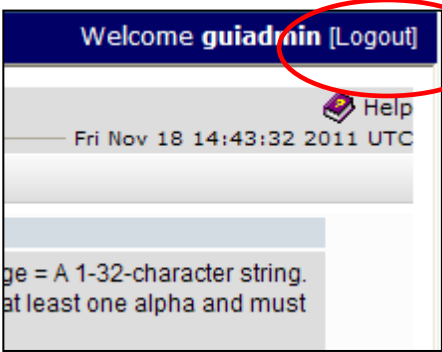
**Procedure 17: Backout DP SOAM NE**

Step	Procedure	Result																																								
3. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>Database</b></p> <p>...as shown on the right.</p>	 <p>Connected using VIP to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P)</p> <p><b>Main Menu: Status &amp; Manage -&gt; Database</b></p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>Network OAM</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>Network OAM</td> </tr> <tr> <td>sds_mrsvnc</td> <td>so-mrsvnc-1</td> <td>Query Server</td> </tr> </tbody> </table>	Network Element	Server	Role	sds_mrsvnc	sds-mrsvnc-a	Network OAM	sds_mrsvnc	sds-mrsvnc-b	Network OAM	sds_mrsvnc	so-mrsvnc-1	Query Server																												
Network Element	Server	Role																																								
sds_mrsvnc	sds-mrsvnc-a	Network OAM																																								
sds_mrsvnc	sds-mrsvnc-b	Network OAM																																								
sds_mrsvnc	so-mrsvnc-1	Query Server																																								
4. <input type="checkbox"/>	<p>Record the name of the <b>DP SOAM</b> NE to be downgraded (<b>Backed out</b>) in the space provided to the right.</p>	<ul style="list-style-type: none"> <li>Record the name of the <b>DP SOAM</b> NE which will be “<b>Backed out</b>”.</li> </ul> <p>DP SOAM NE: _____</p>																																								
5. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>From the “<b>Network Element</b>” filter pull-down, select the name for the <b>DP SOAM</b> NE.</p>	 <p><b>Main Menu: Status &amp; Manage -&gt; Database (Filtered)</b></p> <p>Filter: Info</p> <p>Filter: Network Element: sds_mrsvnc [Reset] Display Filter: - None -</p> <p>Dropdown menu items: - All -, dr_dallastx, sds_mrsvnc, so_carync</p> <table border="1"> <tbody> <tr> <td>sds_mrsvnc</td> <td>rsync-b</td> <td>NETWORK OAM&amp;P</td> </tr> <tr> <td>sds_mrsvnc</td> <td>qs-mrsvnc-1</td> <td>QUERY SERVER</td> </tr> </tbody> </table>	sds_mrsvnc	rsync-b	NETWORK OAM&P	sds_mrsvnc	qs-mrsvnc-1	QUERY SERVER																																		
sds_mrsvnc	rsync-b	NETWORK OAM&P																																								
sds_mrsvnc	qs-mrsvnc-1	QUERY SERVER																																								
6. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Click the “<b>GO</b>” button located on the right end of the filter bar.</p>	 <p>Filter: Network Element: so_carync [Reset] Display Filter: - None - [Reset] [Go]</p>																																								
7. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented with the list of servers associated with the <b>DP SOAM</b> NE.</p> <p>Identify each “<b>Server</b>” and its associated “<b>Role</b>” and “<b>HA Role</b>”.</p>	 <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> <th>DB Level</th> <th>DB Birthday</th> <th>Repl Status</th> </tr> </thead> <tbody> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>SYSTEM OAM</td> <td>Standby</td> <td>Normal</td> <td>3164095</td> <td>2012-02-21 18:20:56.484 UTC</td> <td></td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>SYSTEM OAM</td> <td>Active</td> <td>Normal</td> <td>3164095</td> <td>2012-02-21 18:20:56.484 UTC</td> <td></td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> <td>MP</td> <td>Active</td> <td>Normal</td> <td>3164095</td> <td>2012-02-21 18:20:56.484 UTC</td> <td></td> </tr> <tr> <td>so_carync</td> <td>dp-carync-2</td> <td>MP</td> <td>Active</td> <td>Normal</td> <td>3164095</td> <td>2012-02-21 18:20:56.484 UTC</td> <td></td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	DB Level	DB Birthday	Repl Status	so_carync	so-carync-a	SYSTEM OAM	Standby	Normal	3164095	2012-02-21 18:20:56.484 UTC		so_carync	so-carync-b	SYSTEM OAM	Active	Normal	3164095	2012-02-21 18:20:56.484 UTC		so_carync	dp-carync-1	MP	Active	Normal	3164095	2012-02-21 18:20:56.484 UTC		so_carync	dp-carync-2	MP	Active	Normal	3164095	2012-02-21 18:20:56.484 UTC	
Network Element	Server	Role	HA Role	Status	DB Level	DB Birthday	Repl Status																																			
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so_carync	so-carync-b	SYSTEM OAM	Active	Normal	3164095	2012-02-21 18:20:56.484 UTC																																				
so_carync	dp-carync-1	MP	Active	Normal	3164095	2012-02-21 18:20:56.484 UTC																																				
so_carync	dp-carync-2	MP	Active	Normal	3164095	2012-02-21 18:20:56.484 UTC																																				

**Procedure 17: Backout DP SOAM NE**


Step	Procedure	Result												
<p>8.</p> <input type="checkbox"/>	<p>Using the list of servers associated with the <b>DP SOAM NE</b> shown in the above Step 7.</p> <p>Record the Server names of the <b>DPs</b> associated with the <b>DP SOAM NE</b>.</p>	<ul style="list-style-type: none"> <li>Identify the <b>DP SOAM "Server"</b> names and record them in the space provided below:</li> </ul> <p>Standby DP SOAM: _____</p> <p>Active DP SOAM: _____</p> <p>DP1: _____ DP6: _____</p> <p>DP2: _____ DP7: _____</p> <p>DP3: _____ DP8: _____</p> <p>DP4: _____ DP9: _____</p> <p>DP5: _____ DP10: _____</p>												
<p>9.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Click the "<b>Logout</b>" link on the server GUI.</p>													
<p>10.</p> <input type="checkbox"/>	<p>Using the <b>VIP</b> address, access the <b>System OAM GUI</b>.</p>	<p>Access the <b>System OAM GUI</b> as specified in <b>Appendix A</b>.</p>												
<p>11.</p> <input type="checkbox"/>	<p><b>System OAM GUI:</b></p> <p>Select...</p> <p><b>Main Menu</b>          → <b>Status &amp; Manage</b>          → <b>Database</b></p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>Network OAM</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>Network OAM</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-1</td> <td>Query Server</td> </tr> </tbody> </table>	Network Element	Server	Role	sds_mrsvnc	sds-mrsvnc-a	Network OAM	sds_mrsvnc	sds-mrsvnc-b	Network OAM	sds_mrsvnc	sds-mrsvnc-1	Query Server
Network Element	Server	Role												
sds_mrsvnc	sds-mrsvnc-a	Network OAM												
sds_mrsvnc	sds-mrsvnc-b	Network OAM												
sds_mrsvnc	sds-mrsvnc-1	Query Server												

**Procedure 17: Backout DP SOAM NE**

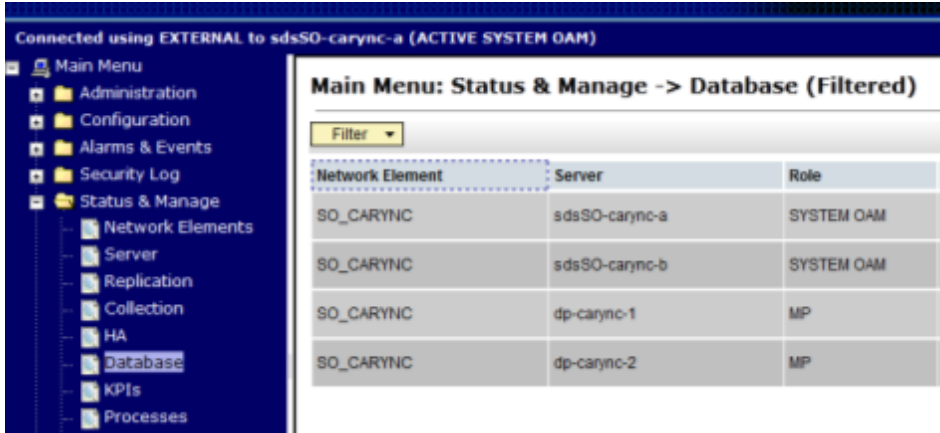

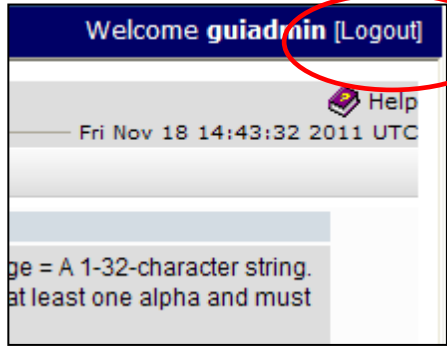
Step	Procedure	Result
<p>12.</p> <input type="checkbox"/>	<p><b>System OAM GUI:</b></p> <p>1) Click on the “<b>Disable Site Provisioning</b>” dialogue button in the bottom left corner of the right panel.</p> <p>2) In the pop-up window, click on the “<b>OK</b>” dialogue button.</p>	
<p>13.</p> <input type="checkbox"/>	<p><b>System OAM GUI:</b></p> <p>The user should be presented with a confirmation message (in the banner area) stating: “<b>Site Provisioning has been manually disabled</b>”.</p> <p><b>NOTE:</b> As a result of disabling Site Provisioning, Warning (<b>Event ID 10008</b>): “Provisioning Manually Disabled” will alarm until Site Provisioning is re-enabled.</p>	
<p>14.</p> <input type="checkbox"/>	<p><b>System OAM GUI:</b></p> <p>Click the “<b>Logout</b>” link on the server GUI.</p>	
<p>15.</p> <input type="checkbox"/>	<p>Using the <b>VIP</b> address, access the Primary Provisioning Site GUI.</p>	<p>Access the Primary Provisioning Site GUI as specified in <b>Appendix A</b>.</p>



**Procedure 17: Backout DP SOAM NE**

Step	Procedure	Result
<p>16.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Using the list of servers recorded in step 8, <b>inhibit</b> all servers associated with the <b>DP SOAM NE</b>.</p>	<p><b>Inhibit</b> all servers associated with the <b>DP SOAM NE</b> (listed in Step 8) using instructions specified in <b>Steps 2 - 16 of Procedure 14 (Inhibit SOAM Servers and Perform Server Backup)</b>.</p>
<div style="display: flex; align-items: center;">  <p><b>NOTE: Steps 17 and 18 of this Procedure may be executed in parallel for DPs associated with the DP SOAM NE being Backed Out.</b></p> </div>		
<p>17.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Referencing the list of servers recorded in <b>Step 8</b>, backout the <b>DP1 Server</b>.</p>	<p><b>Backout</b> the target release for the <b>DP1 Server</b> as specified in <b>Appendix D (Backing out a Single Server)</b>.</p>
<p>18.</p> <input type="checkbox"/>	<p>1) Record the Server names of the <b>DPS</b> associated with the <b>DP SOAM NE</b></p> <p>2) Beginning with <b>DP2</b>, backout each <b>DP Server</b>.</p> <p>3) <b>“Check off”</b> each Check Box as backout is completed for the <b>DP Server</b> listed to its right.</p>	<ul style="list-style-type: none"> <li>• Record the Server name of each <b>DP</b> to be <b>“Backed Out”</b> in the space provided below:</li> <li>• <b>“Check off”</b> the associated <b>Check Box</b> as <b>Appendix D</b> is completed for each <b>DP</b>.</li> </ul> <div style="display: flex; flex-wrap: wrap; gap: 10px;"> <div style="width: 50%;"><input checked="" type="checkbox"/> DP1: _____</div> <div style="width: 50%;"><input type="checkbox"/> DP6: _____</div> <div style="width: 50%;"><input type="checkbox"/> DP2: _____</div> <div style="width: 50%;"><input type="checkbox"/> DP7: _____</div> <div style="width: 50%;"><input type="checkbox"/> DP3: _____</div> <div style="width: 50%;"><input type="checkbox"/> DP8: _____</div> <div style="width: 50%;"><input type="checkbox"/> DP4: _____</div> <div style="width: 50%;"><input type="checkbox"/> DP9: _____</div> <div style="width: 50%;"><input type="checkbox"/> DP5: _____</div> <div style="width: 50%;"><input type="checkbox"/> DP10: _____</div> </div>
<p>19.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Backout the <b>Standby DP SOAM Server</b>.</p>	<p><b>Backout</b> the target release for the <b>Standby DP SOAM Server</b> as specified <b>Appendix D (Backing out a Single Server)</b>.</p>
<p>20.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Backout the <b>Active DP SOAM Server</b>.</p>	<p><b>Backout</b> the target release for the <b>Active DP SOAM Server</b> as specified in <b>Appendix D (Backing out a Single Server)</b>.</p>
<p>21.</p> <input type="checkbox"/>	<p>Using the <b>VIP</b> address, access the <b>System OAM GUI</b>.</p>	<p>Access the <b>System OAM GUI</b> as specified in <b>Appendix A</b>.</p>

**Procedure 17: Backout DP SOAM NE**

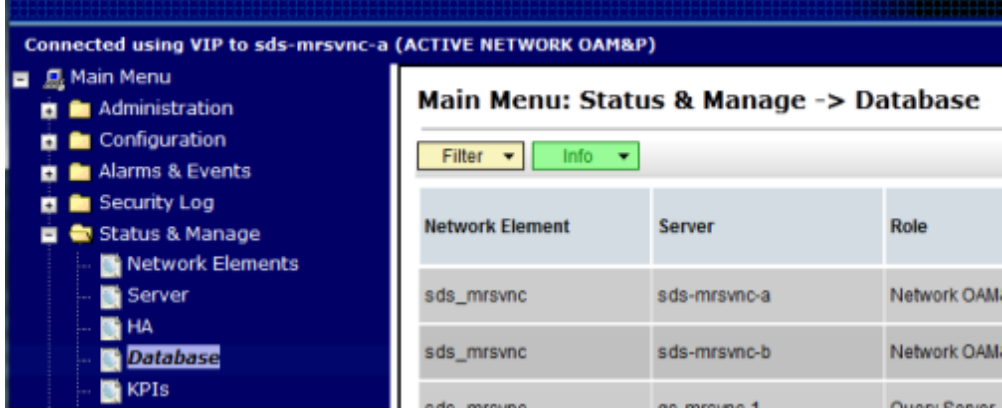
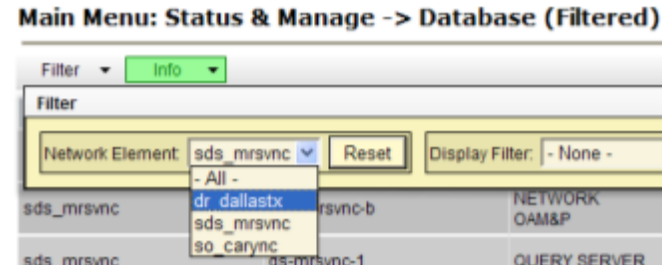
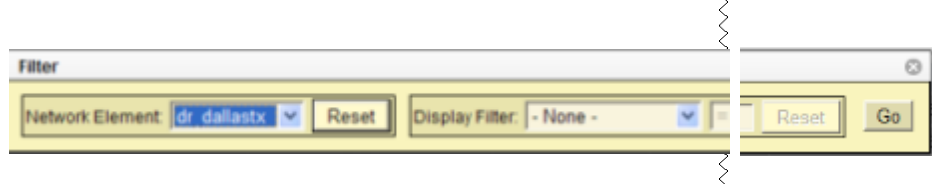
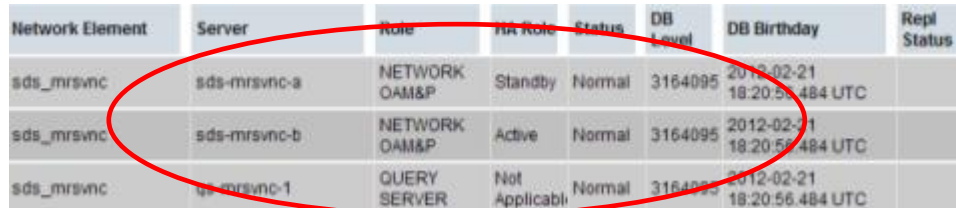
Step	Procedure	Result
<p>22.</p> <p><input type="checkbox"/></p>	<p><b>System OAM GUI:</b></p> <p>Select...</p> <p><b>Main Menu</b>  → <b>Status &amp; Manage</b>  → <b>Database</b></p> <p>...as shown on the right.</p>	
<p>23.</p> <p><input type="checkbox"/></p>	<p><b>System OAM GUI:</b></p> <p>1) Click on the “<b>Enable Site Provisioning</b>” dialogue button in the bottom left corner of the right panel.</p> <p>2) In the pop-up window, click on the “<b>OK</b>” dialogue button.</p>	
<p>24.</p> <p><input type="checkbox"/></p>	<p><b>System OAM GUI:</b></p> <p>Click the “<b>Logout</b>” link on the server GUI.</p>	
<p>25.</p> <p><input type="checkbox"/></p>	<p>Using the <b>VIP</b> address, access the Primary Provisioning Site GUI.</p>	<p>Access the Primary Provisioning Site GUI as specified in <b>Appendix A</b>.</p>
<p>26.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Using the list of servers recorded in <b>step 8</b>, <b>Allow</b> all servers associated with the <b>DP SOAM NE</b>.</p>	<p><b>Allow</b> all servers associated with the <b>DP SOAM NE</b> (listed in Step 8) using instructions as specified in:</p> <ul style="list-style-type: none"> <li>• <b>Steps 16 - 24 of Procedure 15 “Upgrade SOAM NE (SOAM Servers)”</b>, and</li> <li>• <b>Steps 12 - 20 of Procedure 16 “Upgrade SOAM NE (DP Servers)”</b>.</li> </ul>

**Procedure 17: Backout DP SOAM NE**

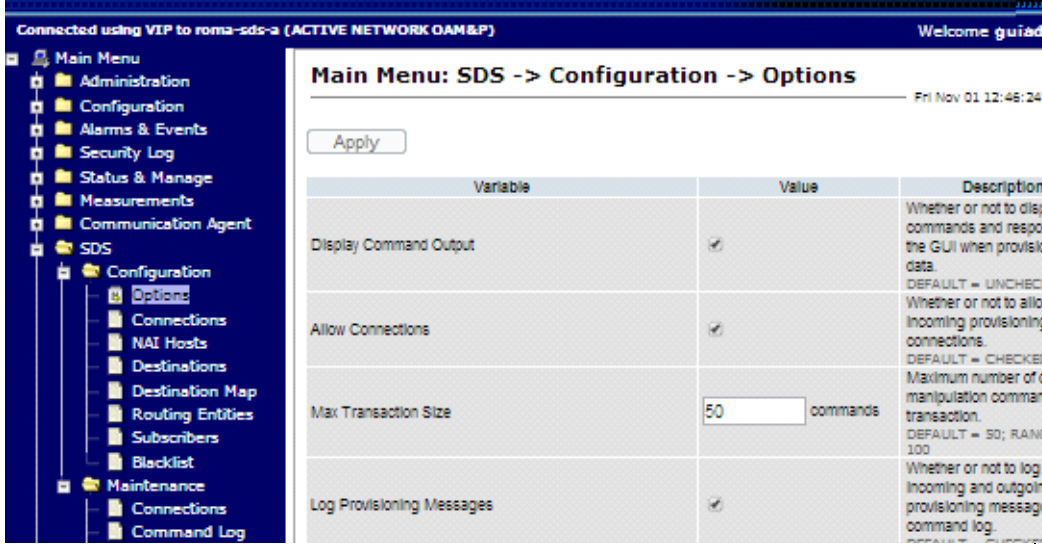

Step	Procedure	Result
27. <input type="checkbox"/>	<b>Active SDS VIP:</b> Execute Health Check at this time only if no other servers require Back Out.  Otherwise, proceed with the next Backout.	Execute Health Check procedures (Post Backout) as specified in <b>Appendix B</b> , if Backout procedures have been completed for all required servers.
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>		

## 7.2 Backout DR SDS NE

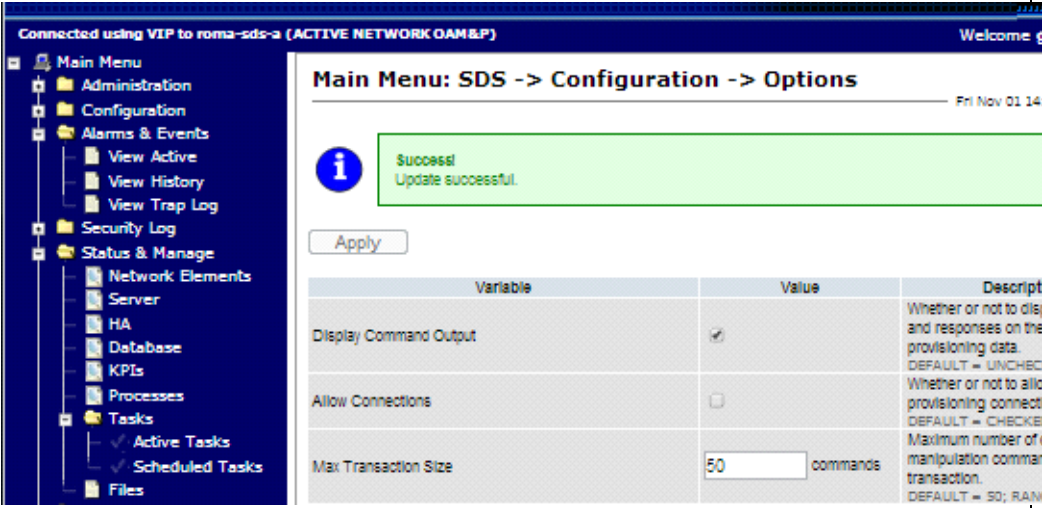

### Procedure 18: Backout DR SDS NE

Step	Procedure	Result																																
6. <input type="checkbox"/>	Using the <b>VIP</b> address, access the Primary Provisioning Site GUI.	<ul style="list-style-type: none"> <li>Access the Primary Provisioning Site GUI as specified in <b>Appendix A</b>.</li> </ul>																																
7. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>Database</b></p> <p>...as shown on the right.</p>																																	
8. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Record the name of the <b>DR SDS</b> Network Element.</p>	<ul style="list-style-type: none"> <li>Record the name of the <b>DR SDS</b> NE which will be “<b>Backed out</b>”.</li> </ul> <p>DR SDS NE: _____</p>																																
9. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>From the “<b>Network Element</b>” filter pull-down, select the name for the <b>DR SDS</b> NE.</p>																																	
10. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Click the “<b>GO</b>” button located on the right end of the filter bar.</p>																																	
11. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented with the list of servers associated with the <b>DR SDS</b> NE.</p> <p>Identify each “<b>Server</b>” and its associated “<b>Role</b>” and “<b>HA Role</b>”.</p>	 <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>HA Role</th> <th>Status</th> <th>DB Level</th> <th>DB Birthday</th> <th>Repl Status</th> </tr> </thead> <tbody> <tr> <td>sds_mvsnvc</td> <td>sds-mvsnvc-a</td> <td>NETWORK OAM&amp;P</td> <td>Standby</td> <td>Normal</td> <td>3164095</td> <td>2012-02-21 18:20:56.484 UTC</td> <td></td> </tr> <tr> <td>sds_mvsnvc</td> <td>sds-mvsnvc-b</td> <td>NETWORK OAM&amp;P</td> <td>Active</td> <td>Normal</td> <td>3164095</td> <td>2012-02-21 18:20:56.484 UTC</td> <td></td> </tr> <tr> <td>sds_mvsnvc</td> <td>sds-mvsnvc-1</td> <td>QUERY SERVER</td> <td>Not Applicable</td> <td>Normal</td> <td>3164095</td> <td>2012-02-21 18:20:56.484 UTC</td> <td></td> </tr> </tbody> </table>	Network Element	Server	Role	HA Role	Status	DB Level	DB Birthday	Repl Status	sds_mvsnvc	sds-mvsnvc-a	NETWORK OAM&P	Standby	Normal	3164095	2012-02-21 18:20:56.484 UTC		sds_mvsnvc	sds-mvsnvc-b	NETWORK OAM&P	Active	Normal	3164095	2012-02-21 18:20:56.484 UTC		sds_mvsnvc	sds-mvsnvc-1	QUERY SERVER	Not Applicable	Normal	3164095	2012-02-21 18:20:56.484 UTC	
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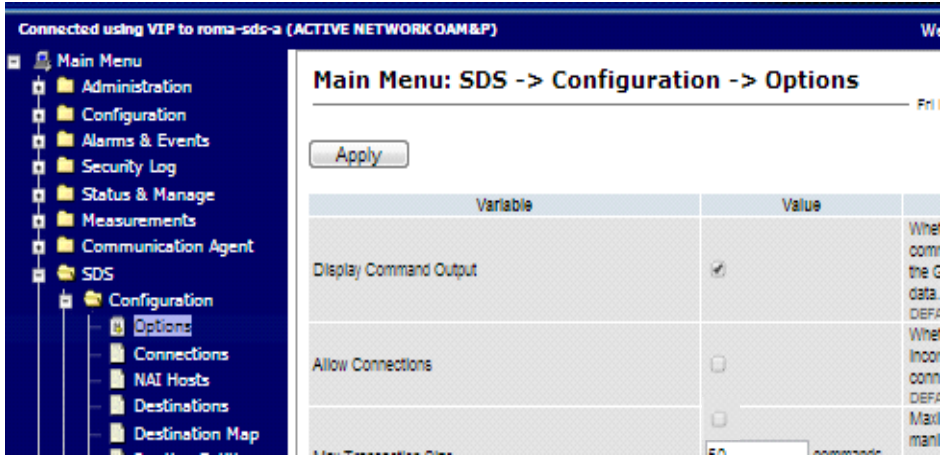
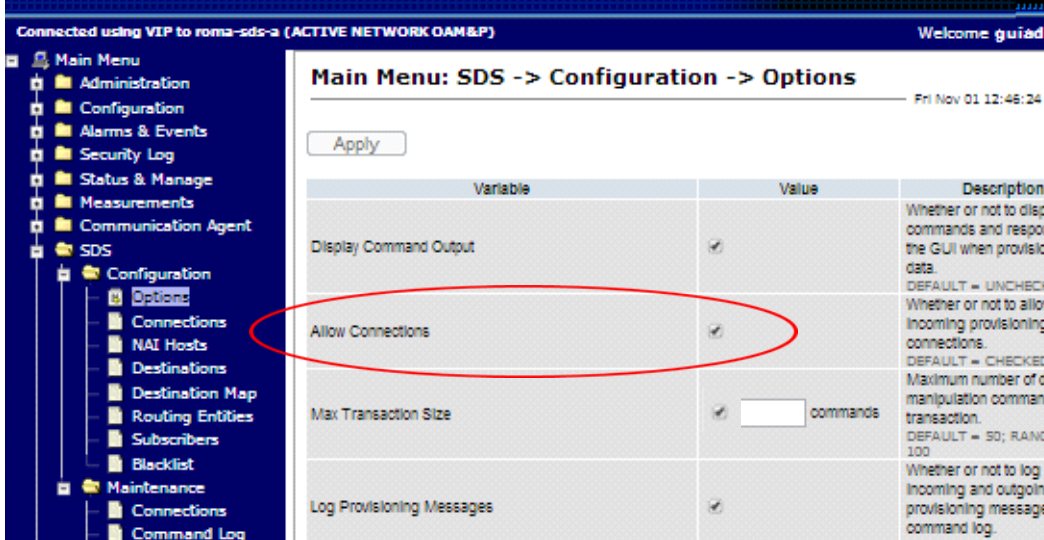
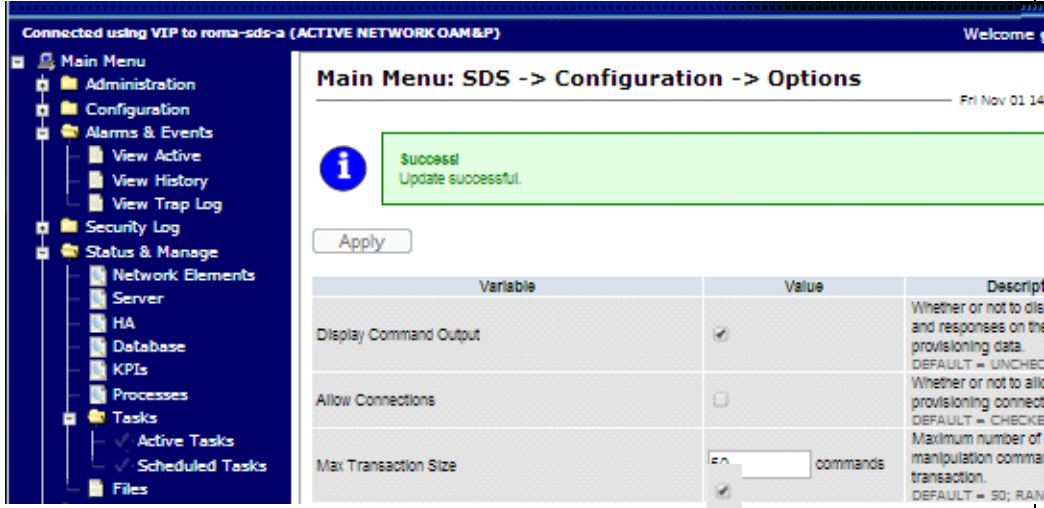
**Procedure 18: Backout DR SDS NE**

Step	Procedure	Result															
<p>12.</p> <p><input type="checkbox"/></p>	<p>Using the list of servers associated with the <b>DR SDS NE</b> shown in the above Step 11.</p> <p>Record the Server names associated with the <b>DR SDS NE</b>.</p>	<ul style="list-style-type: none"> <li>Identify the <b>DR SDS "Server"</b> names and record them in the space provided below:</li> </ul> <p>Standby DR SDS: _____</p> <p>Active DR SDS: _____</p> <p>Query Server: _____</p>															
<p>13.</p> <p><input type="checkbox"/></p> <p>Select...</p> <p><b>Main Menu</b> → <b>SDS</b> → <b>Configuration</b> → <b>Options</b></p> <p>...as shown on the right.</p>		 <p>Connected using VIP to roma-sds-a (ACTIVE NETWORK OAM&amp;P) Welcome guide</p> <p>Main Menu: SDS -&gt; Configuration -&gt; Options</p> <p>Apply</p> <table border="1"> <thead> <tr> <th>Variable</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Display Command Output</td> <td><input checked="" type="checkbox"/></td> <td>Whether or not to display commands and respond the GUI when provision data. DEFAULT = UNCHECKED</td> </tr> <tr> <td>Allow Connections</td> <td><input checked="" type="checkbox"/></td> <td>Whether or not to allow incoming provisioning connections. DEFAULT = CHECKED</td> </tr> <tr> <td>Max Transaction Size</td> <td>50 commands</td> <td>Maximum number of manipulation commands per transaction. DEFAULT = 50; RANGE 100</td> </tr> <tr> <td>Log Provisioning Messages</td> <td><input checked="" type="checkbox"/></td> <td>Whether or not to log incoming and outgoing provisioning message command log.</td> </tr> </tbody> </table>	Variable	Value	Description	Display Command Output	<input checked="" type="checkbox"/>	Whether or not to display commands and respond the GUI when provision data. DEFAULT = UNCHECKED	Allow Connections	<input checked="" type="checkbox"/>	Whether or not to allow incoming provisioning connections. DEFAULT = CHECKED	Max Transaction Size	50 commands	Maximum number of manipulation commands per transaction. DEFAULT = 50; RANGE 100	Log Provisioning Messages	<input checked="" type="checkbox"/>	Whether or not to log incoming and outgoing provisioning message command log.
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<p>14.</p> <p><input type="checkbox"/></p> <p>Disable Connections:</p> <p>1) Un-check the "Allow Connections" check box.</p> <p>2) Click on the "Apply" dialogue button.</p>		 <p>Connected using VIP to roma-sds-a (ACTIVE NETWORK OAM&amp;P) Welcome guide</p> <p>Main Menu: SDS -&gt; Configuration -&gt; Options</p> <p>Apply</p> <table border="1"> <thead> <tr> <th>Variable</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Display Command Output</td> <td><input checked="" type="checkbox"/></td> <td>Whether or not to display commands and respond the GUI when provision data. DEFAULT = UNCHECKED</td> </tr> <tr> <td>Allow Connections</td> <td><input type="checkbox"/></td> <td>Whether or not to allow incoming provisioning connections. DEFAULT = CHECKED</td> </tr> <tr> <td>Max Transaction Size</td> <td>50 commands</td> <td>Maximum number of manipulation commands per transaction. DEFAULT = 50; RANGE 100</td> </tr> </tbody> </table>	Variable	Value	Description	Display Command Output	<input checked="" type="checkbox"/>	Whether or not to display commands and respond the GUI when provision data. DEFAULT = UNCHECKED	Allow Connections	<input type="checkbox"/>	Whether or not to allow incoming provisioning connections. DEFAULT = CHECKED	Max Transaction Size	50 commands	Maximum number of manipulation commands per transaction. DEFAULT = 50; RANGE 100			
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Max Transaction Size	50 commands	Maximum number of manipulation commands per transaction. DEFAULT = 50; RANGE 100															

**Procedure 18: Backout DR SDS NE**

Step	Procedure	Result												
<p>15.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented with a confirmation message (in the banner area) stating: <b>“Update Successful”</b>.</p> <p><b>NOTE:</b> As a result of not allowing connections, Critical (Event ID 14100): “Interface Disabled” will alarm until Connections are Allowed again.</p>	 <p>The screenshot shows the SDS GUI interface. On the left is a navigation tree with categories like Administration, Configuration, Alarms &amp; Events, Security Log, and Status &amp; Manage. The main area displays a 'Main Menu: SDS -&gt; Configuration -&gt; Options' window. A green banner at the top indicates 'Success! Update successful.' Below this is an 'Apply' button and a table of configuration variables.</p> <table border="1"> <thead> <tr> <th>Variable</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Display Command Output</td> <td><input checked="" type="checkbox"/></td> <td>Whether or not to display and responses on the provisioning data. DEFAULT = UNCHECKED</td> </tr> <tr> <td>Allow Connections</td> <td><input type="checkbox"/></td> <td>Whether or not to allow provisioning connections. DEFAULT = CHECKED</td> </tr> <tr> <td>Max Transaction Size</td> <td>50 commands</td> <td>Maximum number of commands per manipulation command transaction. DEFAULT = 50; RANGE = 1-100</td> </tr> </tbody> </table>	Variable	Value	Description	Display Command Output	<input checked="" type="checkbox"/>	Whether or not to display and responses on the provisioning data. DEFAULT = UNCHECKED	Allow Connections	<input type="checkbox"/>	Whether or not to allow provisioning connections. DEFAULT = CHECKED	Max Transaction Size	50 commands	Maximum number of commands per manipulation command transaction. DEFAULT = 50; RANGE = 1-100
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Max Transaction Size	50 commands	Maximum number of commands per manipulation command transaction. DEFAULT = 50; RANGE = 1-100												
<p>16.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Using the list of servers recorded in step 12, <b>inhibit</b> all servers associated with the <b>DR SDS NE</b>.</p>	<p><b>Inhibit</b> replication to all servers associated with the <b>DR SDS NE</b> (listed in Step 7) as specified in <b>Procedure 6 (Inhibit DR Provisioning Site Servers)</b>.</p>												
 <p><b>NOTE: Steps 17 and 18 of this Procedure may be executed in parallel.</b></p>														
<p>17.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Backout <b>Standby - DR SDS Server</b>.</p>	<p><b>Backout the Standby - DR SDS Server</b> as specified in <b>Appendix D (Backing out a Single Server)</b>.</p>												
<p>18.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Backout <b>Query Server</b>.</p>	<p><b>Backout the Query Server - DR</b> as specified in <b>Appendix D (Backing out a Single Server)</b>.</p>												
<p>19.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Backout <b>Active - DR SDS Server</b>.</p>	<p><b>Backout the Active - DR SDS Server</b> as specified in <b>Appendix D (Backing out a Single Server)</b>.</p>												
<p>20.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Using the list of servers recorded in step 12, <b>Allow</b> all servers associated with the <b>DR SDS NE</b>.</p>	<p><b>Allow</b> replication to all servers associated with the <b>DR SDS NE</b> (listed in Step 7) as specified in <b>Procedure 12 (Allow DR Provisioning Site Servers)</b>.</p>												
<p>21.</p> <input type="checkbox"/>	<p>Using the <b>VIP</b> address, access the Primary SDS GUI.</p>	<p>Access the Primary SDS GUI as specified in <b>Appendix A</b>.</p>												

**Procedure 18: Backout DR SDS NE**

Step	Procedure	Result
<p>22.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>  → <b>SDS</b>  → <b>Configuration</b>  → <b>Options</b></p> <p>...as shown on the right.</p>	
<p>23.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Enable Connections:</p> <p>1) Check the “<b>Allow Connections</b>” check box.</p> <p>2) Click on the “<b>Apply</b>” dialogue button</p>	
<p>24.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented with a confirmation message (in the banner area) stating: “<b>Update Successful</b>”.</p> <p><b>NOTE:</b> As a result of again allowing connections, Critical (Event ID 14100): “Interface Disabled” will be cleared.</p>	



**Note:** Minor Alarm 31100 {DB replication process (inetsync) is impaired by a s/w fault} may raise on each server until all NOAM servers are also backed out to the original release. There is no functional impact. (PR 220871)

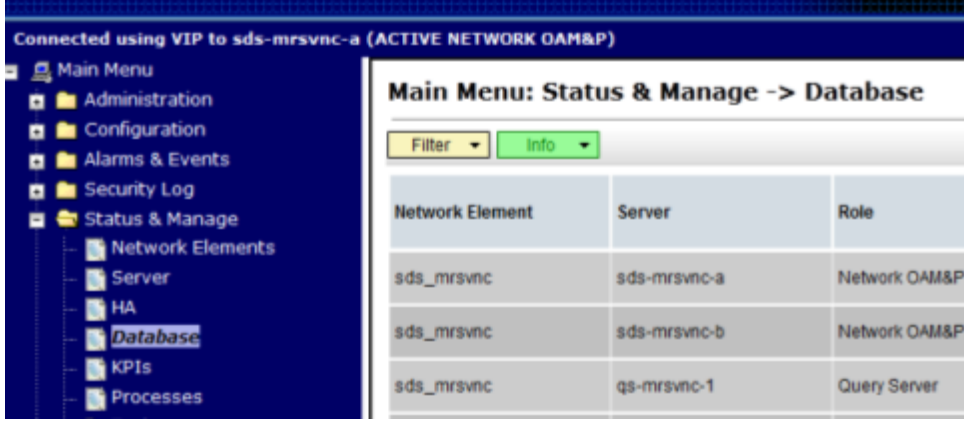
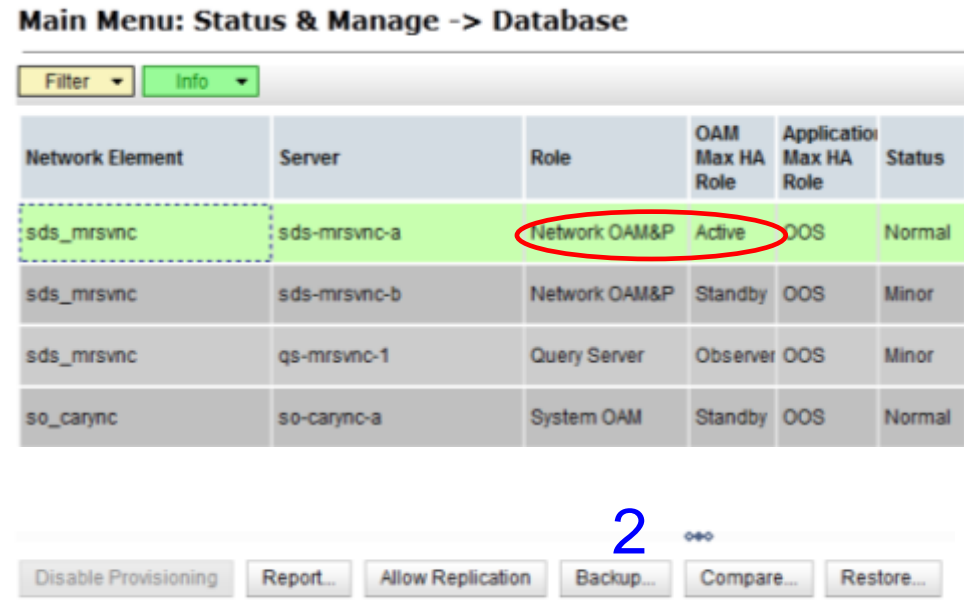
**Procedure 18: Backout DR SDS NE**

Step	Procedure	Result
25. <input type="checkbox"/>	<b>Active SDS VIP:</b>  Execute Health Check at this time only if no other servers require Back Out.  Otherwise, proceed with the next Backout.	Execute Health Check procedures (Post Backout) as specified in <b>Appendix B</b> , if Backout procedures have been completed for all required servers.
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>		

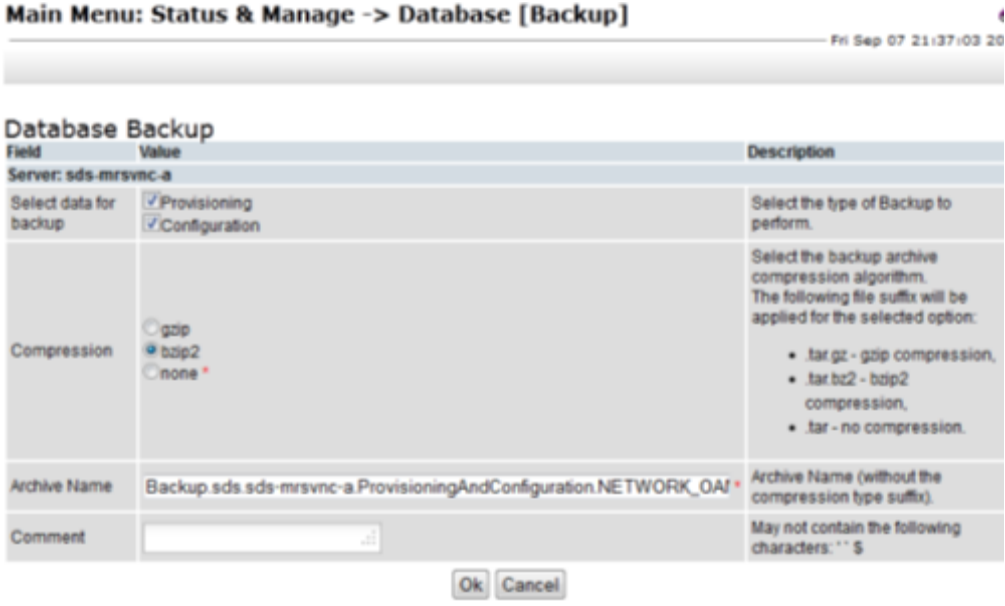
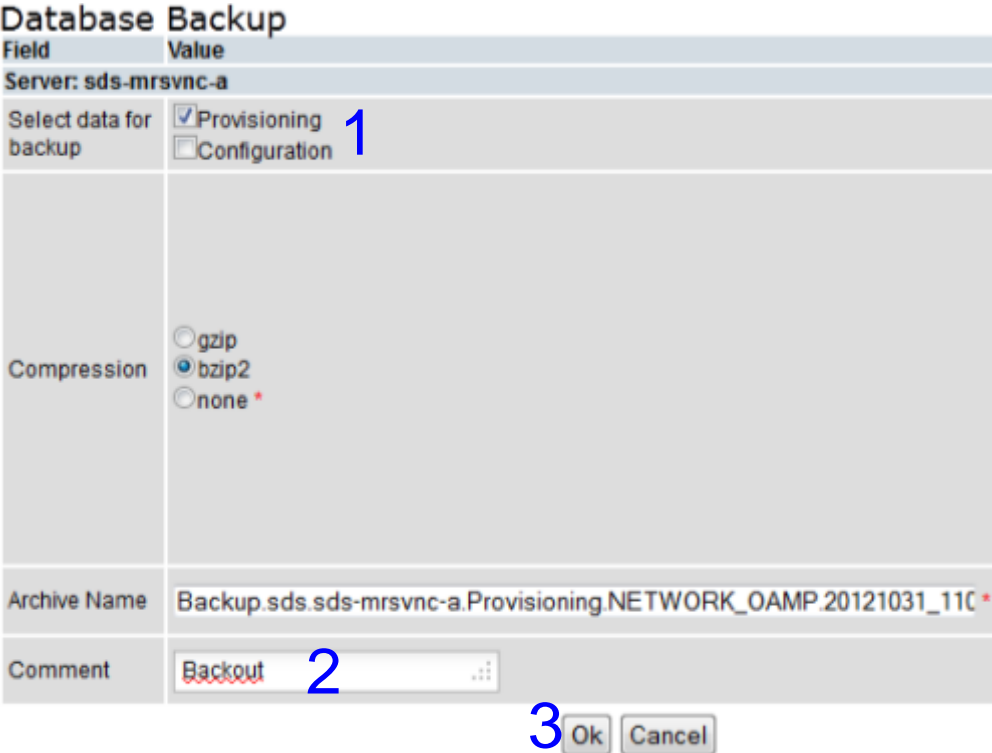
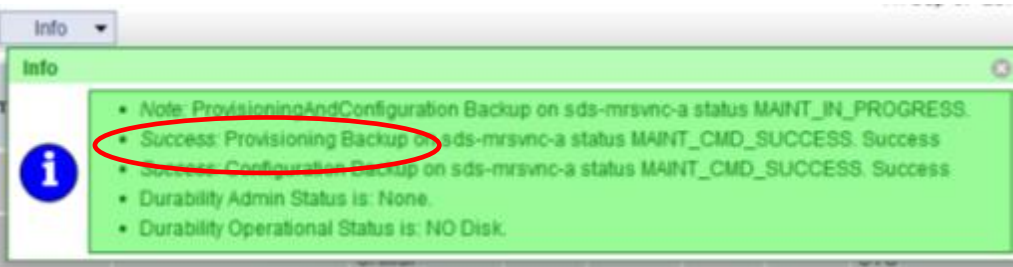


### 7.3 Backout Primary SDS NE

#### Procedure 19: Backout Primary SDS NE

Step	Procedure	Result
1. <input type="checkbox"/>	Using the <b>VIP</b> address, access the Primary Provisioning Site GUI.	<ul style="list-style-type: none"> <li>Access the Primary Provisioning Site GUI as specified in <b>Appendix A</b>.</li> </ul>
2. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>Database</b></p> <p>...as shown on the right.</p>	
3. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>To preserve provisioning changes made since the upgrade, continue with <b>Steps 3 - 6</b>.</p> <p>Otherwise, skip to <b>Step 7</b>.</p> <p><b>1)</b> Select the name of the <b>Network OAM&amp;P Active</b> role.</p> <p><b>2)</b> Then click the <b>“Backup...”</b> button.</p>	

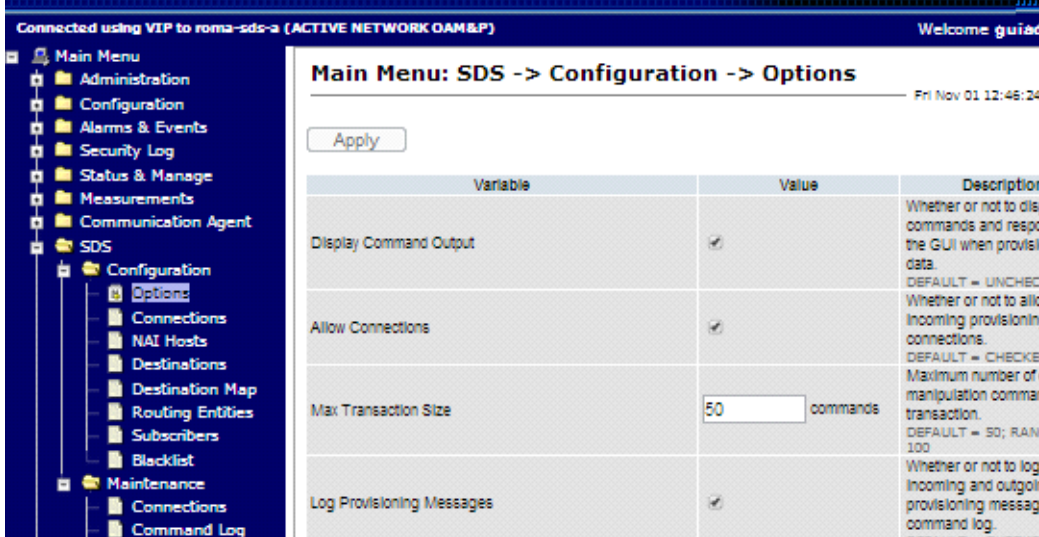
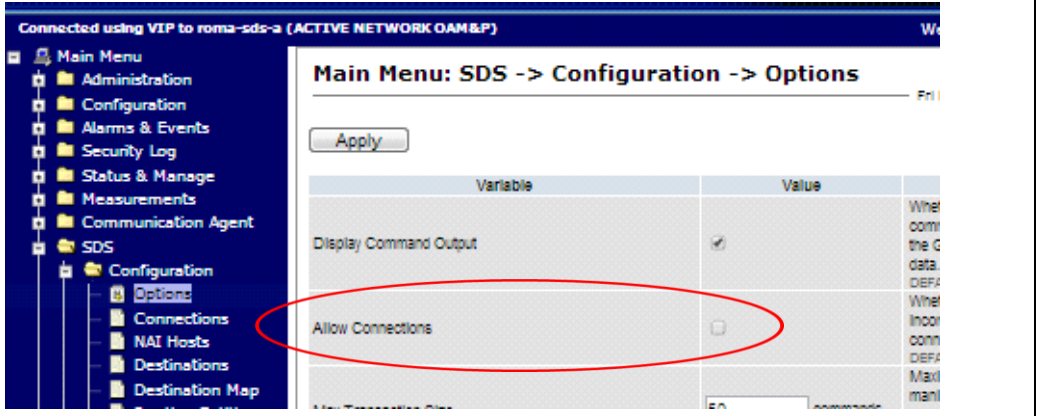
**Procedure 19: Backout Primary SDS NE**

Step	Procedure	Result
<p>4.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user will be present with the backup form.</p>	
<p>5.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>1) Uncheck the <b>Configuration</b> box so only <b>Provisioning</b> data is backed up.</p> <p>2) Enter a comment in the comment field.</p> <p>3) Click “<b>Ok</b>” button.</p>	
<p>6.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Wait for the <b>Info</b> tab message to indicate successful backup.</p>	

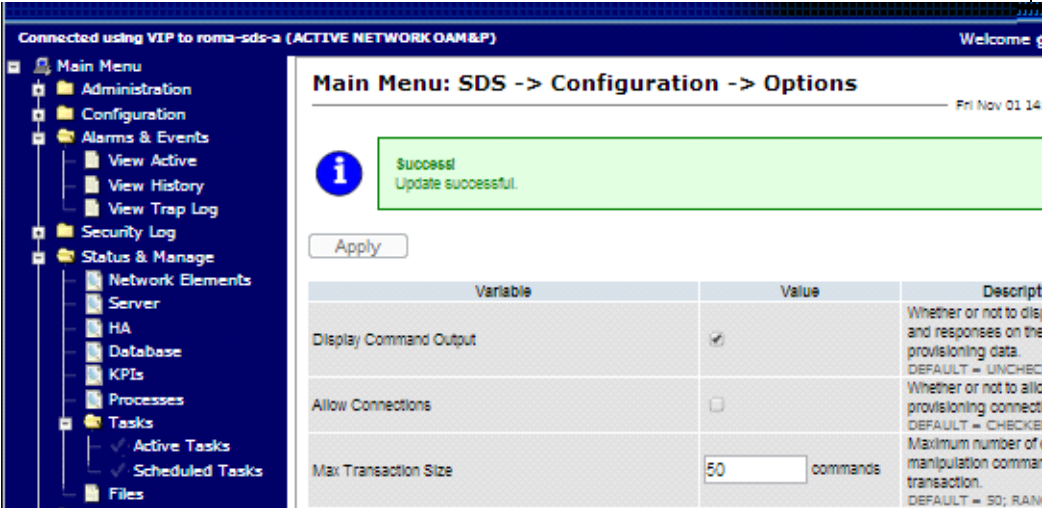


**Procedure 19: Backout Primary SDS NE**

Step	Procedure	Result																																
7. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>Database</b></p> <p>...as shown on the right.</p>																																	
8. <input type="checkbox"/>	<p>Record the name of the <b>Primary SDS NE</b> to be downgraded (<b>Backed out</b>) in the space provided to the right.</p>	<ul style="list-style-type: none"> <li>Record the name of the <b>Primary SDS NE</b> which will be "<b>Backed out</b>".</li> </ul> <p>Primary SDS NE: _____</p>																																
9. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>From the "<b>Network Element</b>" filter pull-down, select the name for the <b>Primary SDS NE</b>.</p>																																	
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sds_mrsync	sds-mrsync-b	NETWORK OAM&P	Active	Normal	3164095	2012-02-21 18:20:56.484 UTC																												
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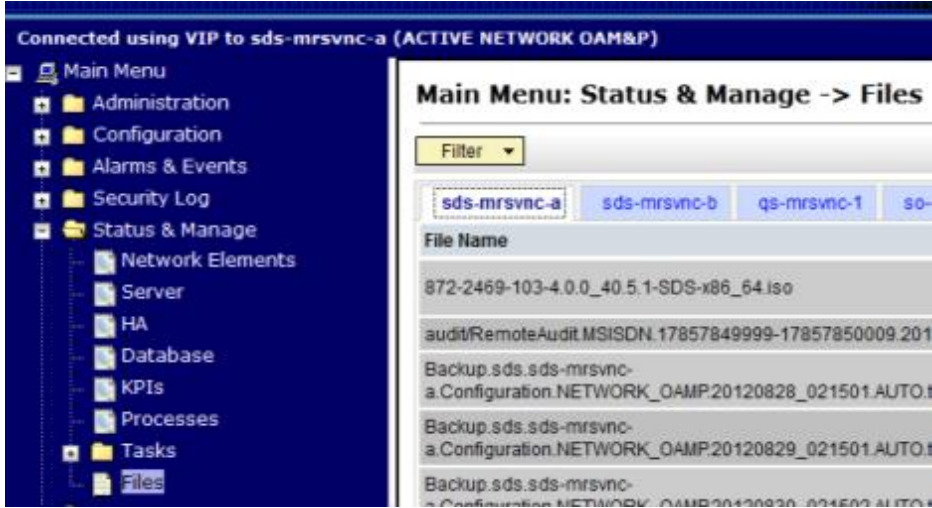
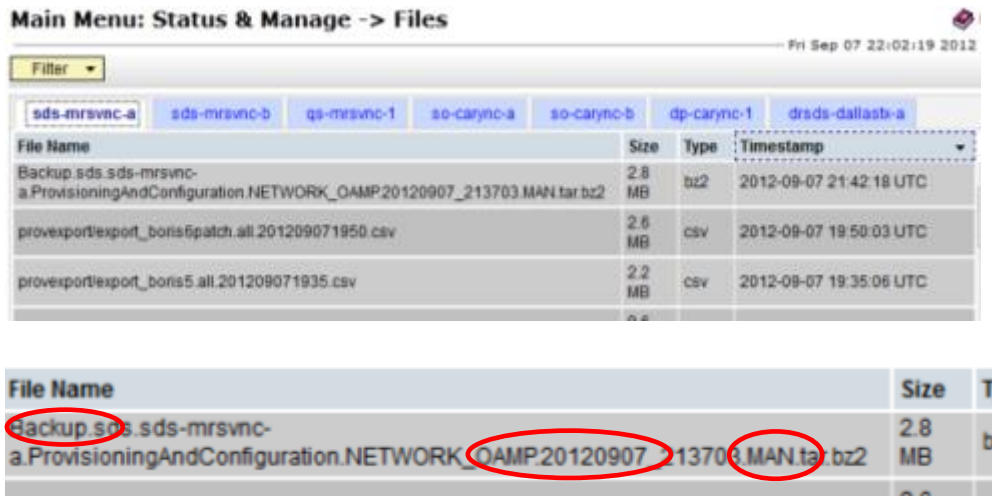
**Procedure 19: Backout Primary SDS NE**

Step	Procedure	Result															
<p>12.</p> <p><input type="checkbox"/></p>	<p>Using the list of servers associated with the <b>Primary SDS NE</b> shown in the above Step 11.</p> <p>Record the Server names associated with the <b>Primary SDS NE</b>.</p>	<ul style="list-style-type: none"> <li>Identify the <b>Primary SDS “Server”</b> names and record them in the space provided below:</li> </ul> <p>Standby Primary SDS: _____</p> <p>Active Primary SDS: _____</p> <p>Query Server: _____</p>															
<p>13.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>          → <b>SDS</b>            → <b>Configuration</b>              → <b>Options</b></p> <p>...as shown on the right.</p>	 <p>Connected using VIP to roma-sds-a (ACTIVE NETWORK OAM&amp;P) Welcome guide</p> <p>Main Menu: SDS -&gt; Configuration -&gt; Options</p> <p>Apply</p> <table border="1"> <thead> <tr> <th>Variable</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Display Command Output</td> <td><input checked="" type="checkbox"/></td> <td>Whether or not to display commands and report the GUI when provisioning data. DEFAULT = UNCHECKED</td> </tr> <tr> <td>Allow Connections</td> <td><input checked="" type="checkbox"/></td> <td>Whether or not to allow incoming provisioning connections. DEFAULT = CHECKED</td> </tr> <tr> <td>Max Transaction Size</td> <td>50 commands</td> <td>Maximum number of manipulation commands per transaction. DEFAULT = 50; RANGE 1-100</td> </tr> <tr> <td>Log Provisioning Messages</td> <td><input checked="" type="checkbox"/></td> <td>Whether or not to log incoming and outgoing provisioning messages to the command log.</td> </tr> </tbody> </table>	Variable	Value	Description	Display Command Output	<input checked="" type="checkbox"/>	Whether or not to display commands and report the GUI when provisioning data. DEFAULT = UNCHECKED	Allow Connections	<input checked="" type="checkbox"/>	Whether or not to allow incoming provisioning connections. DEFAULT = CHECKED	Max Transaction Size	50 commands	Maximum number of manipulation commands per transaction. DEFAULT = 50; RANGE 1-100	Log Provisioning Messages	<input checked="" type="checkbox"/>	Whether or not to log incoming and outgoing provisioning messages to the command log.
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<p>14.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Disable Connections:</p> <ol style="list-style-type: none"> <li>Un-check the <b>“Allow Connections”</b> check box.</li> <li>Click on the <b>“Apply”</b> dialogue button.</li> </ol>	 <p>Connected using VIP to roma-sds-a (ACTIVE NETWORK OAM&amp;P) Welcome guide</p> <p>Main Menu: SDS -&gt; Configuration -&gt; Options</p> <p>Apply</p> <table border="1"> <thead> <tr> <th>Variable</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Display Command Output</td> <td><input checked="" type="checkbox"/></td> <td>Whether or not to display commands and report the GUI when provisioning data. DEFAULT = UNCHECKED</td> </tr> <tr> <td>Allow Connections</td> <td><input type="checkbox"/></td> <td>Whether or not to allow incoming provisioning connections. DEFAULT = CHECKED</td> </tr> <tr> <td>Max Transaction Size</td> <td>50 commands</td> <td>Maximum number of manipulation commands per transaction. DEFAULT = 50; RANGE 1-100</td> </tr> <tr> <td>Log Provisioning Messages</td> <td><input checked="" type="checkbox"/></td> <td>Whether or not to log incoming and outgoing provisioning messages to the command log.</td> </tr> </tbody> </table>	Variable	Value	Description	Display Command Output	<input checked="" type="checkbox"/>	Whether or not to display commands and report the GUI when provisioning data. DEFAULT = UNCHECKED	Allow Connections	<input type="checkbox"/>	Whether or not to allow incoming provisioning connections. DEFAULT = CHECKED	Max Transaction Size	50 commands	Maximum number of manipulation commands per transaction. DEFAULT = 50; RANGE 1-100	Log Provisioning Messages	<input checked="" type="checkbox"/>	Whether or not to log incoming and outgoing provisioning messages to the command log.
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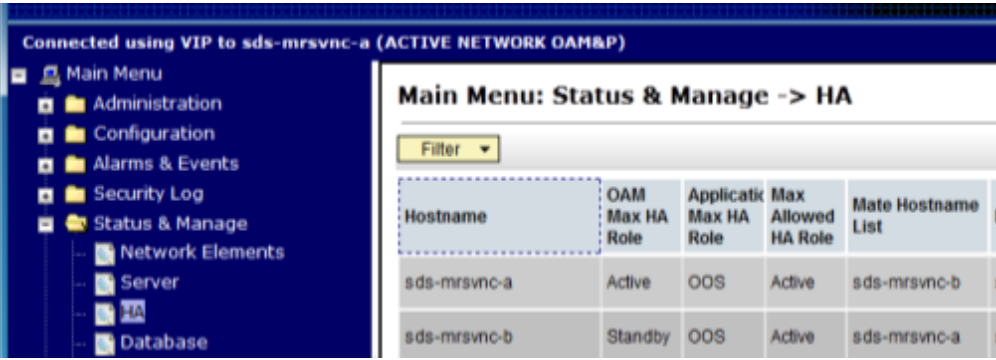
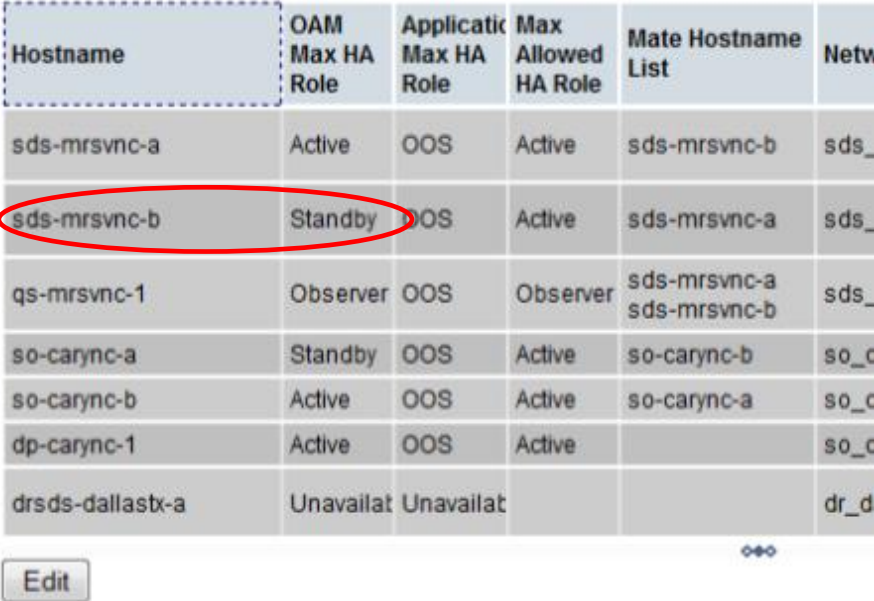
**Procedure 19: Backout Primary SDS NE**

Step	Procedure	Result												
<p>15.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented with a confirmation message (in the banner area) stating: <b>“Update Successful”</b>.</p> <p><b>NOTE:</b> As a result of not allowing connections, Critical (Event ID 14100): “Interface Disabled” will alarm until Connections are Allowed again.</p>	 <p>The screenshot shows the 'Main Menu: SDS -&gt; Configuration -&gt; Options' page. A green success message states 'Success Update successful.' Below it is an 'Apply' button and a table of configuration variables:</p> <table border="1"> <thead> <tr> <th>Variable</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Display Command Output</td> <td><input checked="" type="checkbox"/></td> <td>Whether or not to display and responses on the provisioning data. DEFAULT = UNCHECKED</td> </tr> <tr> <td>Allow Connections</td> <td><input type="checkbox"/></td> <td>Whether or not to allow provisioning connect. DEFAULT = CHECKED</td> </tr> <tr> <td>Max Transaction Size</td> <td>50 commands</td> <td>Maximum number of commands per transaction. DEFAULT = 50; RANGE = 1-100</td> </tr> </tbody> </table>	Variable	Value	Description	Display Command Output	<input checked="" type="checkbox"/>	Whether or not to display and responses on the provisioning data. DEFAULT = UNCHECKED	Allow Connections	<input type="checkbox"/>	Whether or not to allow provisioning connect. DEFAULT = CHECKED	Max Transaction Size	50 commands	Maximum number of commands per transaction. DEFAULT = 50; RANGE = 1-100
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<p>16.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Inhibit all non-active servers across all network elements.</p>	<p><b>Inhibit <i>only non-active</i> servers</b> (whether standby or query server) across <i>all</i> network elements as specified in:</p> <ul style="list-style-type: none"> <li>• <b>Procedure 6</b> (Inhibit DR Provisioning Site Servers),</li> <li>• <b>Procedure 7</b> (Inhibit Primary Provisioning Site Servers), and</li> <li>• Using instructions specified in <b>Steps 2 - 16 of Procedure 14</b> (Inhibit SOAM Servers and Perform Server Backup).</li> </ul>												
<p>17.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Inhibit all active servers across all network elements.</p>	<p><b>Inhibit all remaining (ie, <i>active</i>) servers</b> across <i>all</i> network elements as specified in:</p> <ul style="list-style-type: none"> <li>• <b>Procedure 6</b> (Inhibit DR Provisioning Site Servers),</li> <li>• <b>Procedure 7</b> (Inhibit Primary Provisioning Site Servers), and</li> <li>• Using instructions specified in <b>Steps 2 - 16 of Procedure 14</b> (Inhibit SOAM Servers and Perform Server Backup).</li> </ul>												
 <p><b>NOTE: Steps 18 and 19 of this Procedure may be executed in parallel.</b></p>														
<p>18.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Backout <b>Standby - Primary SDS Server</b>.</p>	<p><b>Backout</b> the target release for the <b>Standby - Primary SDS Server</b> as specified in <b>Appendix D</b> (Backing out a Single Server).</p>												
<p>19.</p> <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Backout <b>Query Server</b>.</p>	<p><b>Backout</b> the target release for the <b>Query Server</b> as specified in <b>Appendix D</b> (Backing out a Single Server).</p>												
 <p><b>!! WARNING !! STEPS 18 and 19 MUST BE COMPLETED BEFORE CONTINUING.</b></p>														

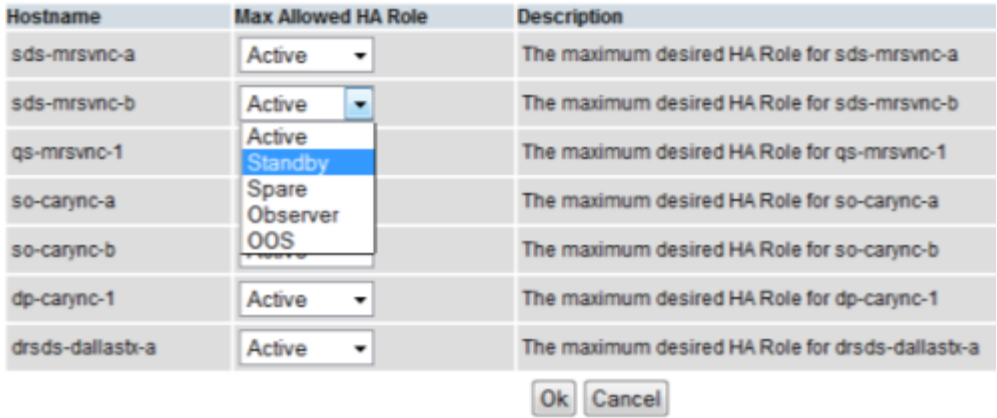
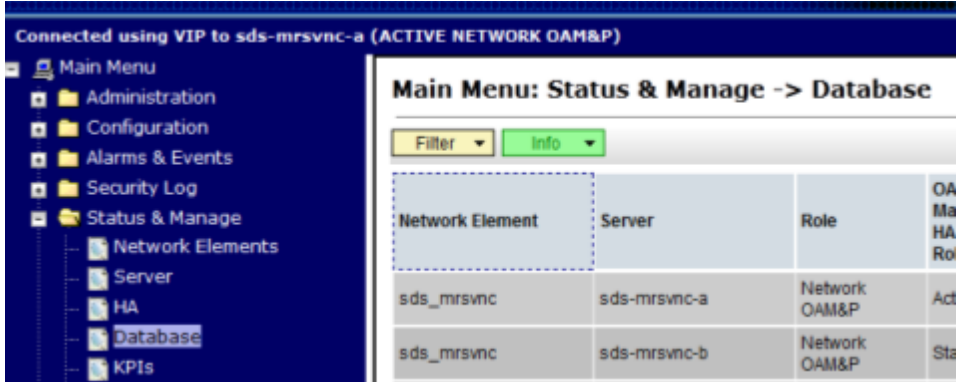
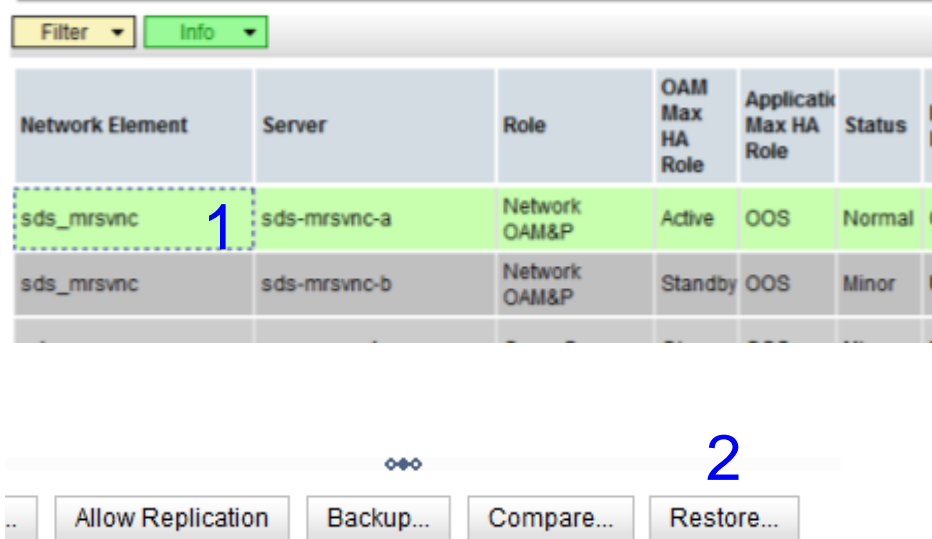
**Procedure 19: Backout Primary SDS NE**

Step	Procedure	Result
20. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Backout <b>Active - Primary SDS Server</b>.</p>	<p><b>Backout</b> the target release for the <b>Active - Primary SDS Server</b> as specified in <b>Appendix D</b> (<i>Backing out a Single Server</i>).</p>
21. <input type="checkbox"/>	<p>Using the <b>VIP</b> address, access the Primary SDS GUI.</p>	<p>Access the Primary SDS GUI as specified in <b>Appendix A</b>.</p>
22. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>Files</b></p> <p>...as shown on the right.</p>	
23. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>1) Click the <b>Timestamp</b> header so the black arrow points downward, to sort in reverse chronology.</p> <p>1) Find your backup which should start with <b>Backup</b> with <b>.MAN.</b> extension and exhibit a recent timestamp encoded after the <b>OAMP</b> text.</p>	

**Procedure 19: Backout Primary SDS NE**


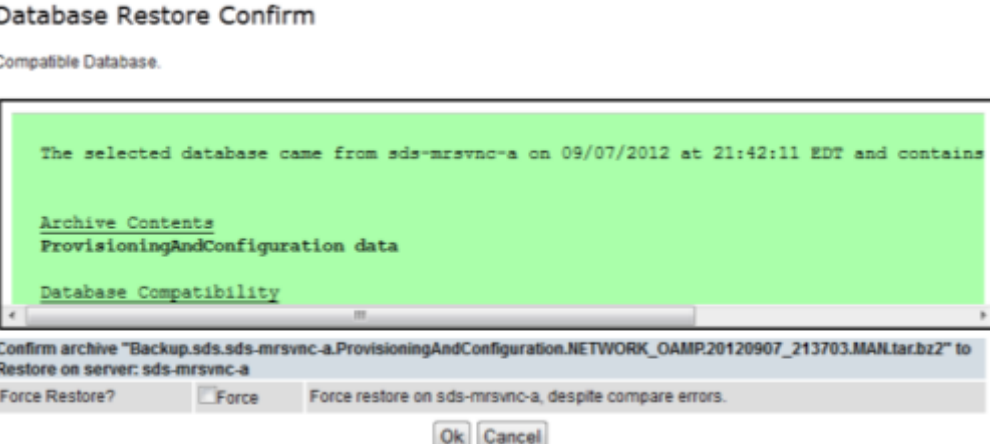
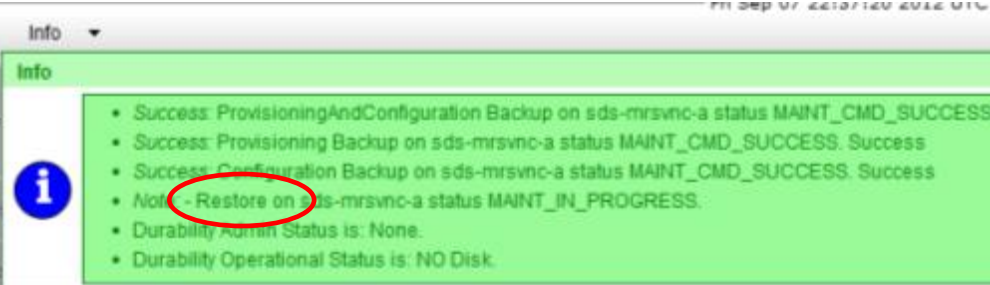
Step	Procedure	Result																																																
<p>24.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p><b>If you found the backup, continue to the next step.</b> Otherwise, click on the Standby server's tab and repeat step 23 above.</p>	<ul style="list-style-type: none"> <li><b>If you found the backup, continue to the next step.</b> Otherwise, click on the Standby server's tab and repeat step 23 above. If the Standby server has the backup file, you will need to set the <b>Active</b> server's Max Allowed HA Role to Standby in the next 3 steps (instead of the Standby server as shown).</li> </ul>  <p><b>Main Menu: Status &amp; Manage -&gt; Files</b></p> <table border="1"> <thead> <tr> <th>File Name</th> <th>Size</th> <th>Type</th> <th>Timestamp</th> </tr> </thead> <tbody> <tr> <td>Backup.sds.sds-mrsvnc-a.ProvisioningAndConfiguration.NETWORK_OAMP20120907_213703.MAN.tar.bz2</td> <td>2.8 MB</td> <td>bz2</td> <td>2012-09-07 21:42:18 UTC</td> </tr> <tr> <td>provexport/export_boris5patch.all.201209071950.csv</td> <td>2.6 MB</td> <td>csv</td> <td>2012-09-07 19:50:03 UTC</td> </tr> <tr> <td>provexport/export_boris5.all.201209071935.csv</td> <td>2.2 MB</td> <td>csv</td> <td>2012-09-07 19:35:06 UTC</td> </tr> </tbody> </table>	File Name	Size	Type	Timestamp	Backup.sds.sds-mrsvnc-a.ProvisioningAndConfiguration.NETWORK_OAMP20120907_213703.MAN.tar.bz2	2.8 MB	bz2	2012-09-07 21:42:18 UTC	provexport/export_boris5patch.all.201209071950.csv	2.6 MB	csv	2012-09-07 19:50:03 UTC	provexport/export_boris5.all.201209071935.csv	2.2 MB	csv	2012-09-07 19:35:06 UTC																																
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<p>25.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>HA</b></p> <p>...as shown on the right.</p>	 <p><b>Main Menu: Status &amp; Manage -&gt; HA</b></p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM Max HA Role</th> <th>Applicat Max HA Role</th> <th>Max Allowed HA Role</th> <th>Mate Hostname List</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Active</td> <td>OOS</td> <td>Active</td> <td>sds-mrsvnc-b</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Standby</td> <td>OOS</td> <td>Active</td> <td>sds-mrsvnc-a</td> </tr> </tbody> </table>	Hostname	OAM Max HA Role	Applicat Max HA Role	Max Allowed HA Role	Mate Hostname List	sds-mrsvnc-a	Active	OOS	Active	sds-mrsvnc-b	sds-mrsvnc-b	Standby	OOS	Active	sds-mrsvnc-a																																	
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<p>26.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) Identify the Standby server.</p> <p>2) Click the <b>Edit</b> button</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM Max HA Role</th> <th>Applicat Max HA Role</th> <th>Max Allowed HA Role</th> <th>Mate Hostname List</th> <th>Netw</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Active</td> <td>OOS</td> <td>Active</td> <td>sds-mrsvnc-b</td> <td>sds_</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Standby</td> <td>OOS</td> <td>Active</td> <td>sds-mrsvnc-a</td> <td>sds_</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td>Observer</td> <td>OOS</td> <td>Observer</td> <td>sds-mrsvnc-a sds-mrsvnc-b</td> <td>sds_</td> </tr> <tr> <td>so-carync-a</td> <td>Standby</td> <td>OOS</td> <td>Active</td> <td>so-carync-b</td> <td>so_c</td> </tr> <tr> <td>so-carync-b</td> <td>Active</td> <td>OOS</td> <td>Active</td> <td>so-carync-a</td> <td>so_c</td> </tr> <tr> <td>dp-carync-1</td> <td>Active</td> <td>OOS</td> <td>Active</td> <td></td> <td>so_c</td> </tr> <tr> <td>drdsds-dallastx-a</td> <td>Unavailat</td> <td>Unavailat</td> <td></td> <td></td> <td>dr_d</td> </tr> </tbody> </table> <p><b>Edit</b></p>	Hostname	OAM Max HA Role	Applicat Max HA Role	Max Allowed HA Role	Mate Hostname List	Netw	sds-mrsvnc-a	Active	OOS	Active	sds-mrsvnc-b	sds_	sds-mrsvnc-b	Standby	OOS	Active	sds-mrsvnc-a	sds_	qs-mrsvnc-1	Observer	OOS	Observer	sds-mrsvnc-a sds-mrsvnc-b	sds_	so-carync-a	Standby	OOS	Active	so-carync-b	so_c	so-carync-b	Active	OOS	Active	so-carync-a	so_c	dp-carync-1	Active	OOS	Active		so_c	drdsds-dallastx-a	Unavailat	Unavailat			dr_d
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qs-mrsvnc-1	Observer	OOS	Observer	sds-mrsvnc-a sds-mrsvnc-b	sds_																																													
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dp-carync-1	Active	OOS	Active		so_c																																													
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**Procedure 19: Backout Primary SDS NE**

Step	Procedure	Result																								
<p>27.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) Using the drop box, set the <b>Max Allowed HA Role</b> for the Standby server to <b>Standby</b>.</p> <p>2) Click the <b>Ok</b> button</p>	<p><b>Main Menu: Status &amp; Manage -&gt; HA [Edit]</b></p>  <table border="1"> <thead> <tr> <th>Hostname</th> <th>Max Allowed HA Role</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Active</td> <td>The maximum desired HA Role for sds-mrsvnc-a</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Active</td> <td>The maximum desired HA Role for sds-mrsvnc-b</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td>Active</td> <td>The maximum desired HA Role for qs-mrsvnc-1</td> </tr> <tr> <td>so-carync-a</td> <td>Spare Observer</td> <td>The maximum desired HA Role for so-carync-a</td> </tr> <tr> <td>so-carync-b</td> <td>OOS</td> <td>The maximum desired HA Role for so-carync-b</td> </tr> <tr> <td>dp-carync-1</td> <td>Active</td> <td>The maximum desired HA Role for dp-carync-1</td> </tr> <tr> <td>drds-dallasb-a</td> <td>Active</td> <td>The maximum desired HA Role for drds-dallasb-a</td> </tr> </tbody> </table>	Hostname	Max Allowed HA Role	Description	sds-mrsvnc-a	Active	The maximum desired HA Role for sds-mrsvnc-a	sds-mrsvnc-b	Active	The maximum desired HA Role for sds-mrsvnc-b	qs-mrsvnc-1	Active	The maximum desired HA Role for qs-mrsvnc-1	so-carync-a	Spare Observer	The maximum desired HA Role for so-carync-a	so-carync-b	OOS	The maximum desired HA Role for so-carync-b	dp-carync-1	Active	The maximum desired HA Role for dp-carync-1	drds-dallasb-a	Active	The maximum desired HA Role for drds-dallasb-a
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<p>28.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>  → <b>Status &amp; Manage</b>  → <b>Database</b></p> <p>...as shown on the right.</p>	 <p><b>Main Menu: Status &amp; Manage -&gt; Database</b></p> <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>OAM HA Role</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td>Act</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>Network OAM&amp;P</td> <td>Sta</td> </tr> </tbody> </table>	Network Element	Server	Role	OAM HA Role	sds_mrsvnc	sds-mrsvnc-a	Network OAM&P	Act	sds_mrsvnc	sds-mrsvnc-b	Network OAM&P	Sta												
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sds_mrsvnc	sds-mrsvnc-a	Network OAM&P	Act																							
sds_mrsvnc	sds-mrsvnc-b	Network OAM&P	Sta																							
<p>29.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) Select the name of the current Active server</p> <p>2) Click the <b>“Restore”</b> button.</p>	<p><b>Main Menu: Status &amp; Manage -&gt; Database</b></p>  <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server</th> <th>Role</th> <th>OAM Max HA Role</th> <th>Applicati Max HA Role</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td>Active</td> <td>OOS</td> <td>Normal</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>Network OAM&amp;P</td> <td>Standby</td> <td>OOS</td> <td>Minor</td> </tr> </tbody> </table> <p>Buttons: Allow Replication, Backup..., Compare..., Restore...</p>	Network Element	Server	Role	OAM Max HA Role	Applicati Max HA Role	Status	sds_mrsvnc	sds-mrsvnc-a	Network OAM&P	Active	OOS	Normal	sds_mrsvnc	sds-mrsvnc-b	Network OAM&P	Standby	OOS	Minor						
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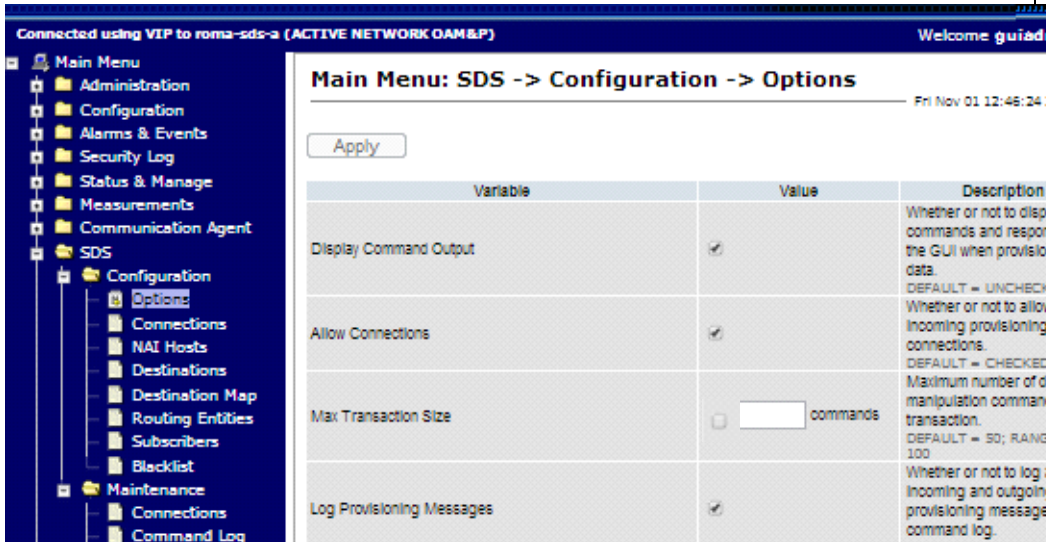


**Procedure 19: Backout Primary SDS NE**

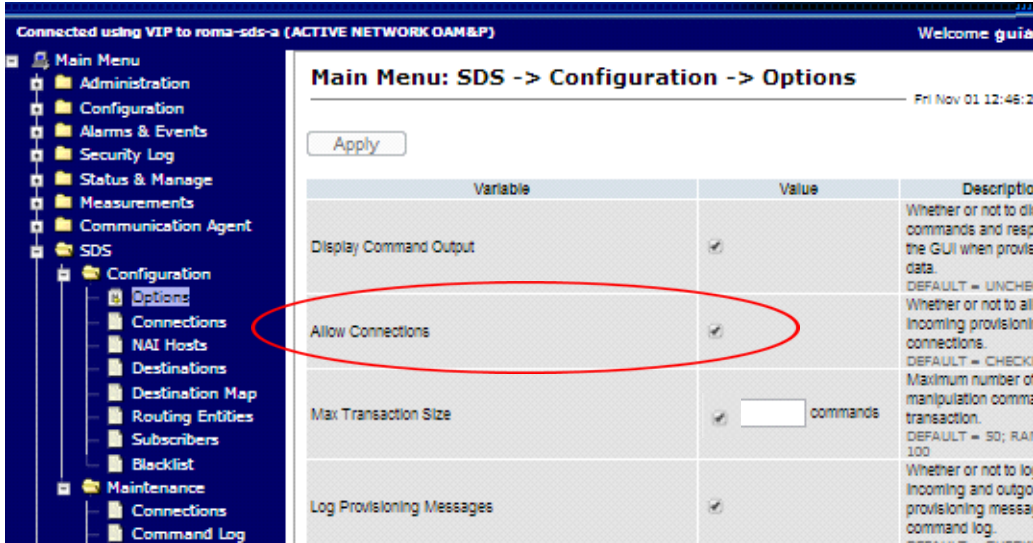
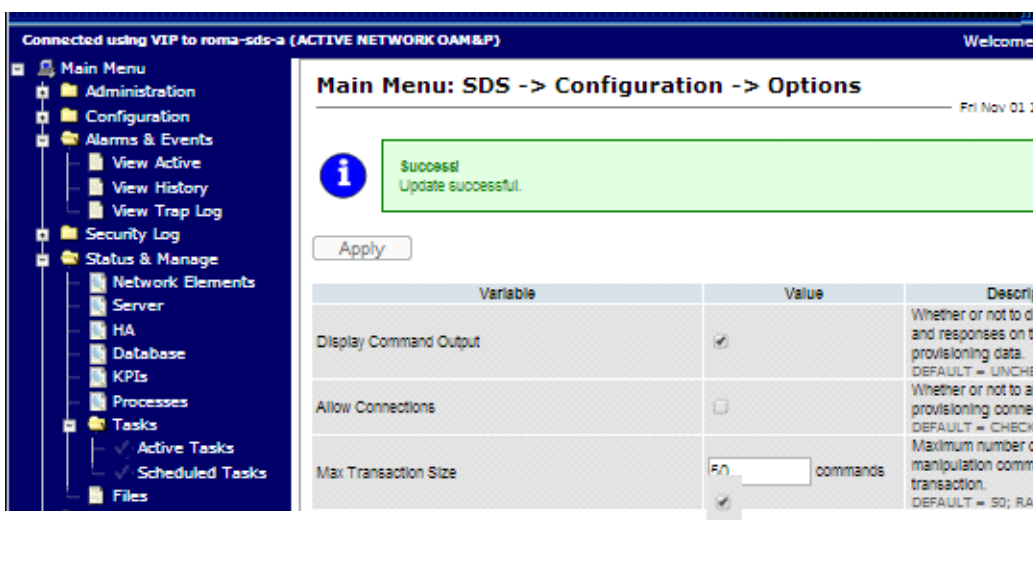
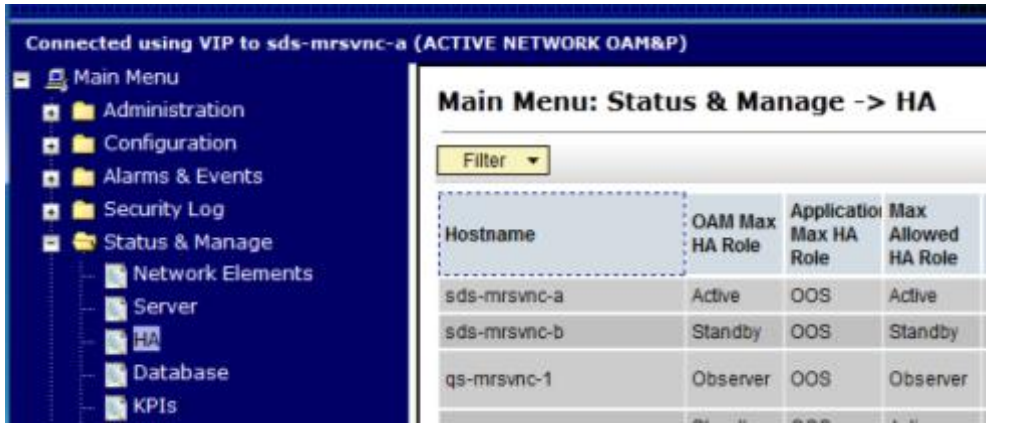

Step	Procedure	Result
<p>30.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) Select your backup from the list.</p> <p>2) Click the “Ok” button.</p>	
<p>31.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p><b>Note:</b> A green color and the message “Compatible Database” will indicate a database that is suitable to restore.</p> <p>Click the <b>Ok</b> button.</p>	
<p>32.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Wait for the <b>Info</b> tab to show Restore Success.</p>	

**Procedure 19: Backout Primary SDS NE**

Step	Procedure	Result
<p>33.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Allow replication by the following order to all servers.</p>	<p>Using the similar procedural steps specified in:</p> <ul style="list-style-type: none"> <li>• <b>Procedure 11</b> (<i>Allow Primary Provisioning Site Servers</i>),</li> <li>• <b>Procedure 12</b> (<i>Allow DR Provisioning Site Servers</i>),</li> <li>• <b>Steps 16 - 24 of Procedure 15</b> "<i>Upgrade SOAM NE (SOAM Servers)</i>", and</li> <li>• <b>Steps 12 - 20 of Procedure 16</b> "<i>Upgrade SOAM NE (DP Servers)</i>".</li> </ul> <p>Perform the following actions:</p> <ol style="list-style-type: none"> <li>1. Allow replication to the Active SDS.</li> <li>2. Allow replication to the Standby SDS and SDS QS.</li> <li>3. Allow replication to the Active DR SDS.</li> <li>4. Allow replication to the Standby DR SDS and DR QS.</li> <li>5. FOREACH Signaling network element:             <ol style="list-style-type: none"> <li>a. Allow replication to Active DP SOAM</li> <li>b. Allow replication to Standby DP SOAM                 <ol style="list-style-type: none"> <li>i. FOREACH DP:                     <ol style="list-style-type: none"> <li>1. Stop application software running on DP using GUI:                             <ol style="list-style-type: none"> <li>a. MainMenu-&gt;Status&amp;Manage-&gt;Ser ver</li> <li>b. Select DP</li> <li>c. Press <b>Stop</b> button</li> </ol> </li> <li>2. Allow replication to DP</li> <li>3. Restart application software running on DP using GUI:                             <ol style="list-style-type: none"> <li>a. MainMenu-&gt;Status&amp;Manage-&gt;Ser ver</li> <li>b. Select DP</li> <li>c. Press <b>Restart</b> button</li> </ol> </li> </ol> </li> <li>ii. DONE</li> </ol> </li> <li>c. DONE.</li> </ol> </li> </ol>

<p>34.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>            → <b>SDS</b>                → <b>Configuration</b>                    → <b>Options</b></p> <p>...as shown on the right.</p>	 <p>Connected using VIP to roma-sds-a (ACTIVE NETWORK OAM&amp;P)      Welcome guide</p> <p><b>Main Menu: SDS -&gt; Configuration -&gt; Options</b>      Fri Nov 01 12:45:24</p> <p>Apply</p> <table border="1"> <thead> <tr> <th>Variable</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Display Command Output</td> <td><input checked="" type="checkbox"/></td> <td>Whether or not to display commands and respond the GUI when provisioning data. DEFAULT = UNCHECKED</td> </tr> <tr> <td>Allow Connections</td> <td><input checked="" type="checkbox"/></td> <td>Whether or not to allow incoming provisioning connections. DEFAULT = CHECKED</td> </tr> <tr> <td>Max Transaction Size</td> <td><input type="checkbox"/> <input type="text" value=""/> commands</td> <td>Maximum number of manipulation command transaction. DEFAULT = 50; RANGE 100</td> </tr> <tr> <td>Log Provisioning Messages</td> <td><input checked="" type="checkbox"/></td> <td>Whether or not to log incoming and outgoing provisioning message command log.</td> </tr> </tbody> </table>	Variable	Value	Description	Display Command Output	<input checked="" type="checkbox"/>	Whether or not to display commands and respond the GUI when provisioning data. DEFAULT = UNCHECKED	Allow Connections	<input checked="" type="checkbox"/>	Whether or not to allow incoming provisioning connections. DEFAULT = CHECKED	Max Transaction Size	<input type="checkbox"/> <input type="text" value=""/> commands	Maximum number of manipulation command transaction. DEFAULT = 50; RANGE 100	Log Provisioning Messages	<input checked="" type="checkbox"/>	Whether or not to log incoming and outgoing provisioning message command log.
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**Procedure 19: Backout Primary SDS NE**

Step	Procedure	Result																
<p>35.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Enable Connections:</p> <p>1) Check the “Allow Connections” check box.</p> <p>2) Click on the “Apply” dialogue button</p>																	
<p>36.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented with a confirmation message (in the banner area) stating: “Update Successful”.</p> <p><b>NOTE:</b> As a result of again allowing connections, Critical (Event ID 14100): “Interface Disabled” will be cleared.</p>																	
<p>37.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>HA</b></p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM Max HA Role</th> <th>Application Max HA Role</th> <th>Max Allowed HA Role</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Active</td> <td>OOS</td> <td>Active</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Standby</td> <td>OOS</td> <td>Standby</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td>Observer</td> <td>OOS</td> <td>Observer</td> </tr> </tbody> </table>	Hostname	OAM Max HA Role	Application Max HA Role	Max Allowed HA Role	sds-mrsvnc-a	Active	OOS	Active	sds-mrsvnc-b	Standby	OOS	Standby	qs-mrsvnc-1	Observer	OOS	Observer
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<p>38.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click the “Edit” dialogue button located on the bottom left of the right panel.</p>																	

**Procedure 19: Backout Primary SDS NE**

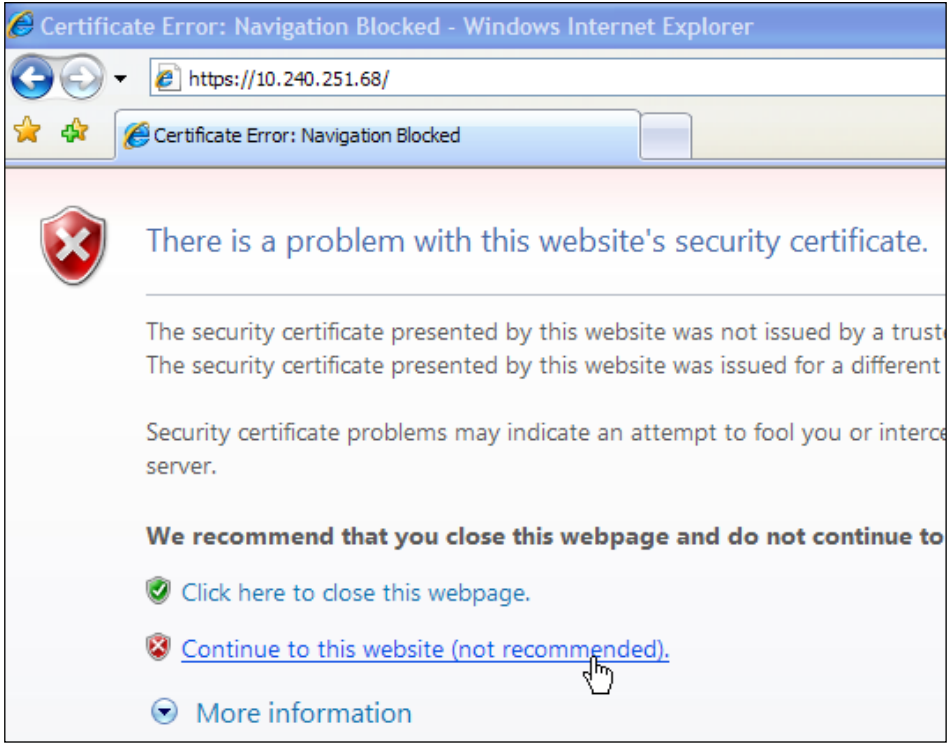

Step	Procedure	Result																																																								
39. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user will be presented with a list of servers. Find the server with <b>Max Allowed HA Role</b> set to <b>“Standby.”</b></p>	<p><b>Main Menu: Status &amp; Manage -&gt; HA [Edit]</b></p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Max Allowed HA Role</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Active</td> <td>The maximum desired HA Role for sds-mrsvnc-a</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Standby</td> <td>The maximum desired HA Role for sds-mrsvnc-b</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td>Observer</td> <td>The maximum desired HA Role for qs-mrsvnc-1</td> </tr> <tr> <td>so-carync-a</td> <td>Active</td> <td>The maximum desired HA Role for so-carync-a</td> </tr> <tr> <td>so-carync-b</td> <td>Active</td> <td>The maximum desired HA Role for so-carync-b</td> </tr> <tr> <td>dp-carync-1</td> <td>Active</td> <td>The maximum desired HA Role for dp-carync-1</td> </tr> <tr> <td>drds-dallastx-a</td> <td>Active</td> <td>The maximum desired HA Role for drds-dallastx-a</td> </tr> </tbody> </table> <p>Ok Cancel</p>	Hostname	Max Allowed HA Role	Description	sds-mrsvnc-a	Active	The maximum desired HA Role for sds-mrsvnc-a	sds-mrsvnc-b	Standby	The maximum desired HA Role for sds-mrsvnc-b	qs-mrsvnc-1	Observer	The maximum desired HA Role for qs-mrsvnc-1	so-carync-a	Active	The maximum desired HA Role for so-carync-a	so-carync-b	Active	The maximum desired HA Role for so-carync-b	dp-carync-1	Active	The maximum desired HA Role for dp-carync-1	drds-dallastx-a	Active	The maximum desired HA Role for drds-dallastx-a																																
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40. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Using the drop box, change the <b>Max Allowed HA Role</b> to <b>“Active.”</b></p> <p>2) Click the <b>“Ok”</b> button.</p>	<p><b>Main Menu: Status &amp; Manage -&gt; HA [Edit]</b></p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Max Allowed HA Role</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Active</td> <td>The maximum desired HA Role for sds-mrsvnc-a</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Standby</td> <td>The maximum desired HA Role for sds-mrsvnc-b</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td>Active</td> <td>The maximum desired HA Role for qs-mrsvnc-1</td> </tr> <tr> <td>so-carync-a</td> <td>Spare</td> <td>The maximum desired HA Role for so-carync-a</td> </tr> <tr> <td>so-carync-b</td> <td>Observer</td> <td>The maximum desired HA Role for so-carync-b</td> </tr> <tr> <td>dp-carync-1</td> <td>OOS</td> <td>The maximum desired HA Role for dp-carync-1</td> </tr> <tr> <td>drds-dallastx-a</td> <td>Active</td> <td>The maximum desired HA Role for drds-dallastx-a</td> </tr> </tbody> </table> <p>Ok Cancel</p>	Hostname	Max Allowed HA Role	Description	sds-mrsvnc-a	Active	The maximum desired HA Role for sds-mrsvnc-a	sds-mrsvnc-b	Standby	The maximum desired HA Role for sds-mrsvnc-b	qs-mrsvnc-1	Active	The maximum desired HA Role for qs-mrsvnc-1	so-carync-a	Spare	The maximum desired HA Role for so-carync-a	so-carync-b	Observer	The maximum desired HA Role for so-carync-b	dp-carync-1	OOS	The maximum desired HA Role for dp-carync-1	drds-dallastx-a	Active	The maximum desired HA Role for drds-dallastx-a																																
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41. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Confirm the <b>Max Allowed HA Role</b> is now <b>“Active.”</b></p>	<p><b>Main Menu: Status &amp; Manage -&gt; HA</b></p> <p>Fri Sep</p> <p>Filter</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM Max HA Role</th> <th>Application Max HA Role</th> <th>Max Allowed HA Role</th> <th>Mate Hostname List</th> <th>Network Element</th> <th>Server Role</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Active</td> <td>OOS</td> <td>Active</td> <td>sds-mrsvnc-b</td> <td>sds_mrsvnc</td> <td>Network OAM&amp;P</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Standby</td> <td>OOS</td> <td>Active</td> <td>sds-mrsvnc-a</td> <td>sds_mrsvnc</td> <td>Network OAM&amp;P</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td>Observer</td> <td>OOS</td> <td>Observer</td> <td>sds-mrsvnc-b sds-mrsvnc-a</td> <td>sds_mrsvnc</td> <td>Query Server</td> </tr> <tr> <td>so-carync-a</td> <td>Standby</td> <td>OOS</td> <td>Active</td> <td>so-carync-b</td> <td>so_carync</td> <td>System OAM</td> </tr> <tr> <td>so-carync-b</td> <td>Active</td> <td>OOS</td> <td>Active</td> <td>so-carync-a</td> <td>so_carync</td> <td>System OAM</td> </tr> <tr> <td>dp-carync-1</td> <td>Active</td> <td>OOS</td> <td>Active</td> <td></td> <td>so_carync</td> <td>MP</td> </tr> <tr> <td>drds-dallastx-a</td> <td>Unavailabl</td> <td>Unavailabl</td> <td></td> <td></td> <td>dr_dallastx</td> <td>Network OAM&amp;P</td> </tr> </tbody> </table>	Hostname	OAM Max HA Role	Application Max HA Role	Max Allowed HA Role	Mate Hostname List	Network Element	Server Role	sds-mrsvnc-a	Active	OOS	Active	sds-mrsvnc-b	sds_mrsvnc	Network OAM&P	sds-mrsvnc-b	Standby	OOS	Active	sds-mrsvnc-a	sds_mrsvnc	Network OAM&P	qs-mrsvnc-1	Observer	OOS	Observer	sds-mrsvnc-b sds-mrsvnc-a	sds_mrsvnc	Query Server	so-carync-a	Standby	OOS	Active	so-carync-b	so_carync	System OAM	so-carync-b	Active	OOS	Active	so-carync-a	so_carync	System OAM	dp-carync-1	Active	OOS	Active		so_carync	MP	drds-dallastx-a	Unavailabl	Unavailabl			dr_dallastx	Network OAM&P
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**Procedure 19: Backout Primary SDS NE**

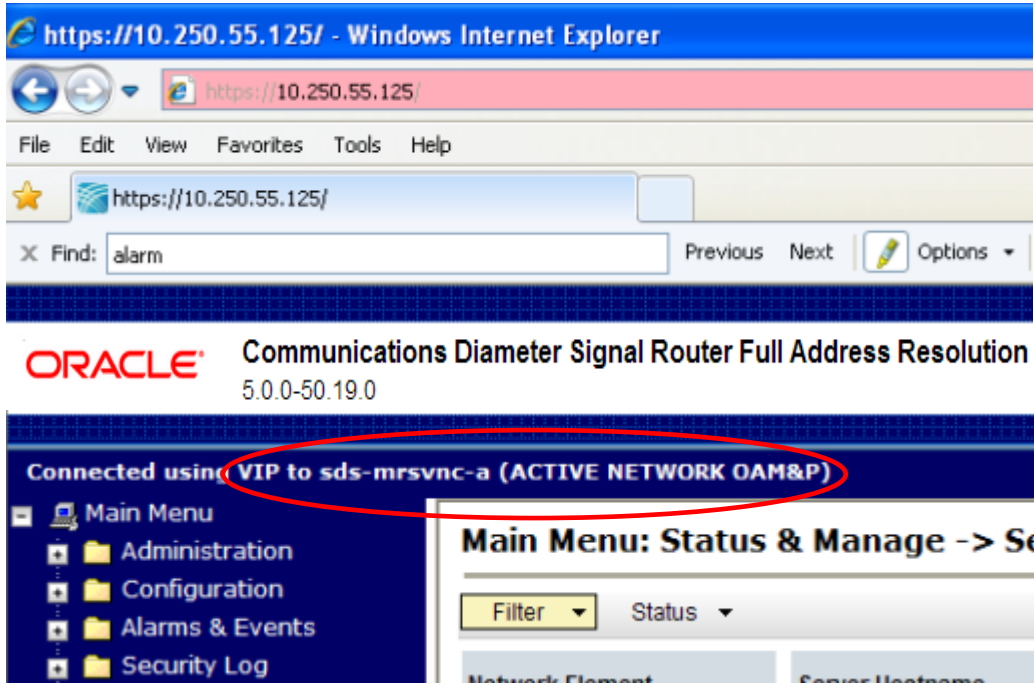
Step	Procedure	Result
 <p><b>Note:</b> Minor Alarm 31100 {DB replication process (<i>inetsync</i>) is impaired by a s/w fault} may raise on each server until all NOAM servers are also backed out to the original release. There is no functional impact. (PR 220871)</p>		
<p><b>42.</b></p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>Execute Health Check at this time only if no other servers require Back Out.</p> <p>Otherwise, proceed with the next Backout.</p>	<p>Execute Health Check procedures (Post Backout) as specified in <b>Appendix B</b>, if Backout procedures have been completed for all required servers.</p>
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>		

## APPENDIX A. ACCESSING THE OAM SERVER GUI (NOAM / SOAM SITES)

### Appendix A: Accessing the OAM Server GUI (NOAM / SOAM Sites)

Step	Procedure	Result
<p>1.</p> <input type="checkbox"/>	<p><b>Active OAM VIP:</b></p> <p>1) Launch <b>Internet Explorer 7.x</b> or higher and connect to the XMI Virtual IP address (VIP) assigned to <b>Active OAM site</b> using data in <b>Table 4</b></p> <p>2) If a Certificate Error is received, click on the link which states...</p> <p><b>“Continue to this website (not recommended).”</b></p>	
<p>2.</p> <input type="checkbox"/>	<p><b>Active OAM VIP:</b></p> <p>The user should be presented a login screen similar to the one shown on the right.</p> <p>Login to the GUI using the default user and password.</p>	

**Appendix A: Accessing the OAM Server GUI (NOAM / SOAM Sites)**

Step	Procedure	Result
<p>3.</p> <p><input type="checkbox"/></p>	<p><b>Active OAM VIP:</b></p> <p>The user should be presented the SDS Main Menu as shown on the right.</p> <p>Verify that the message shown across the top of the right panel indicates that the browser is using the “VIP” connected to the <b>Active</b> OAM server.</p> <p><b>NOTE:</b> The message may show connection to either a “<b>NETWORK OAM&amp;P</b>” or a “<b>SYSTEM OAM</b>” depending on the selected NE.</p>	
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>		

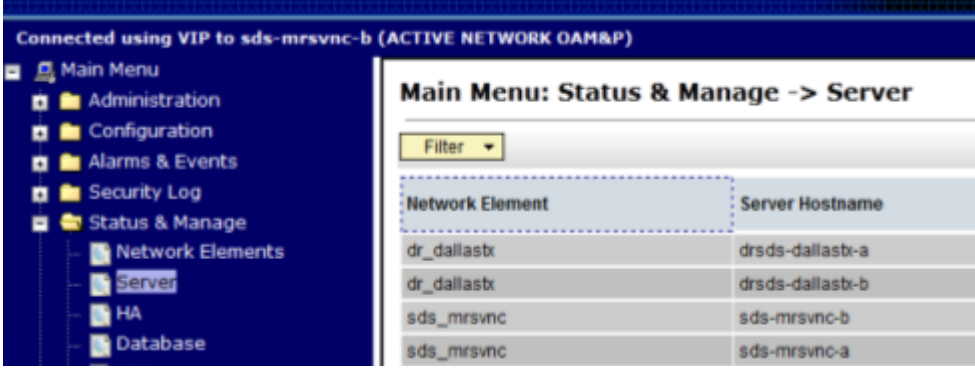

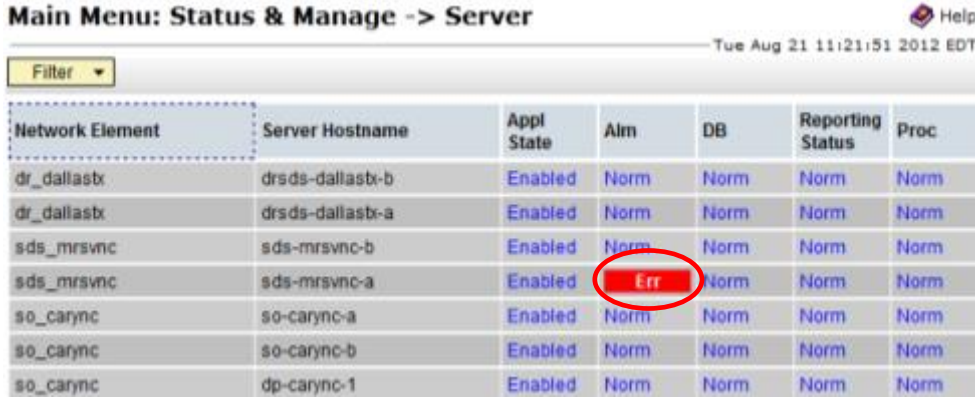
## APPENDIX B. HEALTH CHECK PROCEDURES

This procedure is part of Software Upgrade Preparation and is used to determine the health and status of the SDS network and servers.

Check off (✓) each step as it is completed. Boxes have been provided for this purpose under each step number.

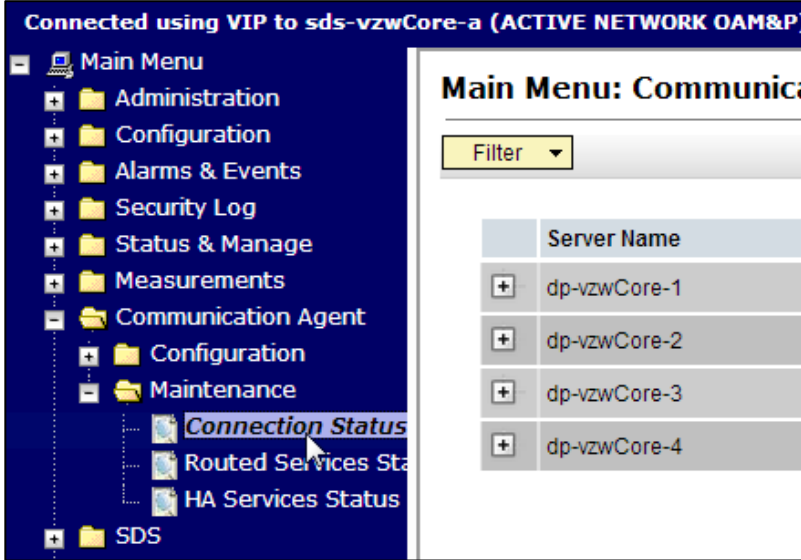
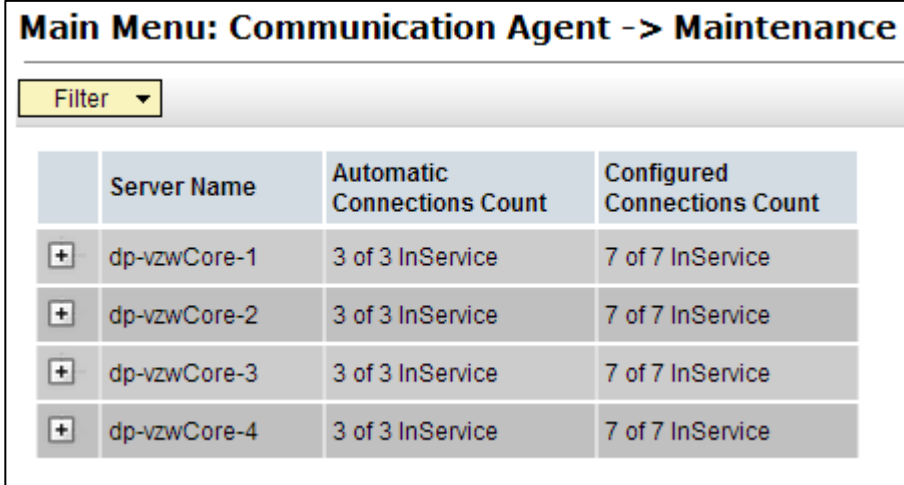
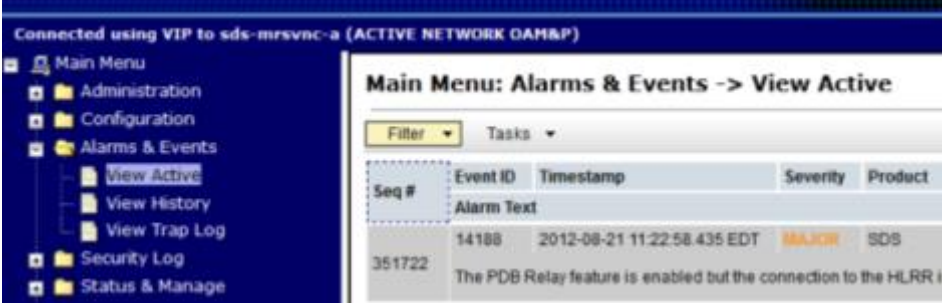
SHOULD ANY STEP IN THIS PROCEDURE FAIL, STOP AND CONTACT ORACLE'S TEKELEC CUSTOMER CARE CENTER FOR ASSISTANCE BEFORE CONTINUING!

### Appendix B: Health Check Procedures

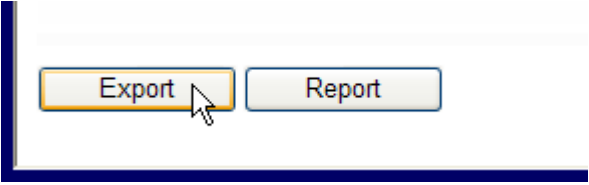
Step	Procedure	Result																																																																																	
1. <input type="checkbox"/>	Using the <b>VIP</b> address, access the Primary Provisioning Site GUI.	<ul style="list-style-type: none"> <li>Access the Primary Provisioning Site GUI as specified in <b>Appendix A</b>.</li> </ul>																																																																																	
2. <input type="checkbox"/>	<b>Active Provisioning Site VIP:</b> Select...  <b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>Server</b>  ...as shown on the right.	 <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> </tr> </thead> <tbody> <tr> <td>dr_dallasx</td> <td>drds-dallasx-a</td> </tr> <tr> <td>dr_dallasx</td> <td>drds-dallasx-b</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> </tr> </tbody> </table>	Network Element	Server Hostname	dr_dallasx	drds-dallasx-a	dr_dallasx	drds-dallasx-b	sds_mrsvnc	sds-mrsvnc-b	sds_mrsvnc	sds-mrsvnc-a																																																																							
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4. <input type="checkbox"/>	<b>Active Provisioning Site VIP:</b>  If any other server statuses are present, they will appear in a colored box as shown on the right.  <b>NOTE:</b> Other server states include " <b>Err</b> , <b>Warn</b> , <b>Man</b> and <b>Unk</b> ".	 <table border="1"> <thead> <tr> <th>Network Element</th> <th>Server Hostname</th> <th>Appl State</th> <th>Alm</th> <th>DB</th> <th>Reporting Status</th> <th>Proc</th> </tr> </thead> <tbody> <tr> <td>dr_dallasx</td> <td>drds-dallasx-b</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>dr_dallasx</td> <td>drds-dallasx-a</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-b</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>sds_mrsvnc</td> <td>sds-mrsvnc-a</td> <td>Enabled</td> <td>Err</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>so_carync</td> <td>so-carync-a</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>so_carync</td> <td>so-carync-b</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>so_carync</td> <td>dp-carync-1</td> <td>Enabled</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> <td>Norm</td> </tr> </tbody> </table>	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc	dr_dallasx	drds-dallasx-b	Enabled	Norm	Norm	Norm	Norm	dr_dallasx	drds-dallasx-a	Enabled	Norm	Norm	Norm	Norm	sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm	sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm	so_carync	so-carync-a	Enabled	Norm	Norm	Norm	Norm	so_carync	so-carync-b	Enabled	Norm	Norm	Norm	Norm	so_carync	dp-carync-1	Enabled	Norm	Norm	Norm	Norm																									
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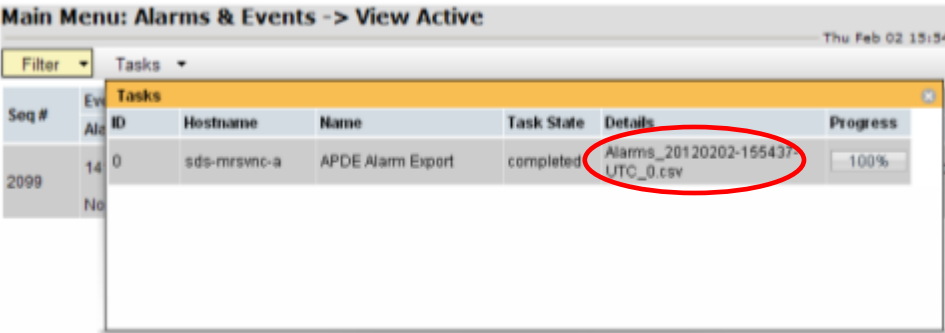
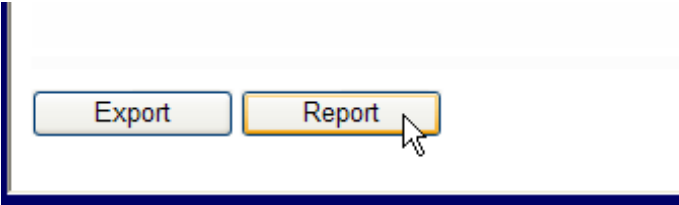
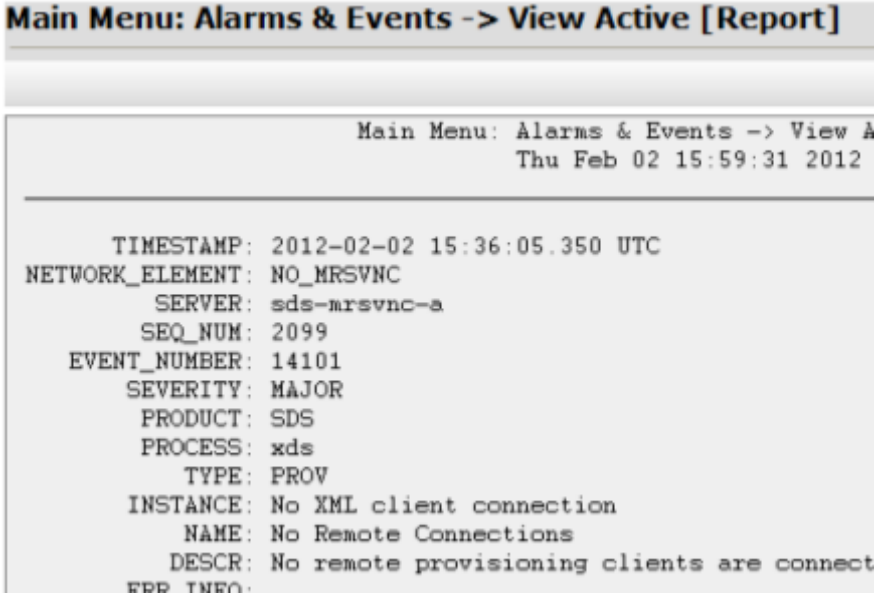
**Appendix B: Health Check Procedures**

Step	Procedure	Result															
<p>5.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b> Select...</p> <p><b>Main Menu</b> → Communication Agent → Maintenance → Connection Status</p> <p>...as shown on the right.</p>																
<p>6.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Verify that all “Connections Counts” show equivalent counts (“n” of “n” InService, “y” of “y” InService) as shown to the right.</p> <p><b>NOTE: Active/Standby MPs</b> will show a “Configured Connections Count” of “1 of 2 InService”. This is normal and can be ignored.</p>	 <table border="1"> <thead> <tr> <th>Server Name</th> <th>Automatic Connections Count</th> <th>Configured Connections Count</th> </tr> </thead> <tbody> <tr> <td>dp-vzwCore-1</td> <td>3 of 3 InService</td> <td>7 of 7 InService</td> </tr> <tr> <td>dp-vzwCore-2</td> <td>3 of 3 InService</td> <td>7 of 7 InService</td> </tr> <tr> <td>dp-vzwCore-3</td> <td>3 of 3 InService</td> <td>7 of 7 InService</td> </tr> <tr> <td>dp-vzwCore-4</td> <td>3 of 3 InService</td> <td>7 of 7 InService</td> </tr> </tbody> </table>	Server Name	Automatic Connections Count	Configured Connections Count	dp-vzwCore-1	3 of 3 InService	7 of 7 InService	dp-vzwCore-2	3 of 3 InService	7 of 7 InService	dp-vzwCore-3	3 of 3 InService	7 of 7 InService	dp-vzwCore-4	3 of 3 InService	7 of 7 InService
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<p>7.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b> Select...</p> <p><b>Main Menu</b> → Alarm &amp; Events → View Active</p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Seq #</th> <th>Event ID</th> <th>Timestamp</th> <th>Severity</th> <th>Product</th> </tr> </thead> <tbody> <tr> <td>351722</td> <td>14188</td> <td>2012-08-21 11:22:58.435 EDT</td> <td>MAJOR</td> <td>SDS</td> </tr> </tbody> </table>	Seq #	Event ID	Timestamp	Severity	Product	351722	14188	2012-08-21 11:22:58.435 EDT	MAJOR	SDS					
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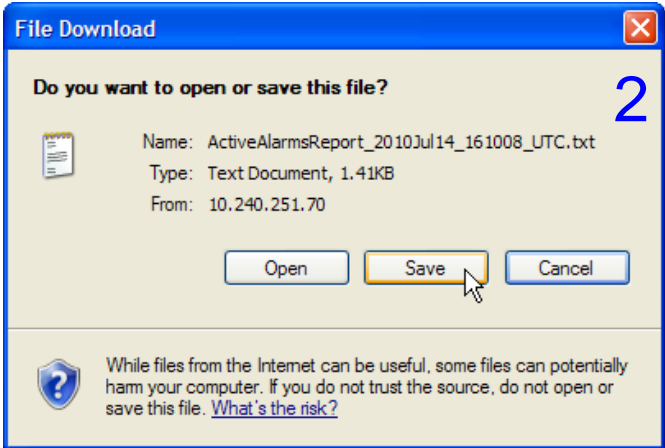
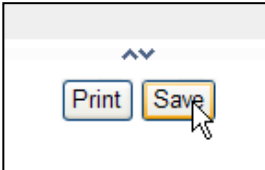
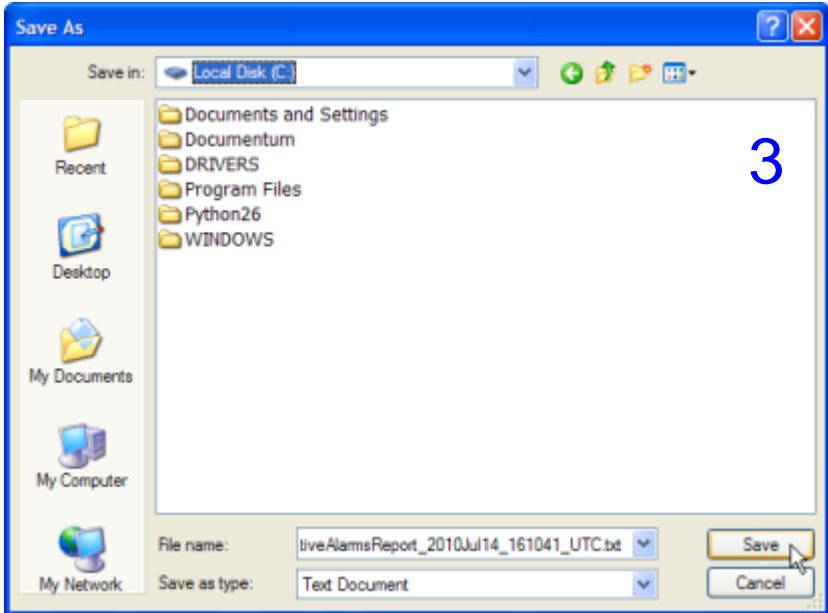
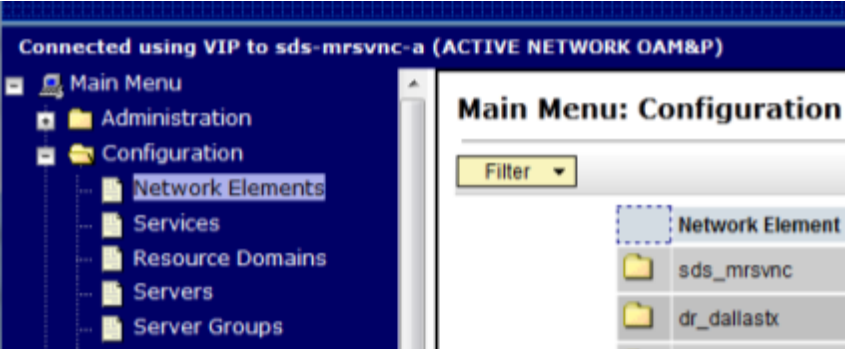
**Appendix B: Health Check Procedures**

Step	Procedure	Result																					
<p>8.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>View Alarm Status in the right panel.</p>	<p>When viewing <b>Pre-Upgrade Status:</b></p> <p><i>If any Alarms are present, STOP and contact Oracle's Tekelec Customer Care Center for assistance before attempting to continue.</i></p> <p>When viewing <b>Post-Upgrade Status:</b></p> <p>Active NO server may have the following expected alarms:            Alarm ID = <b>10075</b> (<i>Application processes have been manually stopped</i>)            Alarm ID = <b>10008</b> (<i>Provisioning Manually Disabled</i>)</p> <p>Servers that still have replication disabled will have the following expected alarm:            Alarm ID = <b>31113</b> (<i>Replication Manually Disabled</i>)</p> <p>You may also see alarms:            Alarm ID = <b>10010</b> (<i>Stateful database not yet synchronized with mate database</i>)            Alarm ID = <b>32532</b> (<i>Server Upgrade Pending Accept/Reject</i>)</p>																					
<p>9.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select the "Export" dialogue button from the bottom left corner of the screen.</p>																						
<p>10.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click the "OK" button at the bottom of the screen.</p>	<p><b>Schedule Active Alarm Data Export</b></p> <table border="1"> <thead> <tr> <th>Attribute</th> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Export Frequency</td> <td> <input checked="" type="radio"/> Once  <input type="radio"/> Hourly  <input type="radio"/> Daily  <input type="radio"/> Weekly                 </td> <td>Select how often the data will be written to the export directory. Selecting "Once" will perform the operation immediately. Note that the Hourly, Daily and Weekly scheduling options are only available when provisioning is enabled. [Default: Once]</td> </tr> <tr> <td>Task Name</td> <td>APDE Alarm Export</td> <td>Periodic export task name. [Required. The length should not exceed 24 characters. Valid characters are alphanumeric, minus sign, and spaces between words. The first character must be an alpha character. The last character must not be a minus sign.]</td> </tr> <tr> <td>Description</td> <td></td> <td>Periodic export task description. [Optional. The length should not exceed 255 characters. Valid characters are alphanumeric, minus sign, and spaces between words. The first character must be an alpha character. The last character must not be a minus sign.]</td> </tr> <tr> <td>Minute</td> <td>0</td> <td>Select the minute of each hour when the data will be written to the export directory. Only if Export Frequency is hourly. [Default = 0. Range = 0 to 59]</td> </tr> <tr> <td>Time of Day</td> <td>12:00 AM</td> <td>Select the time of day when the data will be written to the export directory. Only if Export Frequency is daily or weekly. Select from 15-minute increments, or fill in a specific value. [Default = 12:00 AM. Range = HH:MM with AM/PM.]</td> </tr> <tr> <td>Day of Week</td> <td> <input checked="" type="radio"/> Sunday  <input type="radio"/> Monday  <input type="radio"/> Tuesday  <input type="radio"/> Wednesday  <input type="radio"/> Thursday  <input type="radio"/> Friday  <input type="radio"/> Saturday                 </td> <td>Select the day of week when the data will be written to the export directory. Only if Export Frequency is weekly. [Default: Sunday]</td> </tr> </tbody> </table> <p style="text-align: right;"> <input type="button" value="Ok"/> <input type="button" value="Cancel"/> </p>	Attribute	Value	Description	Export Frequency	<input checked="" type="radio"/> Once <input type="radio"/> Hourly <input type="radio"/> Daily <input type="radio"/> Weekly	Select how often the data will be written to the export directory. Selecting "Once" will perform the operation immediately. Note that the Hourly, Daily and Weekly scheduling options are only available when provisioning is enabled. [Default: Once]	Task Name	APDE Alarm Export	Periodic export task name. [Required. The length should not exceed 24 characters. Valid characters are alphanumeric, minus sign, and spaces between words. The first character must be an alpha character. The last character must not be a minus sign.]	Description		Periodic export task description. [Optional. The length should not exceed 255 characters. Valid characters are alphanumeric, minus sign, and spaces between words. The first character must be an alpha character. The last character must not be a minus sign.]	Minute	0	Select the minute of each hour when the data will be written to the export directory. Only if Export Frequency is hourly. [Default = 0. Range = 0 to 59]	Time of Day	12:00 AM	Select the time of day when the data will be written to the export directory. Only if Export Frequency is daily or weekly. Select from 15-minute increments, or fill in a specific value. [Default = 12:00 AM. Range = HH:MM with AM/PM.]	Day of Week	<input checked="" type="radio"/> Sunday <input type="radio"/> Monday <input type="radio"/> Tuesday <input type="radio"/> Wednesday <input type="radio"/> Thursday <input type="radio"/> Friday <input type="radio"/> Saturday	Select the day of week when the data will be written to the export directory. Only if Export Frequency is weekly. [Default: Sunday]
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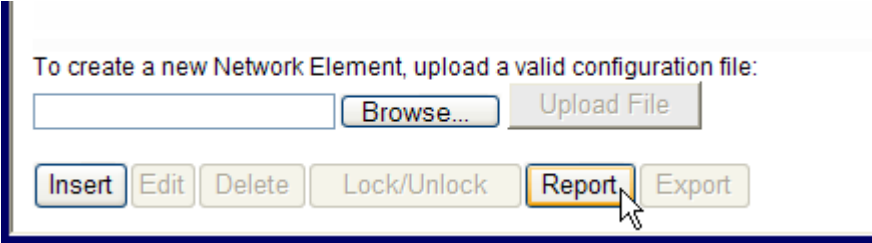
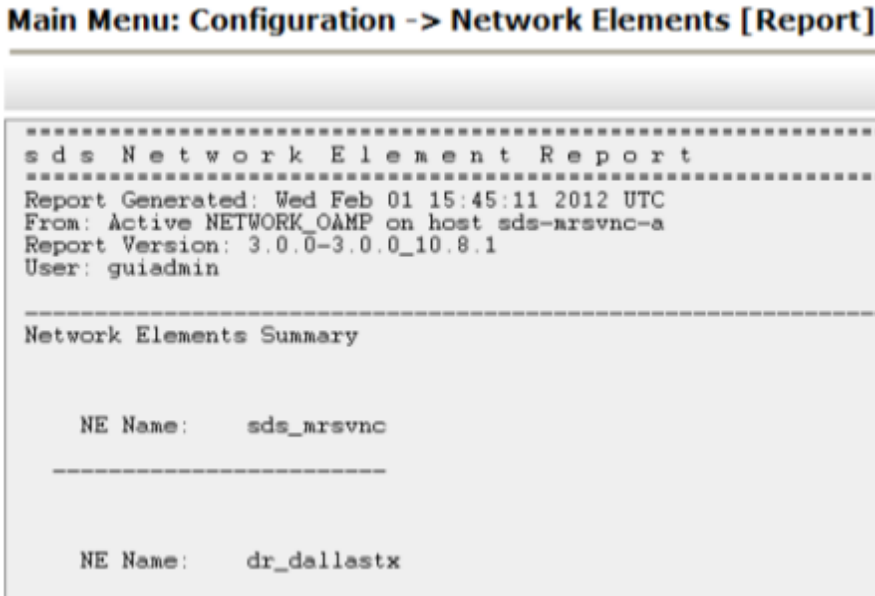
**Appendix B: Health Check Procedures**

Step	Procedure	Result
<p>11.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>The name of the exported Alarms CSV file will appear in the banner at the top of the right panel.</p>	
<p>12.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Record the filename of Alarms CSV file generated in the space provided to the right.</p>	<p>Example: <i>Alarms&lt;yyyymmdd&gt;_&lt;hhmmss&gt;.csv</i></p> <p>Alarms _____ _ _____ .CSV</p>
<p>13.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select the “Report” dialogue button from the bottom left corner of the screen.</p>	
<p>14.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>An <b>Active “Alarms &amp; Events” Report</b> will be generated and displayed in the right panel.</p>	

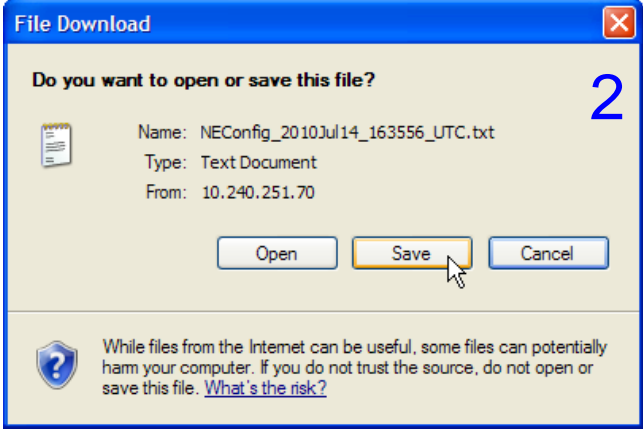
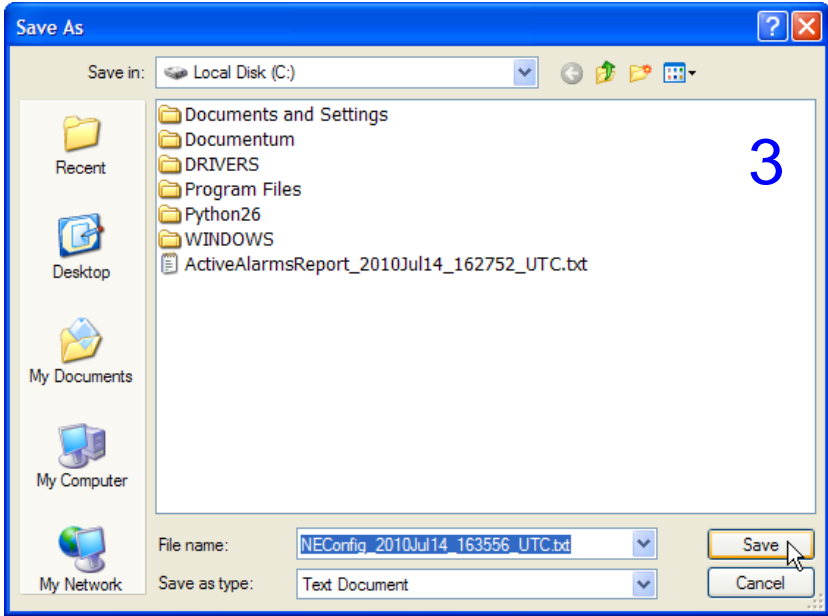

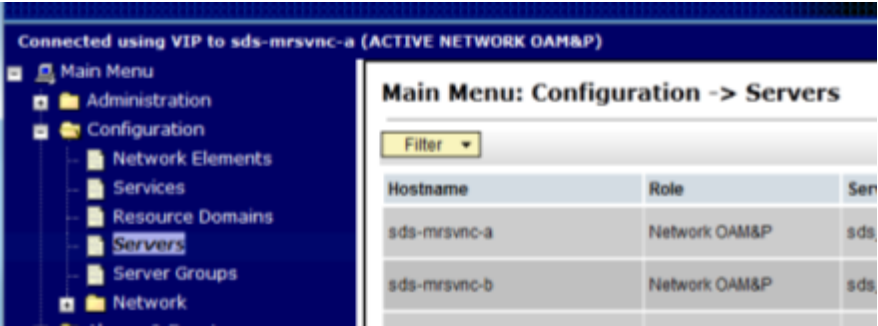

**Appendix B: Health Check Procedures**

Step	Procedure	Result
<p>15.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Select the “<b>Save</b>” dialogue button from the bottom/middle of the right panel.</p> <p>2) Click the “<b>Save</b>” dialogue button on the <i>File Download</i> pop-up box.</p> <p>3) Select a directory on the local disk drive to store the <i>Active “Alarms &amp; Events” Report</i> file and click the “<b>Save</b>” dialogue button.</p>	  
<p>16.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>          → <b>Configuration</b>              → <b>Network Elements</b></p> <p>...as shown on the right.</p>	

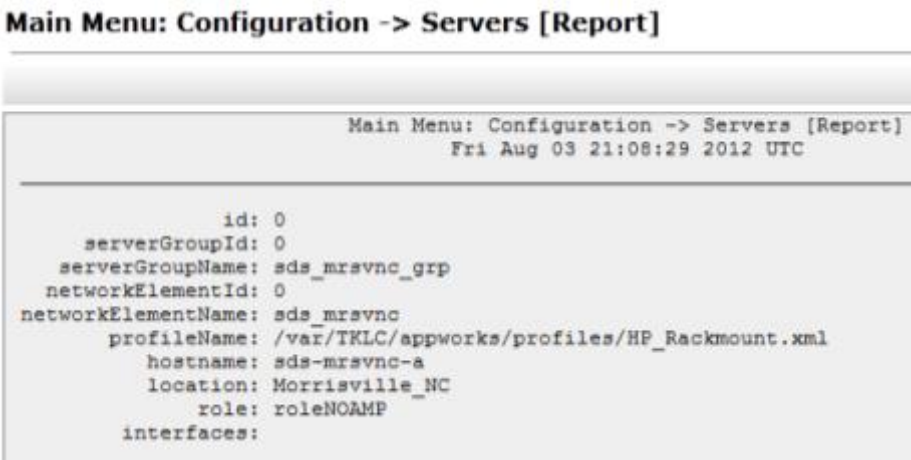
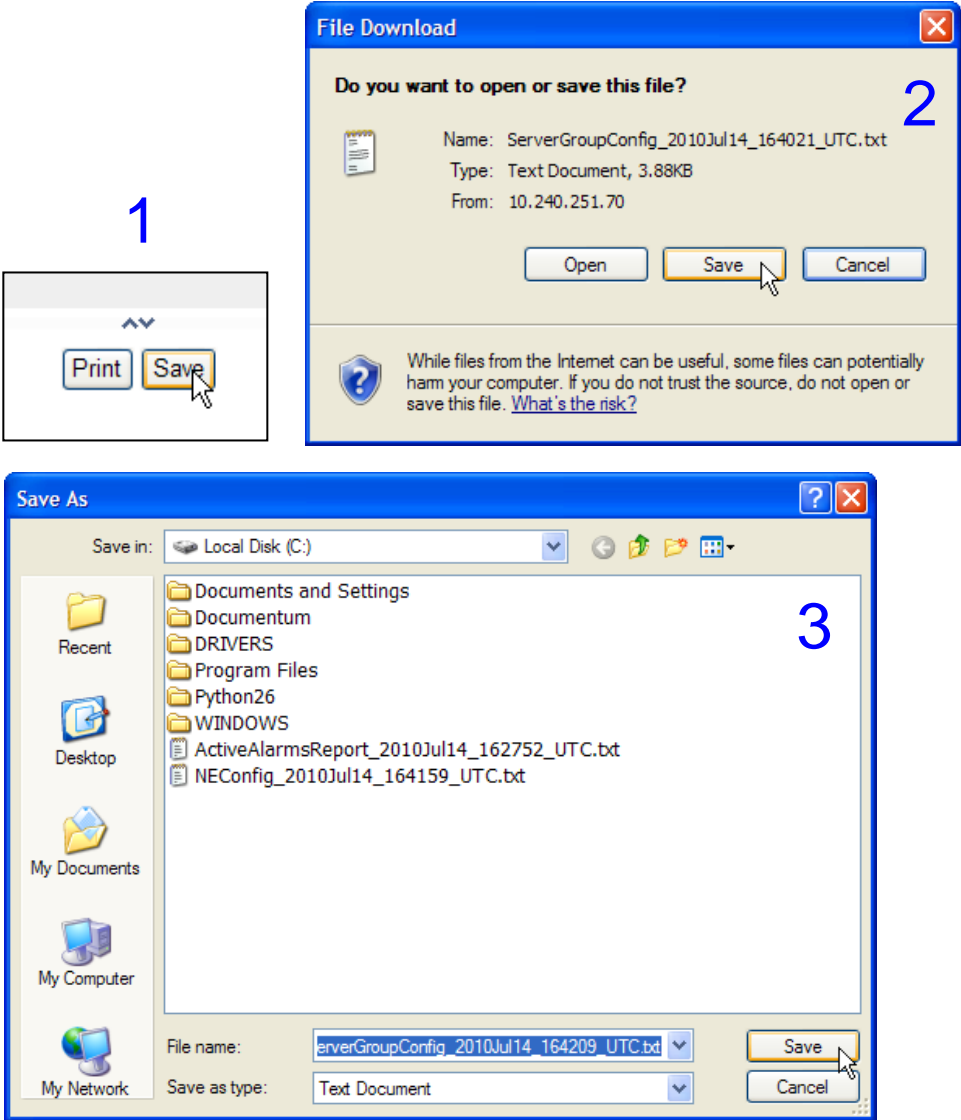
**Appendix B: Health Check Procedures**

Step	Procedure	Result
<p>17.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select the <b>“Report”</b> dialogue button from the bottom left corner of the screen.</p>	
<p>18.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>A <b>“Network Element Report”</b> will be generated and displayed in the right panel.</p>	

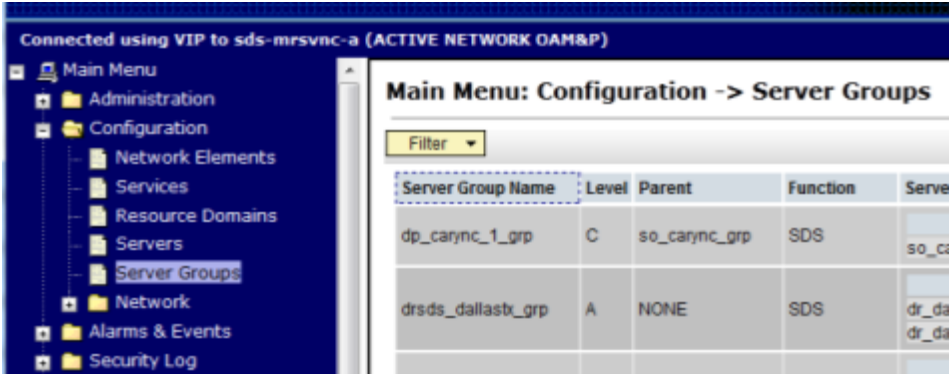
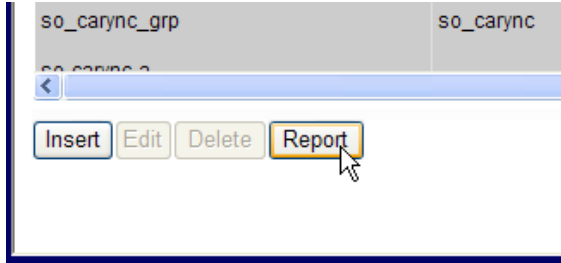
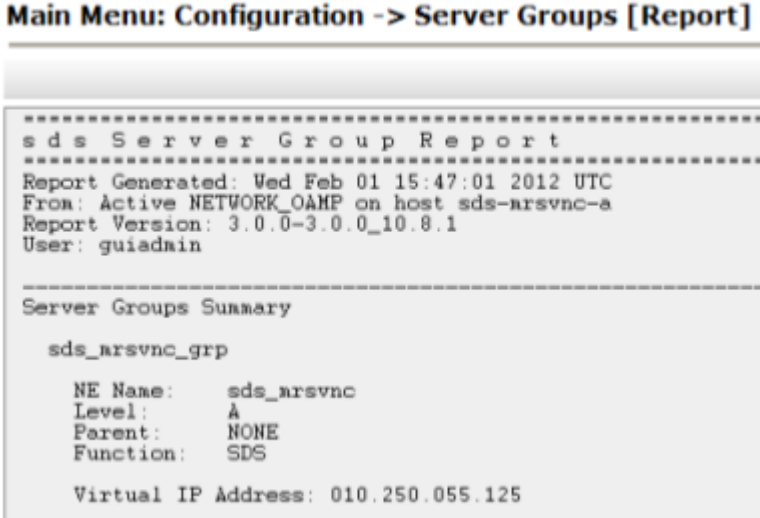
**Appendix B: Health Check Procedures**

Step	Procedure	Result									
<p>19.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Select the “<b>Save</b>” dialogue button from the bottom/middle of the right panel.</p> <p>2) Click the “<b>Save</b>” dialogue button on the <i>File Download</i> pop-up box.</p> <p>3) Select a directory on the local disk drive to store the “<i>Network Elements Report</i>” file and click the “<b>Save</b>” dialogue button.</p>	  									
<p>20.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>  → <b>Configuration</b>  → <b>Servers</b></p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>Role</th> <th>Sen</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Network OAM&amp;P</td> <td>sds</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Network OAM&amp;P</td> <td>sds</td> </tr> </tbody> </table>	Hostname	Role	Sen	sds-mrsvnc-a	Network OAM&P	sds	sds-mrsvnc-b	Network OAM&P	sds
Hostname	Role	Sen									
sds-mrsvnc-a	Network OAM&P	sds									
sds-mrsvnc-b	Network OAM&P	sds									
<p>21.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select the “<b>Report</b>” dialogue button from the bottom left corner of the screen.</p>										

**Appendix B: Health Check Procedures**

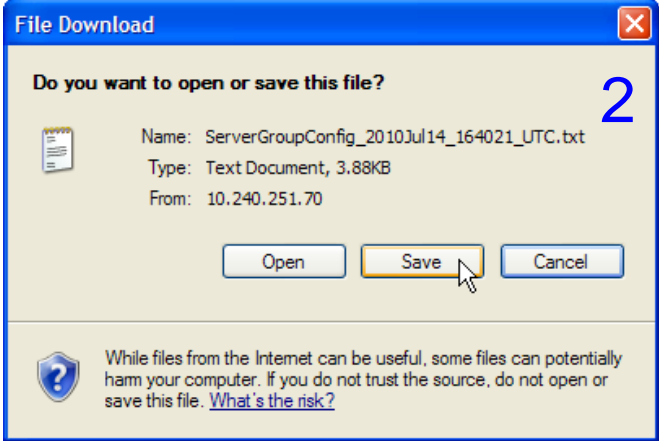

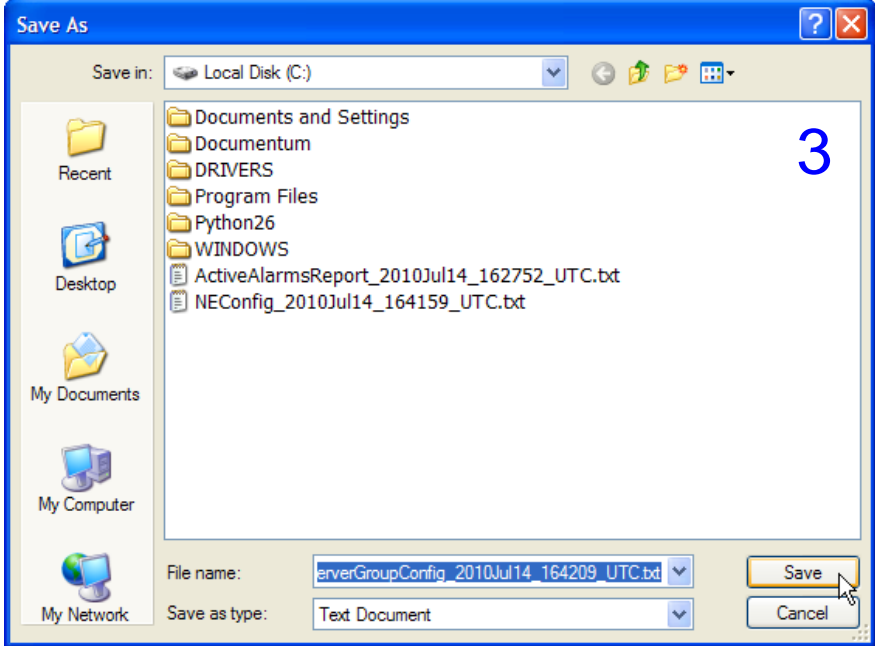
Step	Procedure	Result
<p>22.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>A <b>“Server Report”</b> will be generated and displayed in the right panel.</p>	 <p><b>Main Menu: Configuration -&gt; Servers [Report]</b></p> <pre> Main Menu: Configuration -&gt; Servers [Report] Fri Aug 03 21:08:29 2012 UTC  id: 0 serverGroupId: 0 serverGroupName: sds_mrvnc_grp networkElementId: 0 networkElementName: sds_mrvnc profileName: /var/TKLC/appworks/profiles/HP_Rackmount.xml hostname: sds-mrvnc-a location: Morrisville_NC role: roleNOAMP interfaces:                     </pre>
<p>23.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <ol style="list-style-type: none"> <li>1) Select the <b>“Save”</b> dialogue button from the bottom/middle of the right panel.</li> <li>2) Click the <b>“Save”</b> dialogue button on the <i>File Download</i> pop-up box.</li> <li>3) Select a directory on the local disk drive to store the <i>“Server Group Report”</i> file and click the <b>“Save”</b> dialogue button.</li> </ol>	 <p><b>1</b></p> <p><b>2</b></p> <p><b>3</b></p>

**Appendix B: Health Check Procedures**

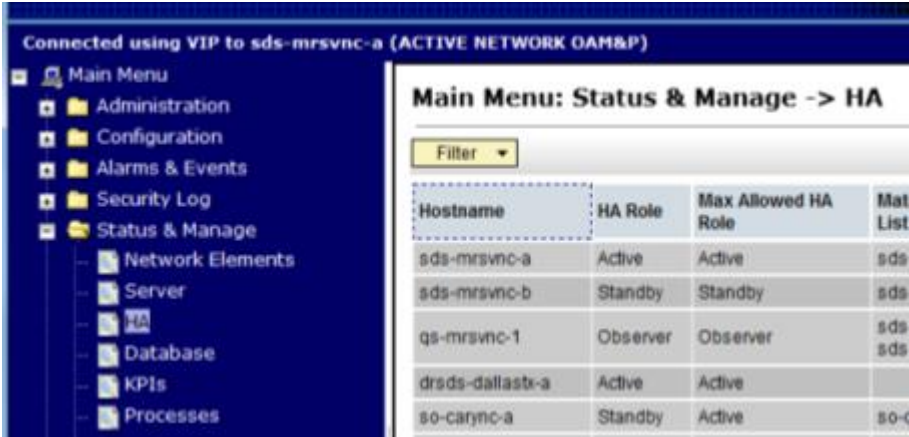
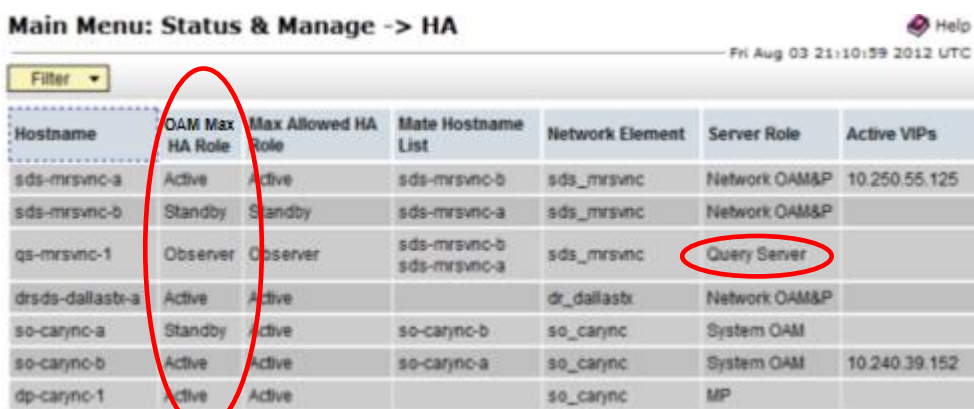
Step	Procedure	Result															
<p>24.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b> Select...</p> <p><b>Main Menu</b> → <b>Configuration</b> → <b>Server Groups</b></p> <p>...as shown on the right.</p>	 <table border="1"> <thead> <tr> <th>Server Group Name</th> <th>Level</th> <th>Parent</th> <th>Function</th> <th>Serve</th> </tr> </thead> <tbody> <tr> <td>dp_carync_1_grp</td> <td>C</td> <td>so_carync_grp</td> <td>SDS</td> <td>so_C</td> </tr> <tr> <td>drsds_dallastx_grp</td> <td>A</td> <td>NONE</td> <td>SDS</td> <td>dr_da dr_da</td> </tr> </tbody> </table>	Server Group Name	Level	Parent	Function	Serve	dp_carync_1_grp	C	so_carync_grp	SDS	so_C	drsds_dallastx_grp	A	NONE	SDS	dr_da dr_da
Server Group Name	Level	Parent	Function	Serve													
dp_carync_1_grp	C	so_carync_grp	SDS	so_C													
drsds_dallastx_grp	A	NONE	SDS	dr_da dr_da													
<p>25.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select the “<b>Report</b>” dialogue button from the bottom left corner of the screen.</p>																
<p>26.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>A “<b>Server Group Report</b>” will be generated and displayed in the right panel.</p>	 <pre> Main Menu: Configuration -&gt; Server Groups [Report]  ----- sds Server Group Report ----- Report Generated: Wed Feb 01 15:47:01 2012 UTC From: Active NETWORK_OAMP on host sds-arsvnc-a Report Version: 3.0.0-3.0.0_10.8.1 User: guiadmin  ----- Server Groups Summary  sds_arsvnc_grp  NE Name:    sds_arsvnc Level:      A Parent:     NONE Function:   SDS  Virtual IP Address: 010.250.055.125 </pre>															



**Appendix B: Health Check Procedures**

Step	Procedure	Result
<p>27.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Select the “<b>Save</b>” dialogue button from the bottom/middle of the right panel.</p> <p>2) Click the “<b>Save</b>” dialogue button on the <i>File Download</i> pop-up box.</p> <p>3) Select a directory on the local disk drive to store the “<i>Server Group Report</i>” file and click the “<b>Save</b>” dialogue button.</p>	  
<p>28.</p> <p><input type="checkbox"/></p>	<p>Provide the saved files to Oracle’s Tekelec Customer Care Center for Health Check Analysis.</p>	<ul style="list-style-type: none"> <li>• If executing this procedure as a pre or post Upgrade Health Check (HC1/HC2/HC3), provide the following saved files to Oracle’s Tekelec Customer Care Center for proper Health Check Analysis: <ul style="list-style-type: none"> <li>○ <b>Active “Alarms &amp; Events” Report</b> [Appendix B, Step 15]</li> <li>○ <b>Network Elements Report</b> [Appendix B, Step 19]</li> <li>○ <b>Server Group Report</b> [Appendix B, Step 23]</li> </ul> </li> </ul>

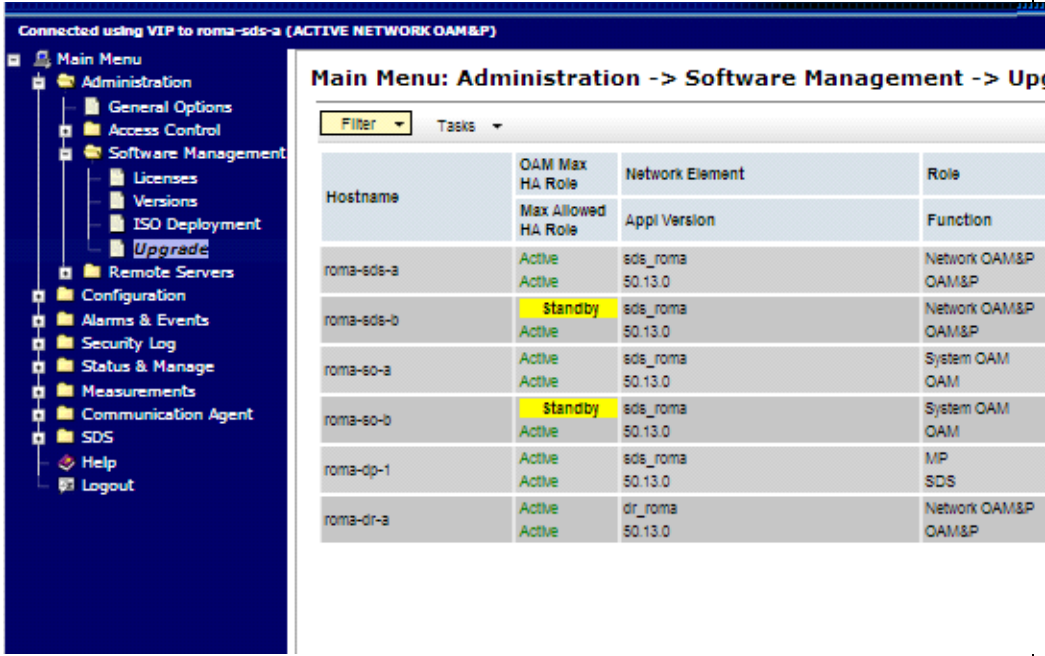
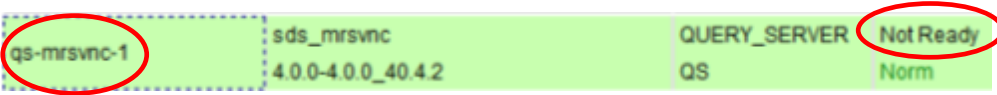
**Appendix B: Health Check Procedures**

Step	Procedure	Result
<p>29.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b> Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>HA</b></p> <p>...as shown on the right.</p>	
<p>30.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Verify that the “<b>HA Role</b>” for all servers shows either “<b>Active</b>” or “<b>Standby</b>” as shown to the right.</p> <p><b>NOTE:</b> An “<b>HA Status</b>” of “<b>Observer</b>” is allowed when Server Role is “<b>Query Server</b>”.</p>	
<p>31.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Repeat <b>Step 30</b> of this procedure until the last page of the [Main Menu: <b>Status &amp; Manage</b> → <b>Status &amp; Manage</b> → <b>HA</b>] screen is reached.</p>	<ul style="list-style-type: none"> <li>Verify the “<b>HA Role</b>” for each page of the [Main Menu: <b>Status &amp; Manage</b> → <b>HA</b>] screen, and click “<b>Next</b>” to reach the next page.</li> </ul>
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>		

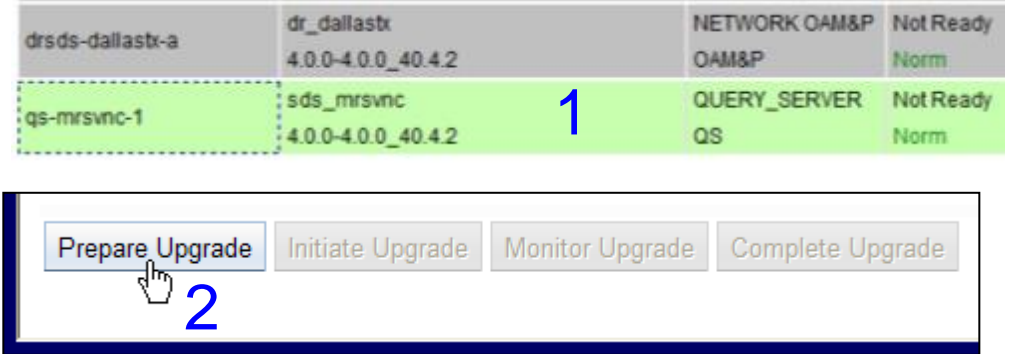
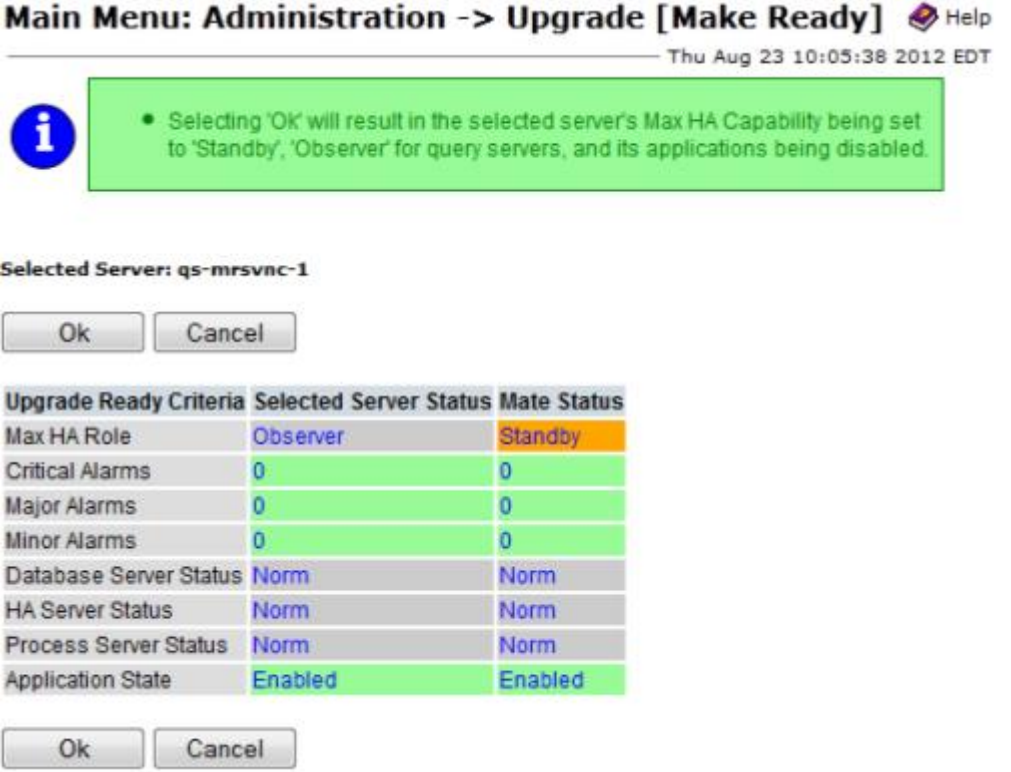
# APPENDIX C. UPGRADE OF A SINGLE SERVER

## C.1 Prepare Upgrade

### Appendix C.1: Prepare Upgrade

Step	Procedure	Result																																
1. <input type="checkbox"/>	Using the <b>VIP</b> address, access the Primary Provisioning Site GUI.	<ul style="list-style-type: none"> <li>Access the Primary Provisioning Site GUI as specified in <b>Appendix A</b>.</li> </ul>																																
2. <input type="checkbox"/>	<p>Active Provisioning Site VIP:</p> <p>Select...</p> <p><b>Main Menu</b>            → Administration            → Software Mangment            → Upgrade</p> <p>...as shown on the right.</p> <p><b>NOTE:</b> On 4.0 systems, select...  <b>Main Menu</b>            → Administration            → Upgrade</p>	 <p>The screenshot shows the GUI interface. On the left is a 'Main Menu' tree with 'Administration' selected. On the right is a table titled 'Main Menu: Administration -&gt; Software Management -&gt; Upgrade'.</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM Max HA Role</th> <th>Network Element</th> <th>Role</th> </tr> <tr> <th></th> <th>Max Allowed HA Role</th> <th>Appl Version</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>roma-sds-a</td> <td>Active</td> <td>sds_roma 50.13.0</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> <tr> <td>roma-sds-b</td> <td>Standby</td> <td>sds_roma 50.13.0</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> <tr> <td>roma-so-a</td> <td>Active</td> <td>sds_roma 50.13.0</td> <td>System OAM OAM</td> </tr> <tr> <td>roma-so-b</td> <td>Standby</td> <td>sds_roma 50.13.0</td> <td>System OAM OAM</td> </tr> <tr> <td>roma-dp-1</td> <td>Active</td> <td>sds_roma 50.13.0</td> <td>MP SDS</td> </tr> <tr> <td>roma-dr-a</td> <td>Active</td> <td>dr_roma 50.13.0</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> </tbody> </table>	Hostname	OAM Max HA Role	Network Element	Role		Max Allowed HA Role	Appl Version	Function	roma-sds-a	Active	sds_roma 50.13.0	Network OAM&P OAM&P	roma-sds-b	Standby	sds_roma 50.13.0	Network OAM&P OAM&P	roma-so-a	Active	sds_roma 50.13.0	System OAM OAM	roma-so-b	Standby	sds_roma 50.13.0	System OAM OAM	roma-dp-1	Active	sds_roma 50.13.0	MP SDS	roma-dr-a	Active	dr_roma 50.13.0	Network OAM&P OAM&P
Hostname	OAM Max HA Role	Network Element	Role																															
	Max Allowed HA Role	Appl Version	Function																															
roma-sds-a	Active	sds_roma 50.13.0	Network OAM&P OAM&P																															
roma-sds-b	Standby	sds_roma 50.13.0	Network OAM&P OAM&P																															
roma-so-a	Active	sds_roma 50.13.0	System OAM OAM																															
roma-so-b	Standby	sds_roma 50.13.0	System OAM OAM																															
roma-dp-1	Active	sds_roma 50.13.0	MP SDS																															
roma-dr-a	Active	dr_roma 50.13.0	Network OAM&P OAM&P																															
3. <input type="checkbox"/>	<p>Active Provisioning Site VIP:</p> <p>1) Using the vertical scroll bar in the right panel, scroll to the row containing the <b>hostname</b> of the server to be upgraded.</p> <p>2) Verify that the <b>Upgrade State</b> shows "Not Ready".</p>	 <p>The screenshot shows a row from the table with the following data: 'qs-mrsvnc-1', 'sds_mrsvnc', '4.0.0-4.0.0_40.4.2', 'QUERY_SERVER', 'QS', and 'Not Ready'. The 'qs-mrsvnc-1' and 'Not Ready' cells are circled in red. A blue '1' is placed below the first column, and a blue '2' is placed below the last column.</p>																																

## Appendix C.1: Prepare Upgrade

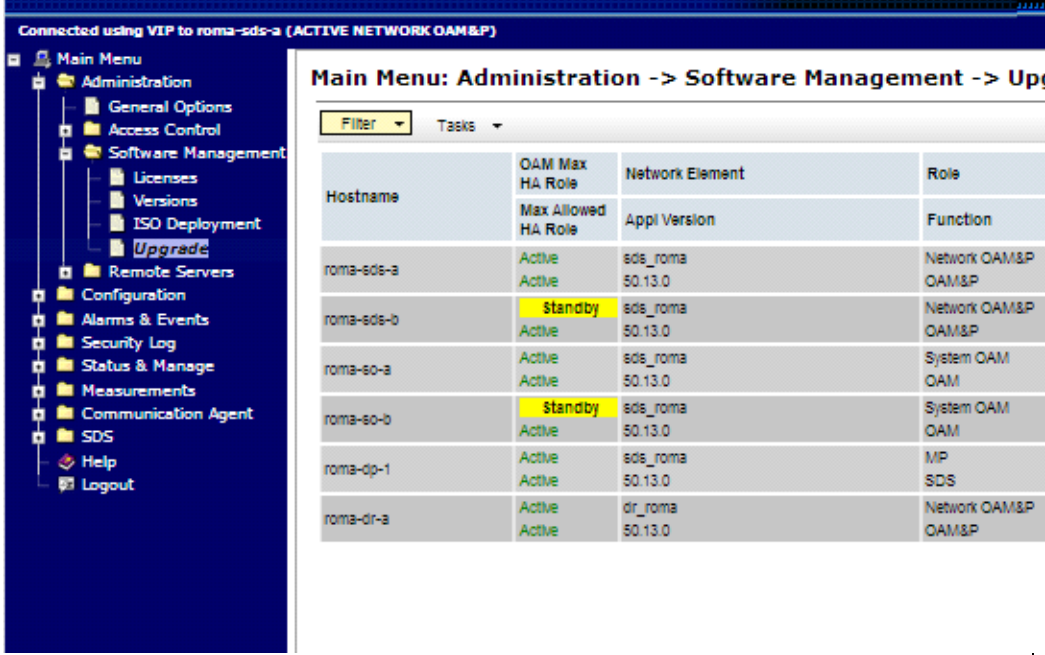

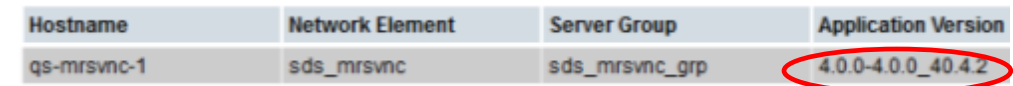
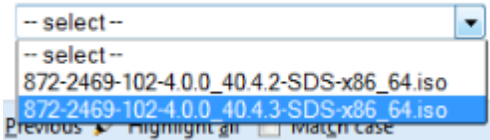
Step	Procedure	Result																											
<p>4.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Using the cursor, select the row containing the <b>hostname</b> of the server to be upgraded.</p> <p>2) Click the “<b>Prepare Upgrade</b>” dialogue button located in the bottom left of the right panel.</p>	 <p>The screenshot shows a table with the following data:</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>Version</th> <th>Role</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>drsds-dallastx-a</td> <td>dr_dallastx 4.0.0-4.0.0_40.4.2</td> <td>NETWORK OAM&amp;P OAM&amp;P</td> <td>Not Ready Norm</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td>sds_mrsvnc 4.0.0-4.0.0_40.4.2</td> <td>QUERY_SERVER QS</td> <td>Not Ready Norm</td> </tr> </tbody> </table> <p>A blue box highlights the 'qs-mrsvnc-1' row, and a blue number '1' is placed next to it. Below the table, a 'Prepare Upgrade' button is highlighted with a blue box and a blue number '2' next to it. Other buttons include 'Initiate Upgrade', 'Monitor Upgrade', and 'Complete Upgrade'.</p>	Hostname	Version	Role	Status	drsds-dallastx-a	dr_dallastx 4.0.0-4.0.0_40.4.2	NETWORK OAM&P OAM&P	Not Ready Norm	qs-mrsvnc-1	sds_mrsvnc 4.0.0-4.0.0_40.4.2	QUERY_SERVER QS	Not Ready Norm															
Hostname	Version	Role	Status																										
drsds-dallastx-a	dr_dallastx 4.0.0-4.0.0_40.4.2	NETWORK OAM&P OAM&P	Not Ready Norm																										
qs-mrsvnc-1	sds_mrsvnc 4.0.0-4.0.0_40.4.2	QUERY_SERVER QS	Not Ready Norm																										
<p>5.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user should be presented with the <b>Upgrade [Make Ready]</b> Administration screen.</p> <p>Click any “<b>Ok</b>” dialogue button.</p>	 <p>The screenshot shows the 'Main Menu: Administration -&gt; Upgrade [Make Ready]' dialog box. It includes a green information box with the following text:</p> <ul style="list-style-type: none"> <li>Selecting 'OK' will result in the selected server's Max HA Capability being set to 'Standby', 'Observer' for query servers, and its applications being disabled.</li> </ul> <p>Below this, it says 'Selected Server: qs-mrsvnc-1' and has 'Ok' and 'Cancel' buttons. At the bottom, there is a table with the following data:</p> <table border="1"> <thead> <tr> <th>Upgrade Ready Criteria</th> <th>Selected Server Status</th> <th>Mate Status</th> </tr> </thead> <tbody> <tr> <td>Max HA Role</td> <td>Observer</td> <td>Standby</td> </tr> <tr> <td>Critical Alarms</td> <td>0</td> <td>0</td> </tr> <tr> <td>Major Alarms</td> <td>0</td> <td>0</td> </tr> <tr> <td>Minor Alarms</td> <td>0</td> <td>0</td> </tr> <tr> <td>Database Server Status</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>HA Server Status</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>Process Server Status</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>Application State</td> <td>Enabled</td> <td>Enabled</td> </tr> </tbody> </table> <p>At the bottom of the dialog, there are 'Ok' and 'Cancel' buttons.</p>	Upgrade Ready Criteria	Selected Server Status	Mate Status	Max HA Role	Observer	Standby	Critical Alarms	0	0	Major Alarms	0	0	Minor Alarms	0	0	Database Server Status	Norm	Norm	HA Server Status	Norm	Norm	Process Server Status	Norm	Norm	Application State	Enabled	Enabled
Upgrade Ready Criteria	Selected Server Status	Mate Status																											
Max HA Role	Observer	Standby																											
Critical Alarms	0	0																											
Major Alarms	0	0																											
Minor Alarms	0	0																											
Database Server Status	Norm	Norm																											
HA Server Status	Norm	Norm																											
Process Server Status	Norm	Norm																											
Application State	Enabled	Enabled																											

**Appendix C.1: Prepare Upgrade**

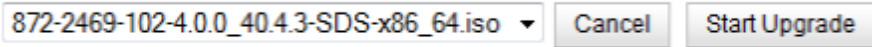
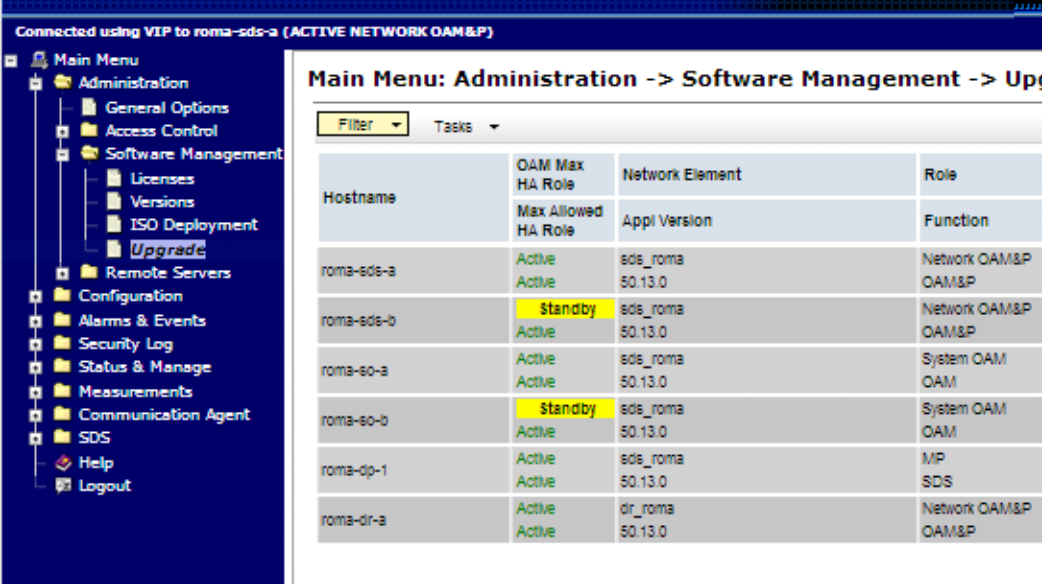
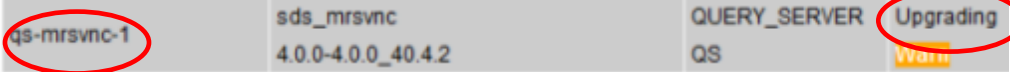
Step	Procedure	Result				
<p>6.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Using the vertical scroll bar in the right panel, scroll to the row containing the <b>hostname</b> of the server to be upgraded.</p> <p>2) Verify that the <b>Upgrade State</b> shows “<b>Ready</b>”.</p> <p><b>NOTE:</b> <i>If the <b>Upgrade State</b> fails to show “<b>Ready</b>”, the user may need to refresh the screen by selecting...</i></p> <p><b>Main Menu</b>            → Administration            → Software Managmnt            → Upgrade</p> <p><i>...for a 2<sup>nd</sup> time and repeating sub-steps 1) &amp; 2) associated with this step.</i></p>	<table border="1"> <tr> <td>qs-mrsvnc-1</td> <td>sds_mrsvnc 4.0.0-4.0.0_40.4.2</td> <td>QUERY_SERVER QS</td> <td>Ready 2 Norm</td> </tr> </table> <p>1</p>	qs-mrsvnc-1	sds_mrsvnc 4.0.0-4.0.0_40.4.2	QUERY_SERVER QS	Ready 2 Norm
qs-mrsvnc-1	sds_mrsvnc 4.0.0-4.0.0_40.4.2	QUERY_SERVER QS	Ready 2 Norm			
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>						

## C.2 Initiate Upgrade

### Appendix C.2: Initiate Upgrade

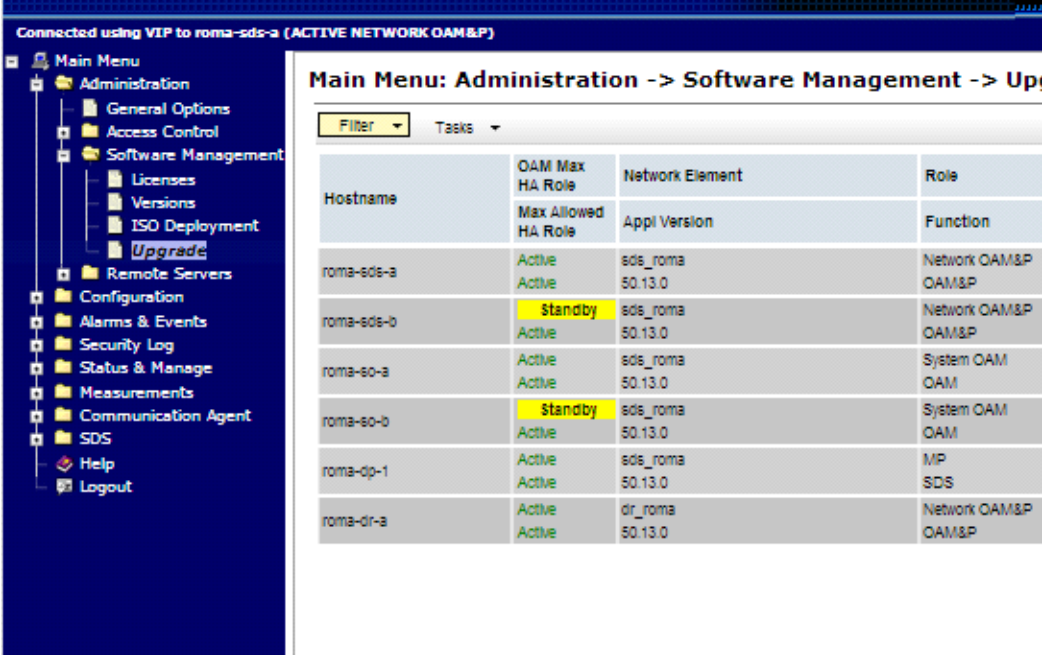
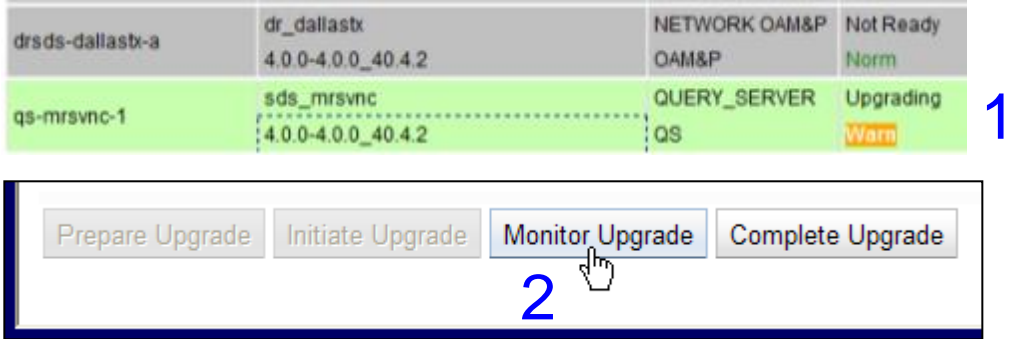
Step	Procedure	Result																												
1.	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>  → Administration  → Software Managmnt  → Upgrade</p> <p>...as shown on the right.</p> <p><b>NOTE:</b> On 4.0 systems, select...  <b>Main Menu</b>  → Administration  → Upgrade</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM Max HA Role</th> <th>Network Element</th> <th>Role</th> </tr> </thead> <tbody> <tr> <td>roma-sds-a</td> <td>Active</td> <td>sds_roma</td> <td>Network OAM&amp;P</td> </tr> <tr> <td>roma-sds-b</td> <td>standby</td> <td>sds_roma</td> <td>Network OAM&amp;P</td> </tr> <tr> <td>roma-so-a</td> <td>Active</td> <td>sds_roma</td> <td>System OAM</td> </tr> <tr> <td>roma-so-b</td> <td>standby</td> <td>sds_roma</td> <td>System OAM</td> </tr> <tr> <td>roma-dp-1</td> <td>Active</td> <td>sds_roma</td> <td>MP</td> </tr> <tr> <td>roma-dr-a</td> <td>Active</td> <td>dr_roma</td> <td>Network OAM&amp;P</td> </tr> </tbody> </table>	Hostname	OAM Max HA Role	Network Element	Role	roma-sds-a	Active	sds_roma	Network OAM&P	roma-sds-b	standby	sds_roma	Network OAM&P	roma-so-a	Active	sds_roma	System OAM	roma-so-b	standby	sds_roma	System OAM	roma-dp-1	Active	sds_roma	MP	roma-dr-a	Active	dr_roma	Network OAM&P
Hostname	OAM Max HA Role	Network Element	Role																											
roma-sds-a	Active	sds_roma	Network OAM&P																											
roma-sds-b	standby	sds_roma	Network OAM&P																											
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roma-so-b	standby	sds_roma	System OAM																											
roma-dp-1	Active	sds_roma	MP																											
roma-dr-a	Active	dr_roma	Network OAM&P																											
2.	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Using the cursor, select the row containing the <b>hostname</b> of the server to be upgraded.</p> <p>2) Click the “Initiate Upgrade” dialogue button located across the bottom left of the right panel.</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>Network Element</th> <th>Server Group</th> <th>Application Version</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>drsds-dallaslx-a</td> <td>dr_dallaslx</td> <td></td> <td>4.0.0-4.0.0_40.4.2</td> <td>Not Ready</td> </tr> <tr> <td>qs-mrsync-1</td> <td>sds_mrsync</td> <td></td> <td>4.0.0-4.0.0_40.4.2</td> <td>Warn</td> </tr> </tbody> </table>	Hostname	Network Element	Server Group	Application Version	Status	drsds-dallaslx-a	dr_dallaslx		4.0.0-4.0.0_40.4.2	Not Ready	qs-mrsync-1	sds_mrsync		4.0.0-4.0.0_40.4.2	Warn													
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3.	<p><b>Active Provisioning Site VIP:</b></p> <p>Verify that the <b>Application Version</b> shows the <b>&lt;source_release&gt;</b>.</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>Network Element</th> <th>Server Group</th> <th>Application Version</th> </tr> </thead> <tbody> <tr> <td>qs-mrsync-1</td> <td>sds_mrsync</td> <td>sds_mrsync_grp</td> <td>4.0.0-4.0.0_40.4.2</td> </tr> </tbody> </table>	Hostname	Network Element	Server Group	Application Version	qs-mrsync-1	sds_mrsync	sds_mrsync_grp	4.0.0-4.0.0_40.4.2																				
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4.	<p><b>Active Provisioning Site VIP:</b></p> <p>Using the pull-down menu located at the bottom left of the right panel, select the <b>&lt;target_release&gt;</b>.</p>																													

## Appendix C.2: Initiate Upgrade

Step	Procedure	Result																																
<p>5.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Click the “<b>Start Upgrade</b>” dialogue button located on the bottom left of the right panel.</p>																																	
<p>6.</p> <p><input type="checkbox"/></p>	<p>The user is returned to the...</p> <p><b>Main Menu</b>  → Administration  → Software Managmnt  → Upgrade</p> <p>...screen as shown on the right.</p> <p><b>NOTE:</b> On 4.0 systems, to...  <b>Main Menu</b>  → Administration  → Upgrade</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM Max HA Role</th> <th>Network Element</th> <th>Role</th> </tr> <tr> <th></th> <th>Max Allowed HA Role</th> <th>Appl Version</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>roma-sds-a</td> <td>Active</td> <td>sds_roma 50.13.0</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> <tr> <td>roma-sds-b</td> <td>Standby</td> <td>sds_roma 50.13.0</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> <tr> <td>roma-so-a</td> <td>Active</td> <td>sds_roma 50.13.0</td> <td>System OAM OAM</td> </tr> <tr> <td>roma-so-b</td> <td>Standby</td> <td>sds_roma 50.13.0</td> <td>System OAM OAM</td> </tr> <tr> <td>roma-op-1</td> <td>Active</td> <td>sds_roma 50.13.0</td> <td>MP SDS</td> </tr> <tr> <td>roma-dr-a</td> <td>Active</td> <td>dr_roma 50.13.0</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> </tbody> </table>	Hostname	OAM Max HA Role	Network Element	Role		Max Allowed HA Role	Appl Version	Function	roma-sds-a	Active	sds_roma 50.13.0	Network OAM&P OAM&P	roma-sds-b	Standby	sds_roma 50.13.0	Network OAM&P OAM&P	roma-so-a	Active	sds_roma 50.13.0	System OAM OAM	roma-so-b	Standby	sds_roma 50.13.0	System OAM OAM	roma-op-1	Active	sds_roma 50.13.0	MP SDS	roma-dr-a	Active	dr_roma 50.13.0	Network OAM&P OAM&P
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roma-op-1	Active	sds_roma 50.13.0	MP SDS																															
roma-dr-a	Active	dr_roma 50.13.0	Network OAM&P OAM&P																															
<p>7.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Using the vertical scroll bar in the right panel, scroll to the row containing the <b>hostname</b> of the server to be upgraded.</p> <p>2) Verify that the <b>Upgrade State</b> shows “<b>Upgrading</b>”.</p> <p><b>NOTE:</b> As a result of the server undergoing upgrade, several alarms related to “<b>DB Replication</b>” (Event IDs 31101, 31102, 31106, 31107) may appear and remain present until the upgrade has been completed.</p>	 <table border="1"> <tbody> <tr> <td>qs-mrsvnc-1</td> <td>sds_mrsvnc 4.0.0-4.0.0_40.4.2</td> <td>QUERY_SERVER QS</td> <td>Upgrading Warn</td> </tr> </tbody> </table>	qs-mrsvnc-1	sds_mrsvnc 4.0.0-4.0.0_40.4.2	QUERY_SERVER QS	Upgrading Warn																												
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<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>																																		

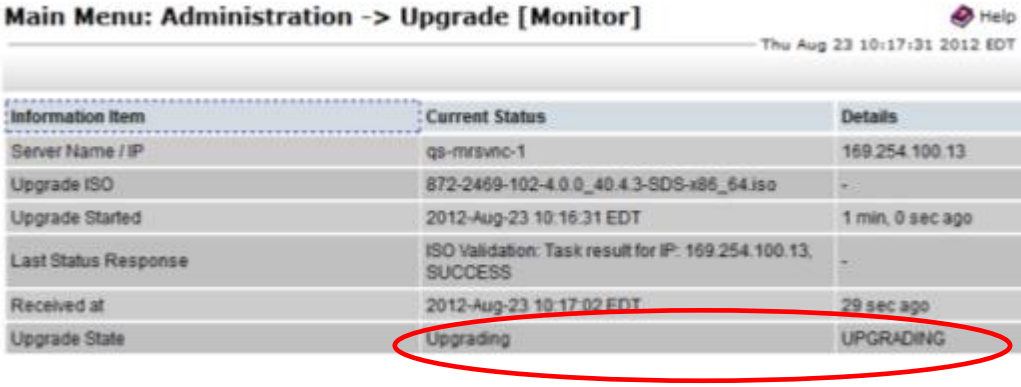
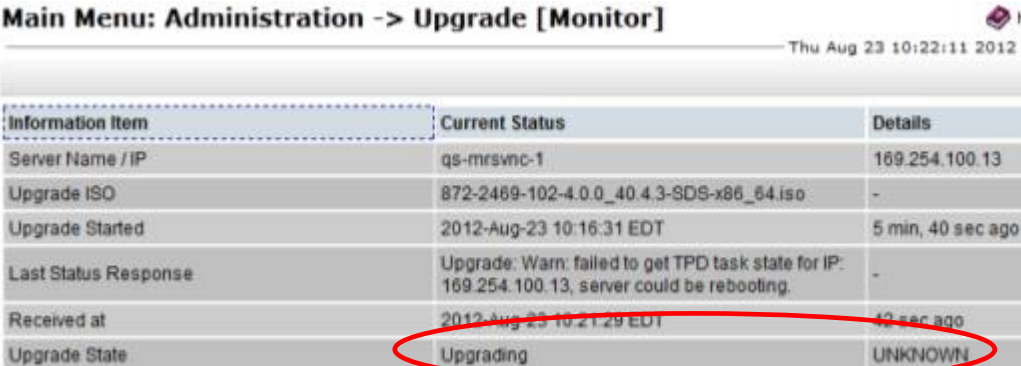
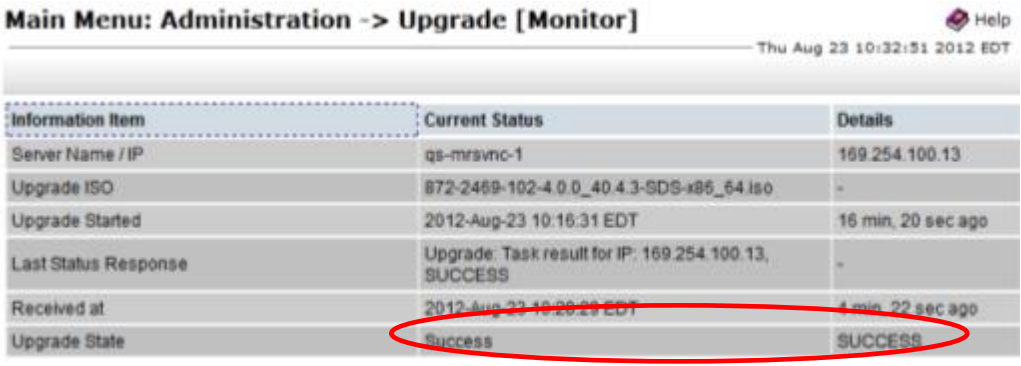
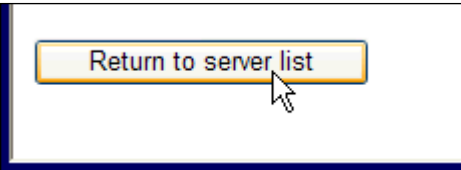
## C.3 Monitor Upgrade

### Appendix C.3: Monitor Upgrade

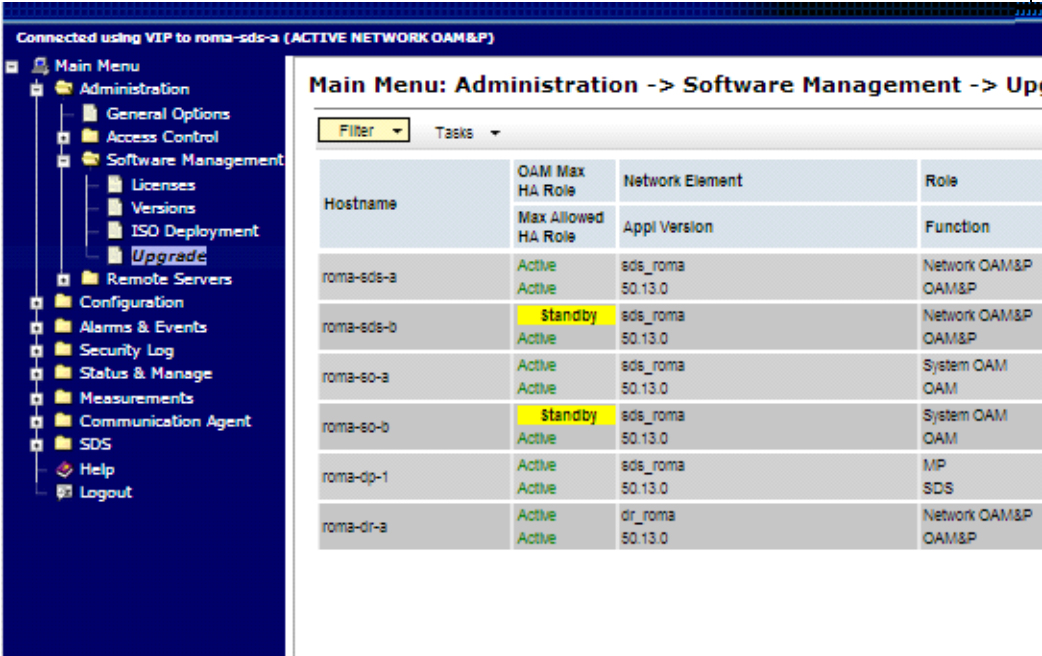

Step	Procedure	Result																																
<p>1.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>On 5.0 Active NOAM: Select...</p> <p><b>Main Menu</b>            → Administration            → Software Managmnt            → Upgrade</p> <p>NOTE: Then skip to Step 3</p> <p>On 4.0 Active NOAM: Select...</p> <p><b>Main Menu</b>            → Administration            → Upgrade</p> <p>Then continue to Step 2.</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM Max HA Role</th> <th>Network Element</th> <th>Role</th> </tr> <tr> <th></th> <th>Max Allowed HA Role</th> <th>Appl Version</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>roma-sds-a</td> <td>Active</td> <td>sds_roma</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> <tr> <td>roma-sds-b</td> <td>Standby</td> <td>sds_roma</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> <tr> <td>roma-so-a</td> <td>Active</td> <td>sds_roma</td> <td>System OAM OAM</td> </tr> <tr> <td>roma-so-b</td> <td>Standby</td> <td>sds_roma</td> <td>System OAM OAM</td> </tr> <tr> <td>roma-dp-1</td> <td>Active</td> <td>sds_roma</td> <td>MP SDS</td> </tr> <tr> <td>roma-dr-a</td> <td>Active</td> <td>dr_roma</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> </tbody> </table>	Hostname	OAM Max HA Role	Network Element	Role		Max Allowed HA Role	Appl Version	Function	roma-sds-a	Active	sds_roma	Network OAM&P OAM&P	roma-sds-b	Standby	sds_roma	Network OAM&P OAM&P	roma-so-a	Active	sds_roma	System OAM OAM	roma-so-b	Standby	sds_roma	System OAM OAM	roma-dp-1	Active	sds_roma	MP SDS	roma-dr-a	Active	dr_roma	Network OAM&P OAM&P
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<p>2.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>NOTE: Only run this step if on an SDS 4.0 NOAM. Otherwise, skip this step.</p> <p>1) Using the cursor, select the row containing the <b>hostname</b> of the server to be upgraded.</p> <p>2) Click the “<b>Monitor Upgrade</b>” dialogue button located across the bottom left of the right panel.</p>	 <table border="1"> <tbody> <tr> <td>drdsds-dallastx-a</td> <td>dr_dallastx 4.0.0-4.0.0_40.4.2</td> <td>NETWORK OAM&amp;P OAM&amp;P</td> <td>Not Ready Norm</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td>sds_mrsvnc 4.0.0-4.0.0_40.4.2</td> <td>QUERY_SERVER QS</td> <td>Upgrading Warn</td> </tr> </tbody> </table> <p>1</p> <p>2</p>	drdsds-dallastx-a	dr_dallastx 4.0.0-4.0.0_40.4.2	NETWORK OAM&P OAM&P	Not Ready Norm	qs-mrsvnc-1	sds_mrsvnc 4.0.0-4.0.0_40.4.2	QUERY_SERVER QS	Upgrading Warn																								
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### Appendix C.3: Monitor Upgrade

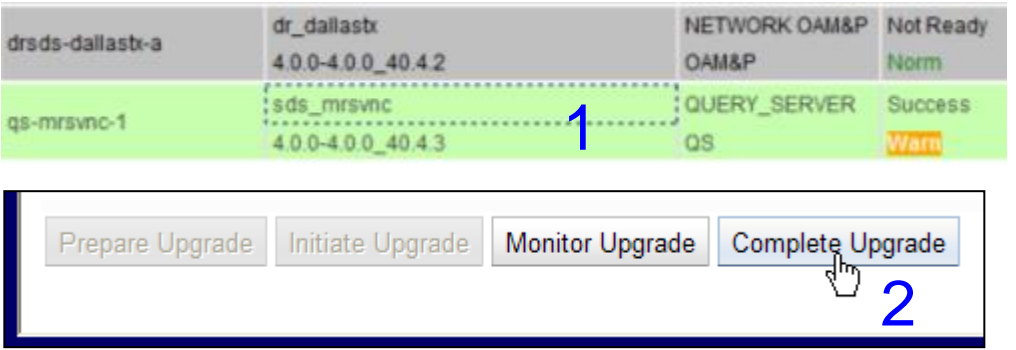
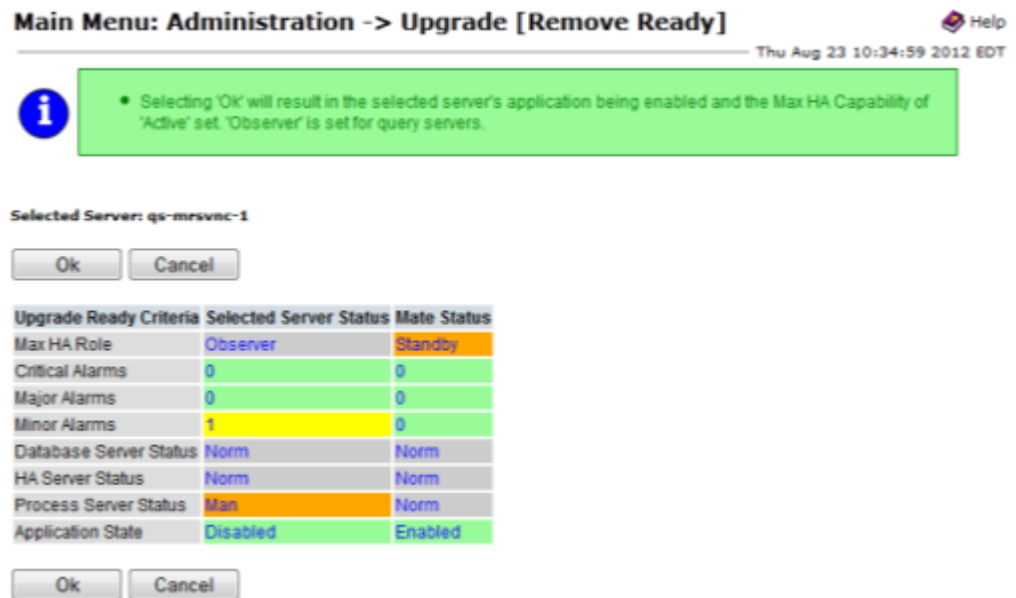
Step	Procedure	Result																					
<p>3.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user should be presented with the <b>Upgrade [Monitor]</b> Administration screen.</p> <p>The initial values for the <b>Current Status /Details</b> fields should be <b>Upgrading /UPGRADING</b>.</p> <p><b>NOTE:</b> As the upgrade progresses, time values will continue to update every 30 seconds.</p>	 <p>The screenshot shows the 'Main Menu: Administration -&gt; Upgrade [Monitor]' page. A table displays the following information:</p> <table border="1"> <thead> <tr> <th>Information Item</th> <th>Current Status</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>Server Name / IP</td> <td>qs-mrsvnc-1</td> <td>169.254.100.13</td> </tr> <tr> <td>Upgrade ISO</td> <td>872-2469-102-4.0.0_40.4.3-SDS-x86_64.iso</td> <td>-</td> </tr> <tr> <td>Upgrade Started</td> <td>2012-Aug-23 10:16:31 EDT</td> <td>1 min, 0 sec ago</td> </tr> <tr> <td>Last Status Response</td> <td>ISO Validation: Task result for IP: 169.254.100.13, SUCCESS</td> <td>-</td> </tr> <tr> <td>Received at</td> <td>2012-Aug-23 10:17:02 EDT</td> <td>29 sec ago</td> </tr> <tr> <td>Upgrade State</td> <td>Upgrading</td> <td>UPGRADING</td> </tr> </tbody> </table> <p>The 'Upgrade State' row is circled in red.</p>	Information Item	Current Status	Details	Server Name / IP	qs-mrsvnc-1	169.254.100.13	Upgrade ISO	872-2469-102-4.0.0_40.4.3-SDS-x86_64.iso	-	Upgrade Started	2012-Aug-23 10:16:31 EDT	1 min, 0 sec ago	Last Status Response	ISO Validation: Task result for IP: 169.254.100.13, SUCCESS	-	Received at	2012-Aug-23 10:17:02 EDT	29 sec ago	Upgrade State	Upgrading	UPGRADING
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<p>4.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>When the server initiates a post-upgrade reboot, the values for the <b>Current Status /Details</b> fields will change to <b>Upgrading /UNKNOWN</b>.</p>	 <p>The screenshot shows the 'Main Menu: Administration -&gt; Upgrade [Monitor]' page. A table displays the following information:</p> <table border="1"> <thead> <tr> <th>Information Item</th> <th>Current Status</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>Server Name / IP</td> <td>qs-mrsvnc-1</td> <td>169.254.100.13</td> </tr> <tr> <td>Upgrade ISO</td> <td>872-2469-102-4.0.0_40.4.3-SDS-x86_64.iso</td> <td>-</td> </tr> <tr> <td>Upgrade Started</td> <td>2012-Aug-23 10:16:31 EDT</td> <td>5 min, 40 sec ago</td> </tr> <tr> <td>Last Status Response</td> <td>Upgrade: Warn: failed to get TPD task state for IP: 169.254.100.13, server could be rebooting.</td> <td>-</td> </tr> <tr> <td>Received at</td> <td>2012-Aug-23 10:21:29 EDT</td> <td>42 sec ago</td> </tr> <tr> <td>Upgrade State</td> <td>Upgrading</td> <td>UNKNOWN</td> </tr> </tbody> </table> <p>The 'Upgrade State' row is circled in red.</p>	Information Item	Current Status	Details	Server Name / IP	qs-mrsvnc-1	169.254.100.13	Upgrade ISO	872-2469-102-4.0.0_40.4.3-SDS-x86_64.iso	-	Upgrade Started	2012-Aug-23 10:16:31 EDT	5 min, 40 sec ago	Last Status Response	Upgrade: Warn: failed to get TPD task state for IP: 169.254.100.13, server could be rebooting.	-	Received at	2012-Aug-23 10:21:29 EDT	42 sec ago	Upgrade State	Upgrading	UNKNOWN
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<p>5.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>After the post-upgrade reboot has been completed, the values for the <b>Current Status /Details</b> fields will change to <b>Success/SUCCESS</b>.</p>	 <p>The screenshot shows the 'Main Menu: Administration -&gt; Upgrade [Monitor]' page. A table displays the following information:</p> <table border="1"> <thead> <tr> <th>Information Item</th> <th>Current Status</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>Server Name / IP</td> <td>qs-mrsvnc-1</td> <td>169.254.100.13</td> </tr> <tr> <td>Upgrade ISO</td> <td>872-2469-102-4.0.0_40.4.3-SDS-x86_64.iso</td> <td>-</td> </tr> <tr> <td>Upgrade Started</td> <td>2012-Aug-23 10:16:31 EDT</td> <td>16 min, 20 sec ago</td> </tr> <tr> <td>Last Status Response</td> <td>Upgrade: Task result for IP: 169.254.100.13, SUCCESS</td> <td>-</td> </tr> <tr> <td>Received at</td> <td>2012-Aug-23 10:28:29 EDT</td> <td>4 min, 22 sec ago</td> </tr> <tr> <td>Upgrade State</td> <td>Success</td> <td>SUCCESS</td> </tr> </tbody> </table> <p>The 'Upgrade State' row is circled in red.</p>	Information Item	Current Status	Details	Server Name / IP	qs-mrsvnc-1	169.254.100.13	Upgrade ISO	872-2469-102-4.0.0_40.4.3-SDS-x86_64.iso	-	Upgrade Started	2012-Aug-23 10:16:31 EDT	16 min, 20 sec ago	Last Status Response	Upgrade: Task result for IP: 169.254.100.13, SUCCESS	-	Received at	2012-Aug-23 10:28:29 EDT	4 min, 22 sec ago	Upgrade State	Success	SUCCESS
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<p>6.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p><b>NOTE:</b> Only run this step if on an SDS 4.0 NOAM. Otherwise, skip this step.</p> <p>Click the <b>“Return to server list”</b> dialogue button located on the bottom left of the right panel.</p>	 <p>The screenshot shows a button labeled 'Return to server list' with a mouse cursor pointing to it.</p>																					

**Appendix C.3: Monitor Upgrade**

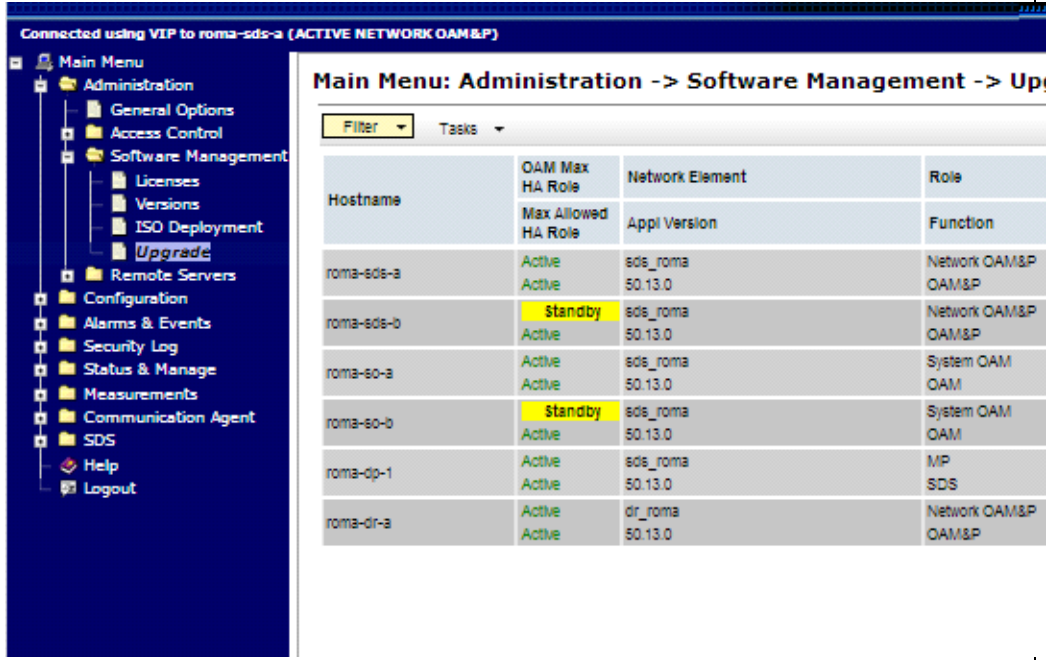

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<p>7.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user is returned to the...</p> <p><b>Main Menu</b>            → Administration            → Software Managmnt            → Upgrade</p> <p>...screen as shown on the right.</p> <p><b>NOTE:</b> On 4.0 systems, to...  <b>Main Menu</b>            → Administration            → Upgrade</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM Max HA Role</th> <th>Network Element</th> <th>Role</th> </tr> </thead> <tbody> <tr> <td>roma-sds-a</td> <td>Active</td> <td>sds_roma</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> <tr> <td>roma-sds-b</td> <td>Standby</td> <td>sds_roma</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> <tr> <td>roma-so-a</td> <td>Active</td> <td>sds_roma</td> <td>System OAM OAM</td> </tr> <tr> <td>roma-so-b</td> <td>Standby</td> <td>sds_roma</td> <td>System OAM OAM</td> </tr> <tr> <td>roma-dp-1</td> <td>Active</td> <td>sds_roma</td> <td>MP SDS</td> </tr> <tr> <td>roma-dr-a</td> <td>Active</td> <td>dr_roma</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> </tbody> </table>	Hostname	OAM Max HA Role	Network Element	Role	roma-sds-a	Active	sds_roma	Network OAM&P OAM&P	roma-sds-b	Standby	sds_roma	Network OAM&P OAM&P	roma-so-a	Active	sds_roma	System OAM OAM	roma-so-b	Standby	sds_roma	System OAM OAM	roma-dp-1	Active	sds_roma	MP SDS	roma-dr-a	Active	dr_roma	Network OAM&P OAM&P
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<p>8.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Using the vertical scroll bar in the right panel, scroll to the row containing the <b>hostname</b> of the server to be upgraded.</p> <p>2) Verify that the <b>Upgrade State</b> shows “<b>Success</b>”.</p>	 <table border="1"> <tbody> <tr> <td>qs-mrsvnc-1</td> <td>sds_mrsvnc</td> <td>QUERY_SERVER</td> <td>Success</td> </tr> <tr> <td></td> <td>4.0.0-4.0.0_40.4.3</td> <td>QS</td> <td>Warn</td> </tr> </tbody> </table>	qs-mrsvnc-1	sds_mrsvnc	QUERY_SERVER	Success		4.0.0-4.0.0_40.4.3	QS	Warn																				
qs-mrsvnc-1	sds_mrsvnc	QUERY_SERVER	Success																											
	4.0.0-4.0.0_40.4.3	QS	Warn																											
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>																														

## C.4 Complete Upgrade


### Appendix C.4: Complete Upgrade

Step	Procedure	Result																											
<p>1.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Using the cursor, select the row containing the <b>hostname</b> of the server to be upgraded.</p> <p>2) Click the <b>“Complete Upgrade”</b> dialogue button located across the bottom left of the right panel.</p>	 <p>The screenshot shows a table with the following data:</p> <table border="1"> <thead> <tr> <th>Host</th> <th>IP</th> <th>Role</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>drsds-dallastx-a</td> <td>dr_dallastx 4.0.0-4.0.0_40.4.2</td> <td>NETWORK OAM&amp;P OAM&amp;P</td> <td>Not Ready Norm</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td>sds_mrsvnc 4.0.0-4.0.0_40.4.3</td> <td>QUERY_SERVER QS</td> <td>Success Warn</td> </tr> </tbody> </table> <p>A blue dashed box highlights the row for 'qs-mrsvnc-1' with a blue '1' next to it. Below the table is a control panel with buttons: 'Prepare Upgrade', 'Initiate Upgrade', 'Monitor Upgrade', and 'Complete Upgrade'. A mouse cursor is pointing at the 'Complete Upgrade' button, which is highlighted with a blue '2'.</p>	Host	IP	Role	Status	drsds-dallastx-a	dr_dallastx 4.0.0-4.0.0_40.4.2	NETWORK OAM&P OAM&P	Not Ready Norm	qs-mrsvnc-1	sds_mrsvnc 4.0.0-4.0.0_40.4.3	QUERY_SERVER QS	Success Warn															
Host	IP	Role	Status																										
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qs-mrsvnc-1	sds_mrsvnc 4.0.0-4.0.0_40.4.3	QUERY_SERVER QS	Success Warn																										
<p>2.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user should be presented with the <b>Upgrade [Remove Ready]</b> Administration screen.</p> <p>Click any <b>“Ok”</b> dialogue button.</p>	 <p>The screenshot shows the 'Main Menu: Administration -&gt; Upgrade [Remove Ready]' screen. It includes a green information box with the text: 'Selecting 'OK' will result in the selected server's application being enabled and the Max HA Capability of 'Active' set. 'Observer' is set for query servers.' Below this is a 'Selected Server: qs-mrsvnc-1' section with 'Ok' and 'Cancel' buttons. A table shows the upgrade ready criteria:</p> <table border="1"> <thead> <tr> <th>Upgrade Ready Criteria</th> <th>Selected Server Status</th> <th>Mate Status</th> </tr> </thead> <tbody> <tr> <td>Max HA Role</td> <td>Observer</td> <td>Standby</td> </tr> <tr> <td>Critical Alarms</td> <td>0</td> <td>0</td> </tr> <tr> <td>Major Alarms</td> <td>0</td> <td>0</td> </tr> <tr> <td>Minor Alarms</td> <td>1</td> <td>0</td> </tr> <tr> <td>Database Server Status</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>HA Server Status</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>Process Server Status</td> <td>Man</td> <td>Norm</td> </tr> <tr> <td>Application State</td> <td>Disabled</td> <td>Enabled</td> </tr> </tbody> </table> <p>At the bottom, there are 'Ok' and 'Cancel' buttons.</p>	Upgrade Ready Criteria	Selected Server Status	Mate Status	Max HA Role	Observer	Standby	Critical Alarms	0	0	Major Alarms	0	0	Minor Alarms	1	0	Database Server Status	Norm	Norm	HA Server Status	Norm	Norm	Process Server Status	Man	Norm	Application State	Disabled	Enabled
Upgrade Ready Criteria	Selected Server Status	Mate Status																											
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Major Alarms	0	0																											
Minor Alarms	1	0																											
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HA Server Status	Norm	Norm																											
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Application State	Disabled	Enabled																											

### Appendix C.4: Complete Upgrade

Step	Procedure	Result																																
<p>3.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user is returned to the...</p> <p><b>Main Menu</b>            → Administration            → Software Managmnt            → Upgrade</p> <p>...screen as shown on the right.</p> <p><b>NOTE:</b> On 4.0 systems, to...  <b>Main Menu</b>            → Administration            → Upgrade</p>	 <p>Connected using VIP to roma-sds-a (ACTIVE NETWORK OAM&amp;P)</p> <p><b>Main Menu: Administration -&gt; Software Management -&gt; Upgrade</b></p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM Max HA Role</th> <th>Network Element</th> <th>Role</th> </tr> <tr> <th></th> <th>Max Allowed HA Role</th> <th>Appl Version</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>roma-sds-a</td> <td>Active</td> <td>sds_roma 50.13.0</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> <tr> <td>roma-sds-b</td> <td>Standby</td> <td>sds_roma 50.13.0</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> <tr> <td>roma-so-a</td> <td>Active</td> <td>sds_roma 50.13.0</td> <td>System OAM OAM</td> </tr> <tr> <td>roma-so-b</td> <td>Standby</td> <td>sds_roma 50.13.0</td> <td>System OAM OAM</td> </tr> <tr> <td>roma-dp-1</td> <td>Active</td> <td>sds_roma 50.13.0</td> <td>MP SDS</td> </tr> <tr> <td>roma-dr-a</td> <td>Active</td> <td>dr_roma 50.13.0</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> </tbody> </table>	Hostname	OAM Max HA Role	Network Element	Role		Max Allowed HA Role	Appl Version	Function	roma-sds-a	Active	sds_roma 50.13.0	Network OAM&P OAM&P	roma-sds-b	Standby	sds_roma 50.13.0	Network OAM&P OAM&P	roma-so-a	Active	sds_roma 50.13.0	System OAM OAM	roma-so-b	Standby	sds_roma 50.13.0	System OAM OAM	roma-dp-1	Active	sds_roma 50.13.0	MP SDS	roma-dr-a	Active	dr_roma 50.13.0	Network OAM&P OAM&P
Hostname	OAM Max HA Role	Network Element	Role																															
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roma-sds-a	Active	sds_roma 50.13.0	Network OAM&P OAM&P																															
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roma-dp-1	Active	sds_roma 50.13.0	MP SDS																															
roma-dr-a	Active	dr_roma 50.13.0	Network OAM&P OAM&P																															
		<p><b>NOTE:</b> Wait for the screen to refresh and show the Upgrade Ready State is <b>Not Ready</b> and the <b>Upgrade</b> action is disabled. It may take up to 2 minutes for the Upgrade Ready State to change to <b>Not Ready</b>.</p>																																

## Appendix C.4: Complete Upgrade

Step	Procedure	Result
<p>4.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Using the vertical scroll bar in the right panel, scroll to the row containing the <b>hostname</b> of the server to be upgraded.</p> <p>2) Verify that the <b>Application Version</b> now shows the <b>&lt;target_release&gt;</b>.</p> <p>3) Verify that the <b>Upgrade State</b> shows “<b>Not Ready</b>”.</p> <p><b>NOTE:</b> <i>If the <b>Upgrade State</b> fails to show “<b>Success</b>”, the user may need to refresh the screen by selecting...</i></p> <p><b>Main Menu</b>            → Administration            → Software Managmnt            → Upgrade</p> <p><i>...for a 2<sup>nd</sup> time and repeating sub-steps 1) thru 3) associated with this step.</i></p>	 <p>qs-mrsvnc-1      sds_mrsvnc      QUERY_SERVER      Not Ready</p> <p>4.0.0-4.0.0_40.4.3      2      QS      Norm</p> <p>1      3</p>
<p>5.</p> <input type="checkbox"/>	<p><b>Server to be Upgraded (SSH):</b></p> <p>1) Access the command prompt of the server being upgraded.</p> <p>2) Log into the server as the “<b>root</b>” user.</p>	<pre>CentOS release 5.7 (Final) Kernel 2.6.18-274.7.1.el5prere15.0.0_72.32.0 on an x86_64  sds-mrsvnc-a login: root Password: &lt;root_password&gt;</pre>
<p>6.</p> <input type="checkbox"/>	<p><b>Server to be Upgraded (SSH):</b></p> <p>Output similar to that shown on the right may appear as the server accesses the command prompt.</p>	<pre>*** TRUNCATED OUTPUT ***  VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpss7 PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=00 VPATH=/opt/TKLCcomcol/runcm5.13:/opt/TKLCcomcol/cm5.13 PRODPATH= RELEASE=5.13 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpss7:/usr/TKLC/sd s PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=0 [root@sds-mrsvnc-a ~]#</pre>

## Appendix C.4: Complete Upgrade

Step	Procedure	Result												
7. <input type="checkbox"/>	<p><b>Server to be Upgraded (SSH):</b></p> <p>1) Verify existence of the <b>netbackup</b> logical volume.</p>	<pre>[root@sds-mrsvnc-a ~]# df -B M</pre> <table border="1"> <thead> <tr> <th>Filesystem</th> <th>1M-blocks</th> <th>Used</th> <th>Available</th> <th>Use%</th> <th>Mounted on</th> </tr> </thead> <tbody> <tr> <td><b>/dev/mapper/vgroot-netbackup_lv</b></td> <td>2016M</td> <td>692M</td> <td>1223M</td> <td>37%</td> <td>/usr/openv</td> </tr> </tbody> </table> <p><i>Examine the output of the above command to find a filesystem named "vgroot-netbackup_lv" as above.</i></p>	Filesystem	1M-blocks	Used	Available	Use%	Mounted on	<b>/dev/mapper/vgroot-netbackup_lv</b>	2016M	692M	1223M	37%	/usr/openv
Filesystem	1M-blocks	Used	Available	Use%	Mounted on									
<b>/dev/mapper/vgroot-netbackup_lv</b>	2016M	692M	1223M	37%	/usr/openv									
8. <input type="checkbox"/>	<p><b>Server to be Upgraded (SSH):</b></p> <p>If you <b>DID NOT</b> find a <b>netbackup</b> partition in the previous Step then execute <b>Appendix H</b> for this server.</p> <p>Otherwise, <b>SKIP</b> this Step and continue forward.</p>	<p>Execute <b>Appendix H</b> "Create new Logical Volume for NetBackup Client".</p>												
9. <input type="checkbox"/>	<p><b>Server to be Upgraded (SSH):</b></p> <p>Exit from the upgraded server's command line.</p>	<pre>[root@sds-mrsvnc-a ~]# exit</pre> <p>logout</p>												
10. <input type="checkbox"/>	<p><b>Root console of upgraded server:</b></p>	<ul style="list-style-type: none"> <li>• <b>Step 7</b> or <b>Step 8</b> must be completed successfully before running this Step.</li> <li>• This is a convenient point to run <b>Appendix I</b> (<i>Resize Shared Segments and Logical Volumes</i>), which must be run for <i>each</i> server, but <i>only</i> for a MAJOR upgrade (4.x to 5.x).</li> </ul>												
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>														

### C.5 Server Worksheet

<p>Primary NO Site Name: _____</p> <p><input type="checkbox"/> Active NOAMP: _____</p> <p><input type="checkbox"/> Standby NOAMP: _____</p> <p><input type="checkbox"/> Query Server: _____</p>	<p>DR NO Site Name: _____</p> <p><input type="checkbox"/> Active NOAMP: _____</p> <p><input type="checkbox"/> Standby NOAMP: _____</p> <p><input type="checkbox"/> Query Server: _____</p>
<p>SOAM Site Name: _____</p> <p><input type="checkbox"/> Active SOAM: _____</p> <p><input type="checkbox"/> Standby SOAM: _____</p> <p><input type="checkbox"/> DP1: _____</p> <p><input type="checkbox"/> DP2: _____</p> <p><input type="checkbox"/> DP3: _____</p> <p><input type="checkbox"/> DP4: _____</p>	<p>SOAM Site Name: _____</p> <p><input type="checkbox"/> Active SOAM: _____</p> <p><input type="checkbox"/> Standby SOAM: _____</p> <p><input type="checkbox"/> DP1: _____</p> <p><input type="checkbox"/> DP2: _____</p> <p><input type="checkbox"/> DP3: _____</p> <p><input type="checkbox"/> DP4: _____</p>
<p>SOAM Site Name: _____</p> <p><input type="checkbox"/> Active SOAM: _____</p> <p><input type="checkbox"/> Standby SOAM: _____</p> <p><input type="checkbox"/> DP1: _____</p> <p><input type="checkbox"/> DP2: _____</p> <p><input type="checkbox"/> DP3: _____</p> <p><input type="checkbox"/> DP4: _____</p>	<p>SOAM Site Name: _____</p> <p><input type="checkbox"/> Active SOAM: _____</p> <p><input type="checkbox"/> Standby SOAM: _____</p> <p><input type="checkbox"/> DP1: _____</p> <p><input type="checkbox"/> DP2: _____</p> <p><input type="checkbox"/> DP3: _____</p> <p><input type="checkbox"/> DP4: _____</p>
<p>SOAM Site Name: _____</p> <p><input type="checkbox"/> Active SOAM: _____</p> <p><input type="checkbox"/> Standby SOAM: _____</p> <p><input type="checkbox"/> DP1: _____</p> <p><input type="checkbox"/> DP2: _____</p> <p><input type="checkbox"/> DP3: _____</p> <p><input type="checkbox"/> DP4: _____</p>	<p>SOAM Site Name: _____</p> <p><input type="checkbox"/> Active SOAM: _____</p> <p><input type="checkbox"/> Standby SOAM: _____</p> <p><input type="checkbox"/> DP1: _____</p> <p><input type="checkbox"/> DP2: _____</p> <p><input type="checkbox"/> DP3: _____</p> <p><input type="checkbox"/> DP4: _____</p>

<p>SOAM Site Name: _____</p> <p><input type="checkbox"/> Active SOAM: _____</p> <p><input type="checkbox"/> Standby SOAM: _____</p> <p><input type="checkbox"/> DP1: _____</p> <p><input type="checkbox"/> DP2: _____</p> <p><input type="checkbox"/> DP3: _____</p> <p><input type="checkbox"/> DP4: _____</p>	<p>SOAM Site Name: _____</p> <p><input type="checkbox"/> Active SOAM: _____</p> <p><input type="checkbox"/> Standby SOAM: _____</p> <p><input type="checkbox"/> DP1: _____</p> <p><input type="checkbox"/> DP2: _____</p> <p><input type="checkbox"/> DP3: _____</p> <p><input type="checkbox"/> DP4: _____</p>
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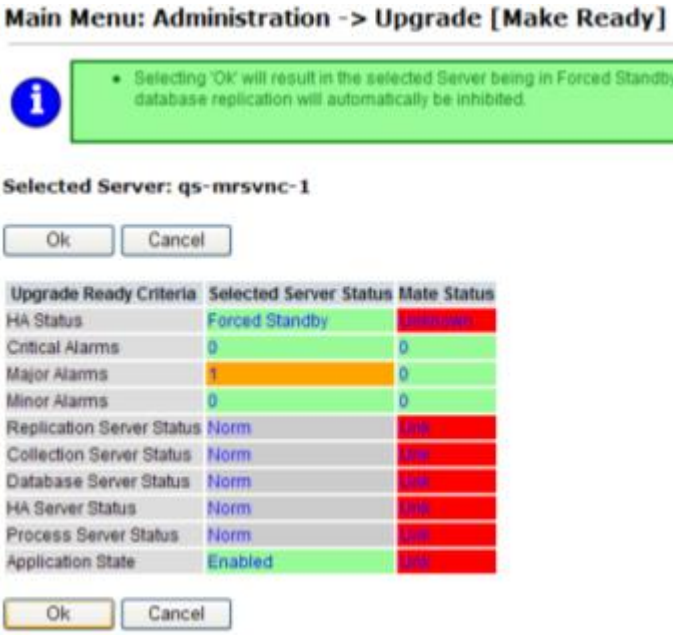
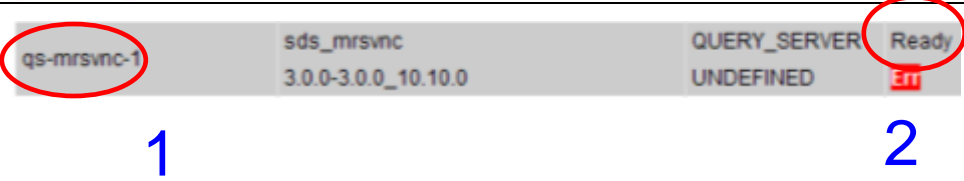



# APPENDIX D. BACKING OUT A SINGLE SERVER

## Appendix D: Backing out a Single Server

Step	Procedure	Result																												
1. <input type="checkbox"/>	Using the <b>VIP</b> address, access the Primary SDS GUI.	<ul style="list-style-type: none"> <li>Access the Primary SDS GUI as specified in <b>Appendix A</b>.</li> </ul>																												
2. <input type="checkbox"/>	<p>Active SDS VIP:</p> <p>Select...</p> <p><b>Main Menu</b>            → Administration            → Software Managmnt            → Upgrade</p> <p>...as shown on the right.</p> <p><b>NOTE: On 4.0 systems, select...</b>  <b>Main Menu</b>            → Administration            → Upgrade</p>	<table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM Max HA Role</th> <th>Network Element</th> <th>Role</th> </tr> </thead> <tbody> <tr> <td>roma-sds-a</td> <td>Active</td> <td>sds_roma</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> <tr> <td>roma-sds-b</td> <td>Standby</td> <td>sds_roma</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> <tr> <td>roma-so-a</td> <td>Active</td> <td>sds_roma</td> <td>System OAM OAM</td> </tr> <tr> <td>roma-so-b</td> <td>Standby</td> <td>sds_roma</td> <td>System OAM OAM</td> </tr> <tr> <td>roma-op-1</td> <td>Active</td> <td>sds_roma</td> <td>MP SDS</td> </tr> <tr> <td>roma-dr-a</td> <td>Active</td> <td>dr_roma</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> </tbody> </table>	Hostname	OAM Max HA Role	Network Element	Role	roma-sds-a	Active	sds_roma	Network OAM&P OAM&P	roma-sds-b	Standby	sds_roma	Network OAM&P OAM&P	roma-so-a	Active	sds_roma	System OAM OAM	roma-so-b	Standby	sds_roma	System OAM OAM	roma-op-1	Active	sds_roma	MP SDS	roma-dr-a	Active	dr_roma	Network OAM&P OAM&P
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roma-dr-a	Active	dr_roma	Network OAM&P OAM&P																											
3. <input type="checkbox"/>	<p>Active SDS VIP:</p> <p>1) Using the vertical scroll bar in the right panel, scroll to the row containing the <b>hostname</b> of the server to be backed out.</p> <p>2) Verify that the <b>Upgrade State</b> shows “Not Ready”.</p>	<table border="1"> <thead> <tr> <th>Hostname</th> <th>Version</th> <th>Network Element</th> <th>Upgrade State</th> </tr> </thead> <tbody> <tr> <td>qs-mrsvnc-1</td> <td>sds_mrsvnc</td> <td>QUERY_SERVER</td> <td>Not Ready</td> </tr> <tr> <td></td> <td>3.0.0-3.0.0_10.10.0</td> <td>UNDEFINED</td> <td></td> </tr> </tbody> </table>	Hostname	Version	Network Element	Upgrade State	qs-mrsvnc-1	sds_mrsvnc	QUERY_SERVER	Not Ready		3.0.0-3.0.0_10.10.0	UNDEFINED																	
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	3.0.0-3.0.0_10.10.0	UNDEFINED																												
4. <input type="checkbox"/>	<p>Active SDS VIP:</p> <p>1) Using the cursor, select the row containing the <b>hostname</b> of the server to be upgraded.</p> <p>2) Click the “Prepare Upgrade” button located in the bottom left of the right panel.</p>	<table border="1"> <thead> <tr> <th>Hostname</th> <th>Version</th> <th>Network Element</th> <th>Upgrade State</th> </tr> </thead> <tbody> <tr> <td>qs-mrsvnc-1</td> <td>sds_mrsvnc</td> <td>QUERY_SERVER</td> <td>Not Ready</td> </tr> <tr> <td></td> <td>3.0.0-3.0.0_10.10.0</td> <td>UNDEFINED</td> <td>Err</td> </tr> <tr> <td>drsds-dallastx-a</td> <td>dr_dallastx</td> <td>NETWORK OAM&amp;P</td> <td>Not Ready</td> </tr> </tbody> </table>	Hostname	Version	Network Element	Upgrade State	qs-mrsvnc-1	sds_mrsvnc	QUERY_SERVER	Not Ready		3.0.0-3.0.0_10.10.0	UNDEFINED	Err	drsds-dallastx-a	dr_dallastx	NETWORK OAM&P	Not Ready												
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## Appendix D: Backing out a Single Server

Step	Procedure	Result																																	
5. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>The user should be presented with the <b>Upgrade [Make Ready]</b> Administration screen.</p> <p>Click either <b>“Ok”</b> button.</p> <p><b>NOTE:</b> If backing out the <b>Active Primary SDS</b> server you will need to log back into the GUI.</p>	<p><b>Main Menu: Administration -&gt; Upgrade [Make Ready]</b></p>  <table border="1"> <thead> <tr> <th>Upgrade Ready Criteria</th> <th>Selected Server Status</th> <th>Mate Status</th> </tr> </thead> <tbody> <tr> <td>HA Status</td> <td>Forced Standby</td> <td>Standby</td> </tr> <tr> <td>Critical Alarms</td> <td>0</td> <td>0</td> </tr> <tr> <td>Major Alarms</td> <td>1</td> <td>0</td> </tr> <tr> <td>Minor Alarms</td> <td>0</td> <td>0</td> </tr> <tr> <td>Replication Server Status</td> <td>Norm</td> <td>Up</td> </tr> <tr> <td>Collection Server Status</td> <td>Norm</td> <td>Up</td> </tr> <tr> <td>Database Server Status</td> <td>Norm</td> <td>Up</td> </tr> <tr> <td>HA Server Status</td> <td>Norm</td> <td>Up</td> </tr> <tr> <td>Process Server Status</td> <td>Norm</td> <td>Up</td> </tr> <tr> <td>Application State</td> <td>Enabled</td> <td>Up</td> </tr> </tbody> </table>	Upgrade Ready Criteria	Selected Server Status	Mate Status	HA Status	Forced Standby	Standby	Critical Alarms	0	0	Major Alarms	1	0	Minor Alarms	0	0	Replication Server Status	Norm	Up	Collection Server Status	Norm	Up	Database Server Status	Norm	Up	HA Server Status	Norm	Up	Process Server Status	Norm	Up	Application State	Enabled	Up
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6. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>1) Using the vertical scroll bar in the right panel, scroll to the row containing the <b>hostname</b> of the server to be backed out.</p> <p>2) Verify that the <b>Upgrade State</b> shows <b>“Ready”</b>.</p>	 <table border="1"> <thead> <tr> <th>Server Name</th> <th>Host</th> <th>Upgrade State</th> </tr> </thead> <tbody> <tr> <td>qs-mrsvnc-1</td> <td>sds_mrsvnc 3.0.0-3.0.0_10.10.0</td> <td>QUERY_SERVER Ready UNDEFINED Err</td> </tr> </tbody> </table>	Server Name	Host	Upgrade State	qs-mrsvnc-1	sds_mrsvnc 3.0.0-3.0.0_10.10.0	QUERY_SERVER Ready UNDEFINED Err																											
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<p> Execute <b>Steps 7 - 26</b> of this procedure for the appropriate server being backed out:</p> <ul style="list-style-type: none"> <li>• <b>Server Console (iLO):</b> NOAMs, Query Servers &amp; DP blades</li> <li>• <b>Server Console (virsh console):</b> SOAMs only</li> <li>• <b>Server Console:</b> All servers</li> </ul>																																			
7. <input type="checkbox"/>	<p><b>Server Console (iLO):</b></p> <p>1) Access the server's <b>iLO IP</b> via <b>“ssh”</b>.</p> <p>2) Enter Virtual Serial Port mode (<b>VSP</b>) as shown on the right.</p> <p><b>NOTE:</b> Do not attempt to <b>“ssh”</b> from thru another server in the SDS topology. Backout requires a direct connection to the server iLO.</p>	<pre>User:root logged-in to ILOUSE205TEW1.(10.240.240.131) iLO 2 Advanced 2.12 at 15:13:25 Jul 16 2012 Server Name: qs-mrsvnc-1 Server Power: On  &lt;/&gt;hpiLO-&gt; vsp  Starting virtual serial port. Press 'ESC (' to return to the CLI Session.  &lt;/&gt;hpiLO-&gt; Virtual Serial Port active: IO=0x03F8 INT=4 &lt;ENTER&gt;  CentOS release 6.3 (Final) Kernel 2.6.32-279.5.2.el6prere16.0.1_80.31.0.x86_64 on an x86_64  qs-mrsvnc-1 login:</pre>																																	


## Appendix D: Backing out a Single Server

Step	Procedure	Result
8. <input type="checkbox"/>	<b>Server Console (virsh console):</b>  Access the TVOE host via “ssh”.	CentOS release 6.3 (Final) Kernel 2.6.32-279.5.2.el6prere16.0.1_80.31.0.x86_64 on an x86_64  cslab-SO-a-tvoe login: <b>root</b> Password: <b>&lt;root_password&gt;</b>
9. <input type="checkbox"/>	<b>Server Console (virsh console):</b>  List the VMs present on the TVOE host.	[root@cslab-SO-a-tvoe ~]# <b>virsh list</b> virsh console Id Name State ----- 1 cslab-ATTdsrSO-a running 2 <b>qs-mrsvnc-1</b> running  [root@cslab-SO-a-tvoe ~]#
10. <input type="checkbox"/>	<b>Server Console (virsh console):</b>  Access the console of the VM to be backed out.	[root@cslab-SO-a-tvoe ~]# <b>virsh console 2</b>
11. <input type="checkbox"/>	<b>Server Console:</b>  Log into the server as the “root” user.	CentOS release 6.3 (Final) Kernel 2.6.32-279.5.2.el6prere16.0.1_80.31.0.x86_64 on an x86_64  qs-mrsvnc-1 login: <b>root</b> Password: <b>&lt;root_password&gt;</b>
12. <input type="checkbox"/>	<b>Server Console:</b>  Output similar to that shown on the right will appear as the server access the command prompt.	<b>*** TRUNCATED OUTPUT ***</b>  VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpss7 PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=00 VPATH=/opt/TKLCcomcol/runcm5.13:/opt/TKLCcomcol/cm5.13 PRODPATH= RELEASE=5.13 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpss7:/usr/TKLC/ex hr PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=0 [root@qs-mrsvnc-1 ~]#
13. <input type="checkbox"/>	<b>Server Console:</b>  Execute the Backout script as shown to the right.	[root@qs-mrsvnc-1 ~]# <b>/var/TKLC/backout/reject</b>  The runlevel transition complete RC file was created as /etc/rc3.d/S99TKLCsnmp_notify_runlevel_transition_complete. Changing to run-level 3... ***** * Waiting for run level 3 transistion to finish * ***** ...
14. <input type="checkbox"/>	<b>Server Console:</b>  Answer “y” when prompted to “Continue backout?”.	...  Verifying that backout is possible. Checking for stale RPM DB locks...  Current platform version: 6.0.0-80.21.0 Continue backout? [y/N]: <b>y</b>
15. <input type="checkbox"/>	<b>Server Console:</b>  Backout proceeds	Many informational messages will come across the terminal screen as the backout proceeds:  Finally, after backout is complete, the server will automatically reboot.

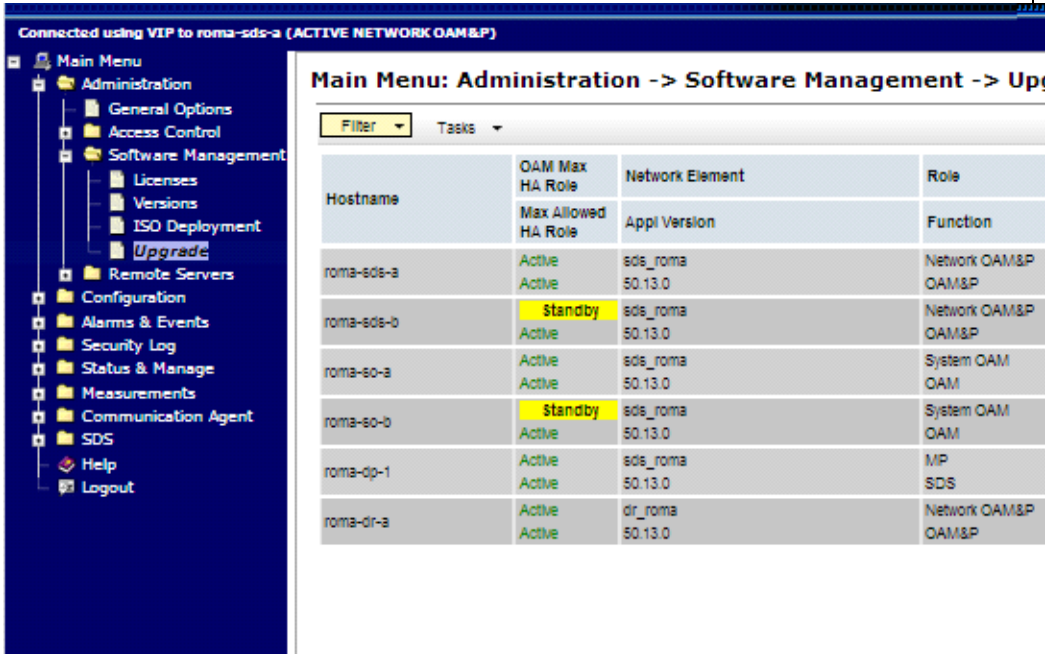
## Appendix D: Backing out a Single Server

Step	Procedure	Result
16. <input type="checkbox"/>	<b>Server Console:</b>  1) Wait for the reboot to return to the command prompt.  2) Log into the server as the "root" user.	<pre>CentOS release 4.6 (Final) Kernel 2.6.18-128.4.1.el5prere14.0.0_70.32.0 on an x86_64  qs-mrsvnc-1 login: root Password: &lt;root_password&gt;</pre>
17. <input type="checkbox"/>	<b>Server Console:</b>  Verify the backout	<p>Examine the upgrade logs in the directory /var/TKLC/log/upgrade and verify that no errors were reported:</p> <pre># grep -i "[^_]error[^_]" /var/TKLC/log/upgrade/upgrade.log</pre> <ol style="list-style-type: none"> <li>Examine the output of the above commands to determine if any errors were reported.</li> </ol> <p>Note: The following error can be ignored:</p> <pre>DEBUG: 'iqt' command failed (is IDB running?) and/or ERROR: createVolumes needs logical volume objects passed in. ERROR: There was a problem creating Logical Volumes. ERROR: Check log for error relating to exitCode: 6. ERROR-(HA:Mgr): No Clusternode found for resource entry, (tklc-ha-active)! ERROR-(HA:Mgr): Failed to initialize ResourceConf! ERROR: generateTest did not return an object! ERROR: Should not happen! and/or: 1382972756::syscheck: unrecognized service 1382972757::ERROR: failed to restart syscheck 1382972757::      If using syscheck, it must be restarted manually</pre> <p>Note: The grep will also find many lines similar to these, which are not errors:</p> <pre>1382721861:: 9901      EvError StatClerk A Single Simple 30min...</pre> <p>and/or:</p> <pre>1382721864:: 31109 DB Topology Config Error ... comcolTopErrorNotify... 1382721864:: 31128 REPL ADIC Found Error...comcolDbADICErrorNotify... 1382721864:: 32302 PLAT Server RAID Disk Error ... tpdRaidDiskError... 1382721864:: 32305 PLAT *****... tpdPlatProcessError ...</pre> <ol style="list-style-type: none"> <li>If the backout was not successful because other errors were recorded in the logs, then contact Oracle's Tekelec Customer Care Center for further instructions.</li> <li>If the backout was successful (no errors or failures), then continue with the remaining steps.</li> </ol>
18. <input type="checkbox"/>	<b>Server Console:</b>  Restore the full DB run environment.	<p>Execute the backout_restore utility to restore the full database run environment:</p> <pre># /var/tmp/backout_restore</pre> <p><b>NOTE:</b> If asked if you would like to proceed, answer "y".</p> <p>If the restore was successful, the following will be displayed:</p> <pre>Success: Full restore of COMCOL run env has completed. Return to the backout procedure document for further instruction.</pre> <p>If an error is encountered and reported by the utility, then work with Oracle's Tekelec Customer Care Center for further instructions.</p>


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Step	Procedure	Result
19. <input type="checkbox"/>	<b>Server Console:</b> Reboot the server.	Enter the following command to reboot the server: <b># init 6</b>  This step can take several minutes and will terminate the SSH session.
20. <input type="checkbox"/>	<b>Server Console:</b> 1) Wait for the reboot to return to the command prompt.  2) Log into the server as the "root" user.	CentOS release 4.6 (Final) Kernel 2.6.18-128.4.1.el5prere14.0.0_70.32.0 on an x86_64  qs-mrsvnc-1 login: <b>root</b> Password: <b>&lt;root_password&gt;</b>
21. <input type="checkbox"/>	<b>Server Console:</b> 1) Verify the server "uptime".  2) Repeat this Step until the "uptime" value shows " <b>5 min</b> " or higher.	[root@qs-mrsvnc-1 ~]# <b>uptime</b> 19:28:43 <b>up 1 min</b> , 1 user, load average: 0.89, 0.29, 0.10 [root@qs-mrsvnc-1 ~]#
22. <input type="checkbox"/>	<b>Server Console:</b> Verify that the "httpd" service is now running.  <b>NOTE:</b> If the "httpd" service fails to start contact Oracle's Tekelec Customer Care Center for assistance.	[root@qs-mrsvnc-1 ~]# <b>service httpd status</b> httpd (pid 6524) is running... [root@qs-mrsvnc-1 ~]#
 <ul style="list-style-type: none"> <li>• Skip to step 25 of this Procedure if the server you are backing out is an SO or DP.</li> </ul>		
23. <input type="checkbox"/>	<b>Server Console:</b> Open <b>prov_ctlBsource</b> table and change "Disable" to "Enable" as shown.  <b>NOTE:</b> This step can be removed when PR 215531 is fixed.	[root@qs-mrsvnc-1 ~]# <b>ivi prov_ctlBsource</b> +igt "-s " -p -h -a prov_ctlBsource  #!/bin/sh iload -ha -xU -fprov_status prov_ctlBsource \ <<'!!!!' Disable !!!!  <i>.... becomes ...</i>  #!/bin/sh iload -ha -xU -fprov_status prov_ctlBsource \ <<'!!!!' <b>Enable</b> !!!!

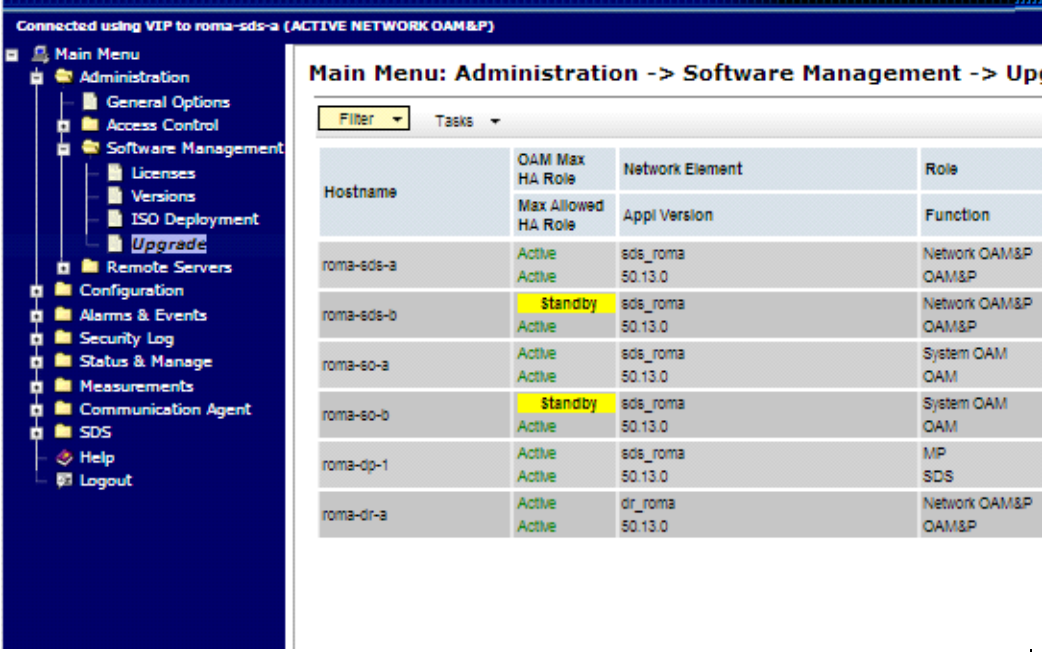

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Step	Procedure	Result																												
24. <input type="checkbox"/>	<p><b>Server Console:</b></p> <p>Write and save changes</p> <p><b>NOTE:</b> <i>This step can be removed when PR 215531 is fixed.</i></p>	<pre>:wq APPLY THE CHANGES [yn]?  y  LOADED OK  [root@qs-mrsvnc-1 ~]#</pre>																												
25. <input type="checkbox"/>	<p><b>Server Console:</b></p> <p>1) Exit from the server command line.</p> <p>2) Exit from the console.</p>	<pre>[root@qs-mrsvnc-1 ~]# exit Logout  qs-mrsvnc-1 login: iLO: &lt; ESC - Shift - (&gt; (ESC then hold Shift and hit 9 in close succession) Virsh Console: &lt; CTRL - ]&gt; (Hold CTRL and hit the Right bracket "]" in close succession)</pre>																												
26. <input type="checkbox"/>	<p><b>Server Console:</b></p> <p>Exit from the iLO or TVOE host.</p>	<pre>&gt; exit or # exit</pre>																												
27. <input type="checkbox"/>	<p>Using the VIP address, access the Primary SDS GUI.</p>	<p>Access the Primary SDS GUI as specified in <b>Appendix A</b>.</p>																												
28. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → Administration → Software Managmnt → Upgrade</p> <p>...as shown on the right.</p> <p><b>NOTE:</b> <i>On 4.0 systems, select...</i></p> <p><b>Main Menu</b> → Administration → Upgrade</p>	 <p>The screenshot shows the Primary SDS GUI interface. On the left is a tree view of the Main Menu with 'Administration' selected, and 'Software Management' and 'Upgrade' highlighted. On the right is a table titled 'Main Menu: Administration -&gt; Software Management -&gt; Upgrade'.</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM Max HA Role</th> <th>Network Element</th> <th>Role</th> </tr> </thead> <tbody> <tr> <td>roma-sds-a</td> <td>Active</td> <td>sds_roma</td> <td>Network OAM&amp;P</td> </tr> <tr> <td>roma-sds-b</td> <td>Standby</td> <td>sds_roma</td> <td>Network OAM&amp;P</td> </tr> <tr> <td>roma-so-a</td> <td>Active</td> <td>sds_roma</td> <td>System OAM</td> </tr> <tr> <td>roma-so-b</td> <td>Standby</td> <td>sds_roma</td> <td>System OAM</td> </tr> <tr> <td>roma-dp-1</td> <td>Active</td> <td>sds_roma</td> <td>MP</td> </tr> <tr> <td>roma-dr-a</td> <td>Active</td> <td>dr_roma</td> <td>Network OAM&amp;P</td> </tr> </tbody> </table>	Hostname	OAM Max HA Role	Network Element	Role	roma-sds-a	Active	sds_roma	Network OAM&P	roma-sds-b	Standby	sds_roma	Network OAM&P	roma-so-a	Active	sds_roma	System OAM	roma-so-b	Standby	sds_roma	System OAM	roma-dp-1	Active	sds_roma	MP	roma-dr-a	Active	dr_roma	Network OAM&P
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Step	Procedure	Result																											
29. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>1) Using the vertical scroll bar in the right panel, scroll to the row containing the <b>hostname</b> of the server to be backed out.</p> <p>2) Verify that the <b>Upgrade State</b> shows “<b>Not Ready</b>” or “<b>Success</b>”.</p>	<table border="1"> <tr> <td>qs-mrsvnc-1</td> <td>sds_mrsvnc 3.0.0-3.0.0_10.10.0</td> <td>QUERY_SERVER UNDEFINED</td> <td>Not Ready Err</td> </tr> </table>	qs-mrsvnc-1	sds_mrsvnc 3.0.0-3.0.0_10.10.0	QUERY_SERVER UNDEFINED	Not Ready Err																							
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 <p><b>NOTE:</b> If Upgrade State shows <b>Not Ready</b>, skip ahead to <b>Step 33</b> of this procedure.</p>																													
30. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p><b>NOTE:</b> If Upgrade State in step 29 shows “<b>Success</b>”:</p> <p>1) Using the cursor, select the row containing the <b>hostname</b> of the server to be upgraded.</p> <p>2) Click the “<b>Complete Upgrade</b>” button located in the bottom left of the right panel.</p>	<table border="1"> <tr> <td>qs-mrsvnc-1</td> <td>sds_mrsvnc 3.0.0-3.0.0_10.10.0</td> <td>QUERY_SERVER UNDEFINED</td> <td>Not Ready Err</td> </tr> </table> <p>Prepare Upgrade   Initiate Upgrade   Monitor Upgrade   <b>Complete Upgrade</b></p>	qs-mrsvnc-1	sds_mrsvnc 3.0.0-3.0.0_10.10.0	QUERY_SERVER UNDEFINED	Not Ready Err																							
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31. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p><b>NOTE:</b> If Upgrade State in step 30 shows “<b>Success</b>”:</p> <p>The user should be presented with the <b>Upgrade [Remove Ready]</b> Administration screen.</p> <p>Click any “<b>Ok</b>” dialogue button.</p>	<p><b>Main Menu: Administration -&gt; Upgrade [Remove Ready]</b></p> <p>Thu Aug 23 10:34:59 2012 EDT</p> <p>Selecting 'OK' will result in the selected server's application being enabled and the Max HA Capability of 'Active' set. 'Observer' is set for query servers.</p> <p>Selected Server: qs-mrsvnc-1</p> <p>Ok   Cancel</p> <table border="1"> <thead> <tr> <th>Upgrade Ready Criteria</th> <th>Selected Server Status</th> <th>Mate Status</th> </tr> </thead> <tbody> <tr> <td>Max HA Role</td> <td>Observer</td> <td>Standby</td> </tr> <tr> <td>Critical Alarms</td> <td>0</td> <td>0</td> </tr> <tr> <td>Major Alarms</td> <td>0</td> <td>0</td> </tr> <tr> <td>Minor Alarms</td> <td>1</td> <td>0</td> </tr> <tr> <td>Database Server Status</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>HA Server Status</td> <td>Norm</td> <td>Norm</td> </tr> <tr> <td>Process Server Status</td> <td>Man</td> <td>Norm</td> </tr> <tr> <td>Application State</td> <td>Disabled</td> <td>Enabled</td> </tr> </tbody> </table> <p>Ok   Cancel</p>	Upgrade Ready Criteria	Selected Server Status	Mate Status	Max HA Role	Observer	Standby	Critical Alarms	0	0	Major Alarms	0	0	Minor Alarms	1	0	Database Server Status	Norm	Norm	HA Server Status	Norm	Norm	Process Server Status	Man	Norm	Application State	Disabled	Enabled
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<p>32.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p><b>NOTE:</b> If Upgrade State in step 30 shows “Success”:</p> <p>The user is returned to the...</p> <p><b>Main Menu</b>            → Administration            → Software Managmnt            → Upgrade</p> <p>...screen as shown on the right.</p> <p><b>NOTE:</b> On 4.0 systems, to...  <b>Main Menu</b>            → Administration            → Upgrade</p>	 <p>Connected using VIP to roma-sds-a (ACTIVE NETWORK OAM&amp;P)</p> <p>Main Menu: Administration -&gt; Software Management -&gt; Upgrade</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM Max HA Role</th> <th>Network Element</th> <th>Role</th> </tr> <tr> <th></th> <th>Max Allowed HA Role</th> <th>Appl Version</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>roma-sds-a</td> <td>Active</td> <td>sds_roma 50.13.0</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> <tr> <td>roma-sds-b</td> <td>Standby</td> <td>sds_roma 50.13.0</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> <tr> <td>roma-so-a</td> <td>Active</td> <td>sds_roma 50.13.0</td> <td>System OAM OAM</td> </tr> <tr> <td>roma-so-b</td> <td>Standby</td> <td>sds_roma 50.13.0</td> <td>System OAM OAM</td> </tr> <tr> <td>roma-dp-1</td> <td>Active</td> <td>sds_roma 50.13.0</td> <td>MP SDS</td> </tr> <tr> <td>roma-dr-a</td> <td>Active</td> <td>dr_roma 50.13.0</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> </tbody> </table>	Hostname	OAM Max HA Role	Network Element	Role		Max Allowed HA Role	Appl Version	Function	roma-sds-a	Active	sds_roma 50.13.0	Network OAM&P OAM&P	roma-sds-b	Standby	sds_roma 50.13.0	Network OAM&P OAM&P	roma-so-a	Active	sds_roma 50.13.0	System OAM OAM	roma-so-b	Standby	sds_roma 50.13.0	System OAM OAM	roma-dp-1	Active	sds_roma 50.13.0	MP SDS	roma-dr-a	Active	dr_roma 50.13.0	Network OAM&P OAM&P
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		<p><b>NOTE:</b> Wait for the screen to refresh and show the Upgrade State is <b>Not Ready</b> and the <b>Upgrade</b> action is disabled. It may take up to 2 minutes for the Upgrade State to change to <b>Not Ready</b>.</p>																																

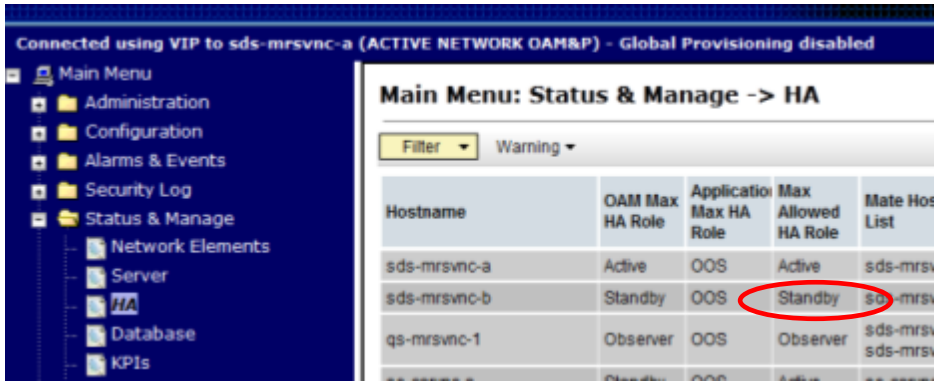
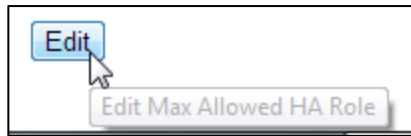
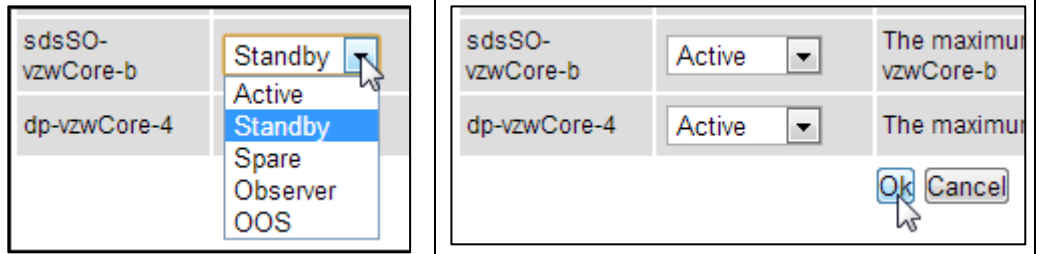


## Appendix D: Backing out a Single Server

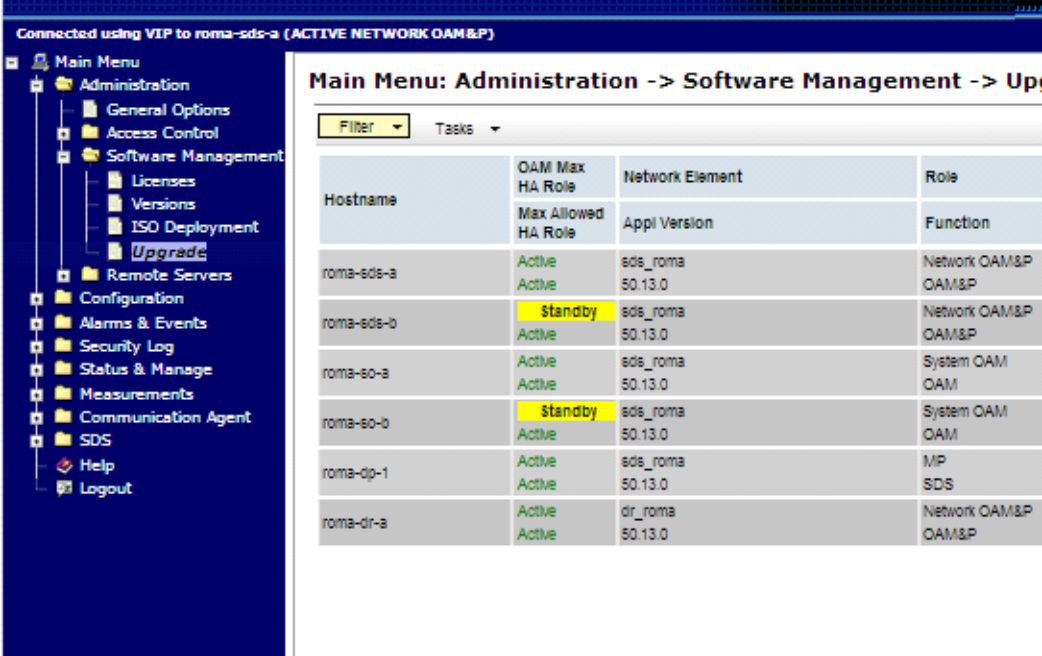
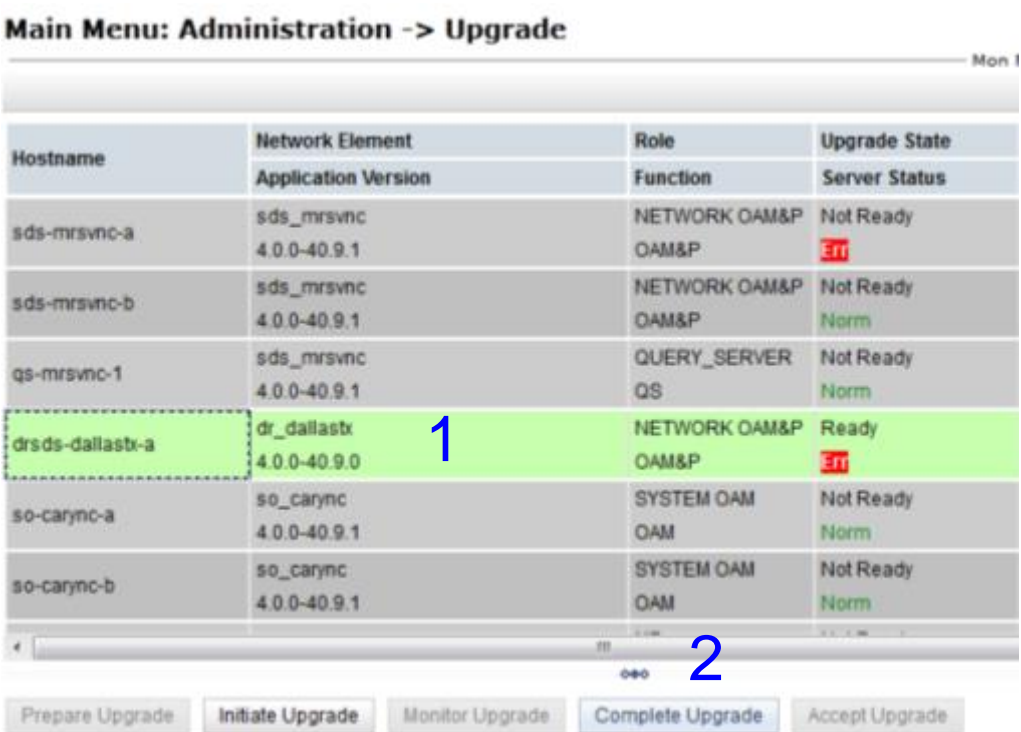
Step	Procedure	Result
33. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>1) Using the vertical scroll bar in the right panel, scroll to the row containing the <b>hostname</b> of the backout server.</p> <p>2) Verify that the <b>Application Version</b> now shows the <b>&lt;target_release&gt;</b>.</p> <p>3) Verify that the <b>Upgrade State</b> shows “<b>Not Ready</b>”.</p> <p><b>NOTE:</b> <i>If the <b>Upgrade State</b> fails to show “<b>Not Ready</b>”, the user may need to refresh the screen by selecting...</i></p> <p><b>Main Menu</b>            → Administration            → Software Managmnt            → Upgrade</p> <p><i>...for a 2<sup>nd</sup> time and repeating sub-steps 1) thru 3) associated with this step.</i></p>	
 <ul style="list-style-type: none"> <li>• <b>Skip</b> the remaining step of this Procedure if the server you are upgrading is a <b>Query Server</b>.</li> </ul>		
34. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Lift Standby restriction on the server.</p>	<p>Lift the Standby restriction as specified in <b>Appendix E (Lifting Standby Restriction)</b>.</p>
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>		

# APPENDIX E. LIFTING STANDBY RESTRICTION

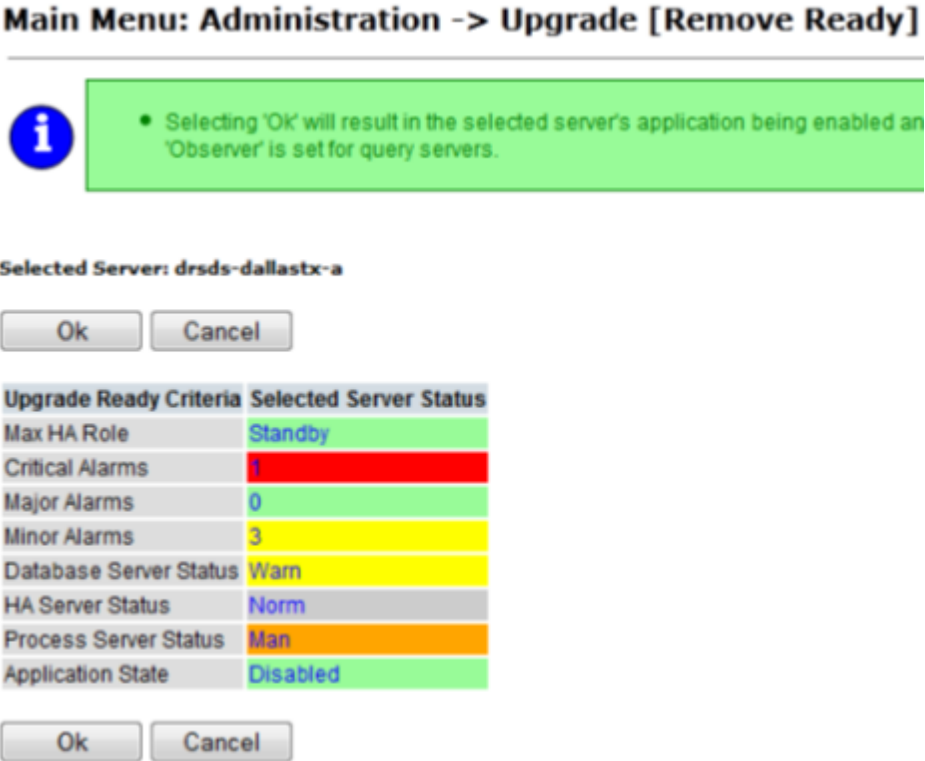
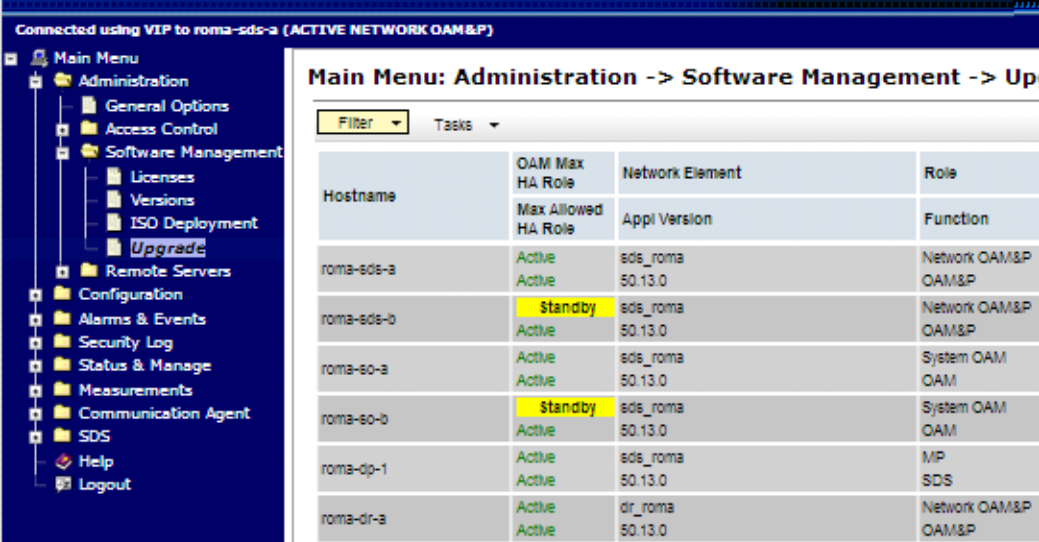
## Appendix E: Lifting Standby Restriction

Step	Procedure	Result																				
1. <input type="checkbox"/>	Using the <b>VIP</b> address, access the Primary SDS GUI.	<ul style="list-style-type: none"> <li>Access the Primary SDS GUI as specified in <b>Appendix A</b>.</li> </ul>																				
2. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b> → <b>Status &amp; Manage</b> → <b>HA</b></p> <p>...screen as shown on the right.</p> <p>Unless the backout server shows <b>HA Status</b> as “<b>Max Allowed HA Role</b>” as “<b>Standby</b>” (shown in the example to the right), this procedure is not required to be run.</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM Max HA Role</th> <th>Application Max HA Role</th> <th>Max Allowed HA Role</th> <th>Mate Host List</th> </tr> </thead> <tbody> <tr> <td>sds-mrsync-a</td> <td>Active</td> <td>OOS</td> <td>Active</td> <td>sds-mrsync-a</td> </tr> <tr> <td>sds-mrsync-b</td> <td>Standby</td> <td>OOS</td> <td>Standby</td> <td>sds-mrsync-b</td> </tr> <tr> <td>qs-mrsync-1</td> <td>Observer</td> <td>OOS</td> <td>Observer</td> <td>sds-mrsync-1</td> </tr> </tbody> </table>	Hostname	OAM Max HA Role	Application Max HA Role	Max Allowed HA Role	Mate Host List	sds-mrsync-a	Active	OOS	Active	sds-mrsync-a	sds-mrsync-b	Standby	OOS	Standby	sds-mrsync-b	qs-mrsync-1	Observer	OOS	Observer	sds-mrsync-1
Hostname	OAM Max HA Role	Application Max HA Role	Max Allowed HA Role	Mate Host List																		
sds-mrsync-a	Active	OOS	Active	sds-mrsync-a																		
sds-mrsync-b	Standby	OOS	Standby	sds-mrsync-b																		
qs-mrsync-1	Observer	OOS	Observer	sds-mrsync-1																		
3. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>Click the “<b>Edit</b>” dialogue button in the bottom right panel</p>																					
4. <input type="checkbox"/>	<p><b>Active SDS VIP:</b></p> <p>For the server backed out, change the “<b>Max Allowed HA Role</b>” to “<b>Active</b>” and click the “<b>OK</b>” button.</p>																					


## Appendix E: Lifting Standby Restriction

Step	Procedure	Result
<p>5.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>  → Administration  → Software Managmnt  → Upgrade</p> <p>...as shown on the right.</p> <p><b>NOTE:</b> On 4.0 systems, select...  <b>Main Menu</b>  → Administration  → Upgrade</p>	
<p>6.</p> <p><input type="checkbox"/></p>	<p><b>Active SDS VIP:</b></p> <p>1) Using the cursor, select the row containing the <b>hostname</b> of the backout server.</p> <p>2a) If the <b>Upgrade State</b> shows “<b>Not Ready</b>” then skip to <b>Step 9</b> of this procedure.</p> <p>2b) If the <b>Upgrade State</b> shows “<b>Ready</b>” then click the “<b>Complete Upgrade</b>” button located in the bottom of the right panel and continue to the next Step.</p>	

**Appendix E: Lifting Standby Restriction**

Step	Procedure	Result																																
<p>7.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user should be presented with the <b>Upgrade [Remove Ready]</b> Administration screen.</p> <p>Click any “Ok” dialogue button.</p>	 <table border="1"> <thead> <tr> <th>Upgrade Ready Criteria</th> <th>Selected Server Status</th> </tr> </thead> <tbody> <tr> <td>Max HA Role</td> <td>Standby</td> </tr> <tr> <td>Critical Alarms</td> <td>1</td> </tr> <tr> <td>Major Alarms</td> <td>0</td> </tr> <tr> <td>Minor Alarms</td> <td>3</td> </tr> <tr> <td>Database Server Status</td> <td>Warn</td> </tr> <tr> <td>HA Server Status</td> <td>Norm</td> </tr> <tr> <td>Process Server Status</td> <td>Man</td> </tr> <tr> <td>Application State</td> <td>Disabled</td> </tr> </tbody> </table>	Upgrade Ready Criteria	Selected Server Status	Max HA Role	Standby	Critical Alarms	1	Major Alarms	0	Minor Alarms	3	Database Server Status	Warn	HA Server Status	Norm	Process Server Status	Man	Application State	Disabled														
Upgrade Ready Criteria	Selected Server Status																																	
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HA Server Status	Norm																																	
Process Server Status	Man																																	
Application State	Disabled																																	
<p>8.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user is returned to the...</p> <p><b>Main Menu</b>  → Administration  → Software Managmnt  → Upgrade</p> <p>...screen as shown on the right.</p> <p><b>NOTE: On 4.0 systems, to...</b>  <b>Main Menu</b>  → Administration  → Upgrade</p>	 <table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM Max HA Role</th> <th>Network Element</th> <th>Role</th> </tr> <tr> <th></th> <th>Max Allowed HA Role</th> <th>Appl Version</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>roma-sds-a</td> <td>Active</td> <td>sds_roma 50.13.0</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> <tr> <td>roma-sds-b</td> <td>Standby</td> <td>sds_roma 50.13.0</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> <tr> <td>roma-so-a</td> <td>Active</td> <td>sds_roma 50.13.0</td> <td>System OAM OAM</td> </tr> <tr> <td>roma-so-b</td> <td>Standby</td> <td>sds_roma 50.13.0</td> <td>System OAM OAM</td> </tr> <tr> <td>roma-op-1</td> <td>Active</td> <td>sds_roma 50.13.0</td> <td>MP SDS</td> </tr> <tr> <td>roma-dr-a</td> <td>Active</td> <td>dr_roma 50.13.0</td> <td>Network OAM&amp;P OAM&amp;P</td> </tr> </tbody> </table>	Hostname	OAM Max HA Role	Network Element	Role		Max Allowed HA Role	Appl Version	Function	roma-sds-a	Active	sds_roma 50.13.0	Network OAM&P OAM&P	roma-sds-b	Standby	sds_roma 50.13.0	Network OAM&P OAM&P	roma-so-a	Active	sds_roma 50.13.0	System OAM OAM	roma-so-b	Standby	sds_roma 50.13.0	System OAM OAM	roma-op-1	Active	sds_roma 50.13.0	MP SDS	roma-dr-a	Active	dr_roma 50.13.0	Network OAM&P OAM&P
Hostname	OAM Max HA Role	Network Element	Role																															
	Max Allowed HA Role	Appl Version	Function																															
roma-sds-a	Active	sds_roma 50.13.0	Network OAM&P OAM&P																															
roma-sds-b	Standby	sds_roma 50.13.0	Network OAM&P OAM&P																															
roma-so-a	Active	sds_roma 50.13.0	System OAM OAM																															
roma-so-b	Standby	sds_roma 50.13.0	System OAM OAM																															
roma-op-1	Active	sds_roma 50.13.0	MP SDS																															
roma-dr-a	Active	dr_roma 50.13.0	Network OAM&P OAM&P																															

**Appendix E: Lifting Standby Restriction**


Step	Procedure	Result																																								
<p>9.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>Select...</p> <p><b>Main Menu</b>            → Status &amp; Manage            → HA</p> <p>...screen as shown on the right.</p> <p>Verify the backout server is now <b>“Active”</b> under <b>“Application Max HA Role”</b></p>	 <p>Connected using VIP to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P) - Global Provisioning disabled</p> <p><b>Main Menu: Status &amp; Manage -&gt; HA</b></p> <p>Filter Warning</p> <table border="1"> <thead> <tr> <th>Hostname</th> <th>OAM Max HA Role</th> <th>Application Max HA Role</th> <th>Max Allowed HA Role</th> <th>Ma Lis</th> </tr> </thead> <tbody> <tr> <td>sds-mrsvnc-a</td> <td>Active</td> <td>OOS</td> <td>Active</td> <td>sd</td> </tr> <tr> <td>sds-mrsvnc-b</td> <td>Standby</td> <td>OOS</td> <td>Active</td> <td>sd</td> </tr> <tr> <td>qs-mrsvnc-1</td> <td>Observer</td> <td>OOS</td> <td>Observer</td> <td>sd sd</td> </tr> <tr> <td>drsds-dallasbr-a</td> <td>Active</td> <td>OOS</td> <td><b>Active</b></td> <td></td> </tr> <tr> <td>so-carync-a</td> <td>Standby</td> <td>OOS</td> <td>Active</td> <td>so-</td> </tr> <tr> <td>so-carync-b</td> <td>Active</td> <td>OOS</td> <td>Active</td> <td>so-</td> </tr> <tr> <td>dp-carync-1</td> <td>Active</td> <td>OOS</td> <td>Active</td> <td></td> </tr> </tbody> </table>	Hostname	OAM Max HA Role	Application Max HA Role	Max Allowed HA Role	Ma Lis	sds-mrsvnc-a	Active	OOS	Active	sd	sds-mrsvnc-b	Standby	OOS	Active	sd	qs-mrsvnc-1	Observer	OOS	Observer	sd sd	drsds-dallasbr-a	Active	OOS	<b>Active</b>		so-carync-a	Standby	OOS	Active	so-	so-carync-b	Active	OOS	Active	so-	dp-carync-1	Active	OOS	Active	
Hostname	OAM Max HA Role	Application Max HA Role	Max Allowed HA Role	Ma Lis																																						
sds-mrsvnc-a	Active	OOS	Active	sd																																						
sds-mrsvnc-b	Standby	OOS	Active	sd																																						
qs-mrsvnc-1	Observer	OOS	Observer	sd sd																																						
drsds-dallasbr-a	Active	OOS	<b>Active</b>																																							
so-carync-a	Standby	OOS	Active	so-																																						
so-carync-b	Active	OOS	Active	so-																																						
dp-carync-1	Active	OOS	Active																																							
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>																																										

## APPENDIX F. DISABLE HYPERTHREADING

This section is to be run only once on each DP; the configuration stays across future upgrades. If hyperthreading was disabled during installation, it is not be required to be executed again.

**NOTE:** *Disable hyper threading applies only to DP servers.*

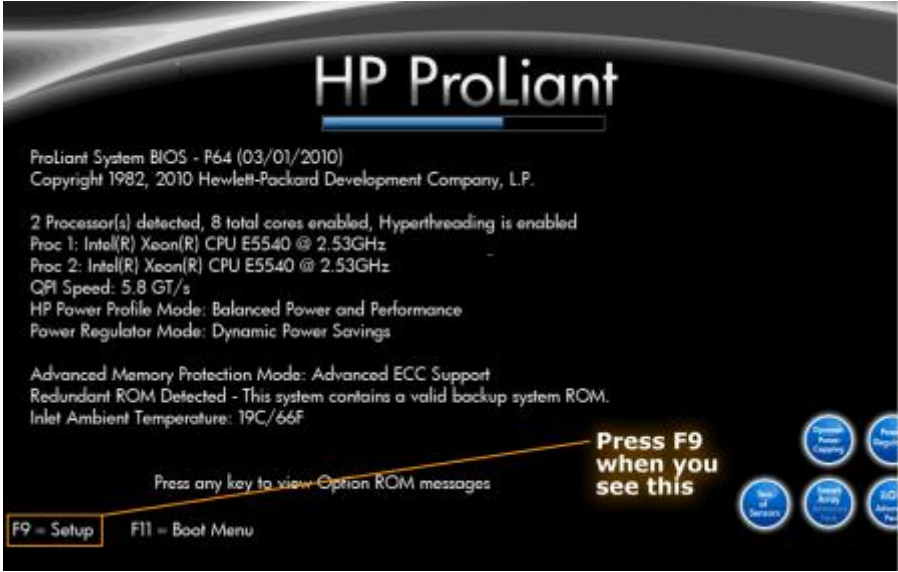
### Appendix F: Disable Hyperthreading

Step	Procedure	Result
1. <input type="checkbox"/>	<p><b>DP Server XMI IP (SSH):</b></p> <p>1) Access the command prompt via the server's <b>XMI IP</b></p> <p>2) Log into the server as the "root" user.</p> <p><b>NOTE:</b> <i>The XMI IP address may be viewed by locating the server hostname under...</i></p> <p><b>Main Menu</b> → Configuration → Servers</p>	<p>CentOS release 4.6 (Final) Kernel 2.6.18-128.4.1.el5prere14.0.0_70.32.0 on an x86_64</p> <p>dp-carync-1 login: <b>root</b> Password: <b>&lt;root_password&gt;</b></p>
2. <input type="checkbox"/>	<p><b>DP Server XMI IP (SSH):</b></p> <p>Output similar to that shown on the right will appear as the server access the command prompt.</p>	<p><b>*** TRUNCATED OUTPUT ***</b></p> <pre>VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpss7 PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=00 VPATH=/opt/TKLCcomcol/runcm5.13:/opt/TKLCcomcol/cm5.13 PRODPATH= RELEASE=5.13 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpss7:/usr/TKLC/ex hr PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=0 [root@dp-carync-1 ~]#</pre>
3. <input type="checkbox"/>	<p><b>DP Server XMI IP (SSH):</b></p> <p>Check the number of expected CPUs. If the number is greater than 20, then this procedure has not been run before.</p>	<pre># syscheckAdm system cpu --get --var='EXPECTED_CPUS' 39</pre>
		<p><b>NOTE:</b> <i>If the number of CPUs is reported as 20, this procedure has already been run for this DP. You may return to the calling section.</i></p>

## Appendix F: Disable Hyperthreading

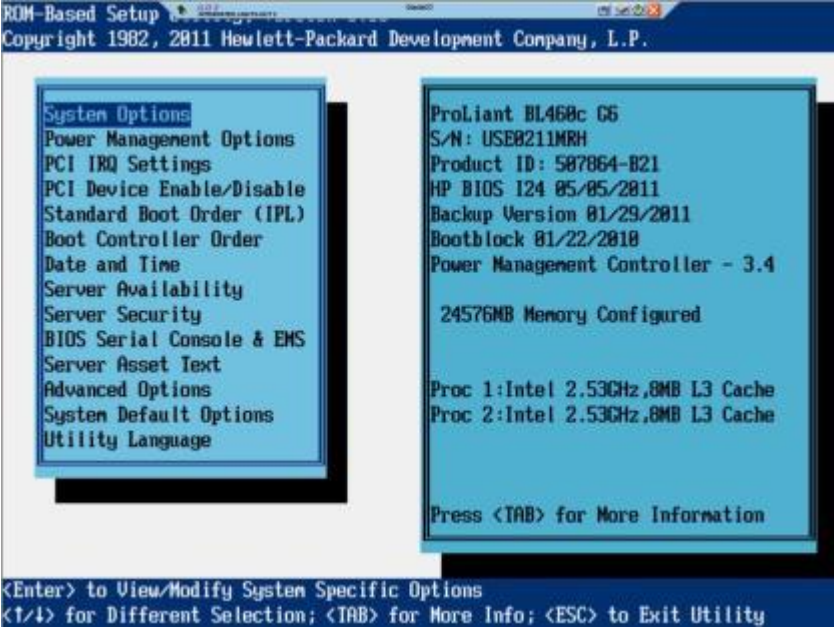
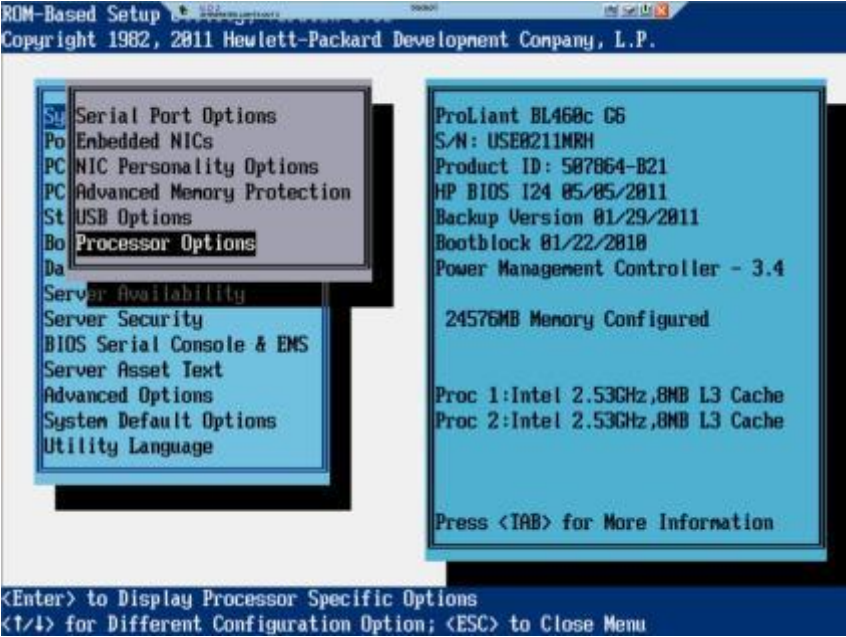
Step	Procedure	Result
4. <input type="checkbox"/>	<p><b>DP Server XMI IP (SSH):</b></p> <p>Set the number of expected CPUs to the number of physical CPUs (20 for BL360 hardware).</p>	<pre># syscheckAdm system cpu --set --var='EXPECTED_CPUS' --val='20'</pre>
5. <input type="checkbox"/>	<p><b>DP Server XMI IP (SSH):</b></p> <p>Verify the set number of expected CPUs.</p>	<pre># syscheckAdm system cpu --get --var='EXPECTED_CPUS' 20</pre>
6. <input type="checkbox"/>	<p><b>DP Server XMI IP (SSH):</b></p> <p>Restart syscheck service.</p>	<pre># stop syscheck syscheck stop/waiting  # start syscheck syscheck start/running, process 48790</pre> <p><b>NOTE:</b> On SDS 4.0 systems, run this instead:</p> <pre># service syscheck restart Stopping syscheck:          [ OK ] Starting syscheck:         [ OK ]</pre>
7. <input type="checkbox"/>	<p><b>DP Server XMI IP (SSH):</b></p> <p>Verify the number of CPUs recorded at OS installation.</p> <p><b>NOTE:</b> If a “No such file or directory” response is received, then skip to <b>Step 10</b> of this procedure.</p>	<pre># cat /usr/TKLC/awpcommon/prod/bin/NumOriginalCpus 40</pre>
8. <input type="checkbox"/>	<p><b>DP Server XMI IP (SSH):</b></p> <p>Modify the number of CPUs recorded at OS installation to “20”.</p>	<pre># echo 20 &gt; /usr/TKLC/awpcommon/prod/bin/NumOriginalCpus</pre>
9. <input type="checkbox"/>	<p><b>DP Server XMI IP (SSH):</b></p> <p>Verify the number of CPUs has been updated to “20”.</p>	<pre># cat /usr/TKLC/awpcommon/prod/bin/NumOriginalCpus 20</pre>

## Appendix F: Disable Hyperthreading

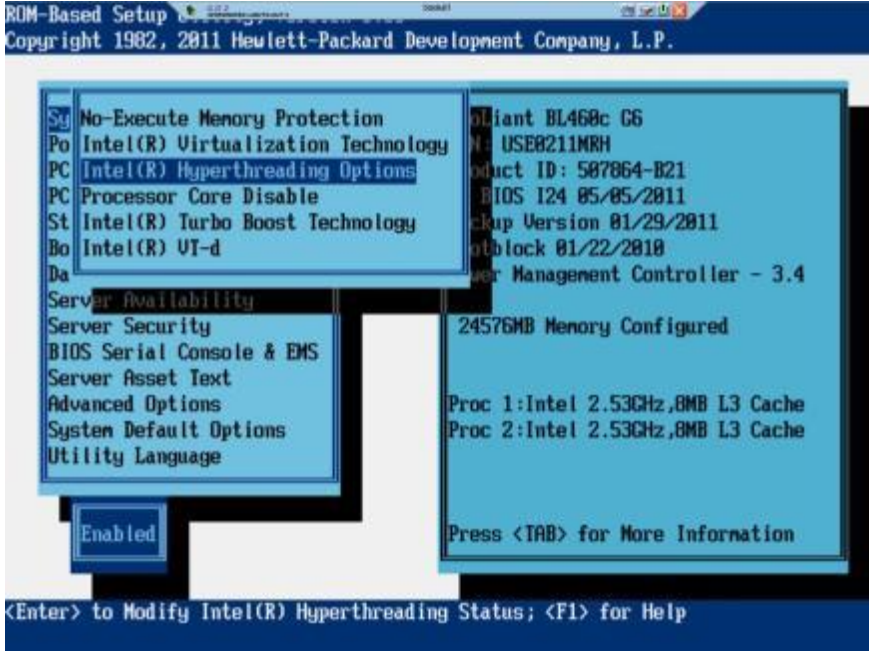
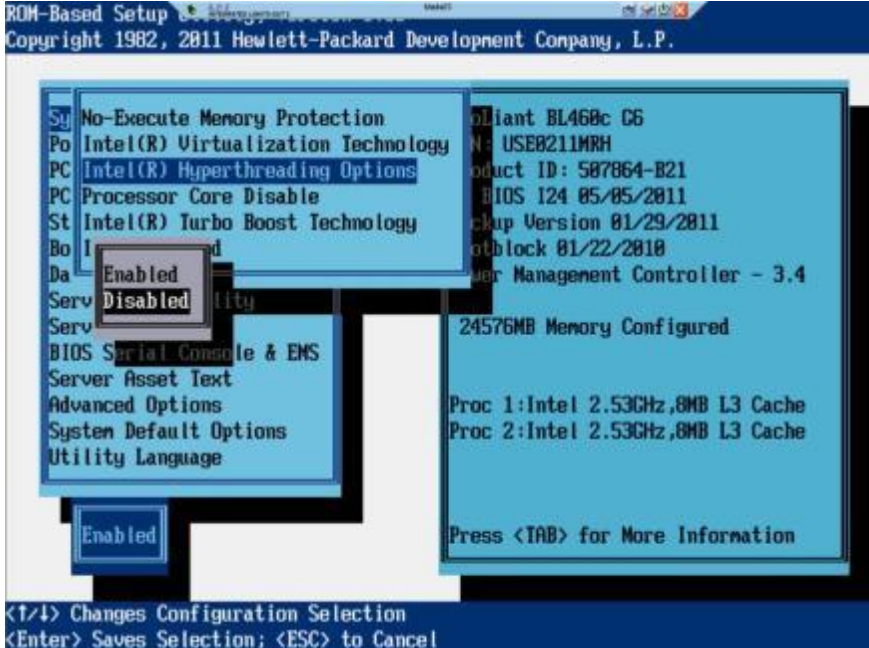
Step	Procedure	Result
<p>10.</p> <input type="checkbox"/>	<p><b>DP Server XMI IP (SSH):</b></p> <p>Exit from the server command line.</p> <p><b>Note:</b> <i>If you are on the console, you may instead type <b>reboot</b> here in preparation for <b>Step 11</b> below.</i></p>	<pre>[root@dp-carync-1 ~]# exit logout</pre>
<p>11.</p> <input type="checkbox"/>	<p>Access the Server BIOS</p>	<p>Reboot the server. This can be achieved by pressing and holding the power button until the server turns off, then after approximately 5-10 seconds press the power button to enable power.</p> <p>As soon as you see <b>F9=Setup</b> in the lower left corner of the screen, press <b>[F9]</b> to access the BIOS setup screen. You may be required to press [F9] 2-3 times. The F9=Setup will change to F9 Pressed once it is accepted. See example below.</p>  <p><b>Expected Result:</b></p> <ul style="list-style-type: none"> <li>ROM-Based Setup Utility is accessed and the ROM-Based Setup Utility menu will be displayed.</li> </ul>



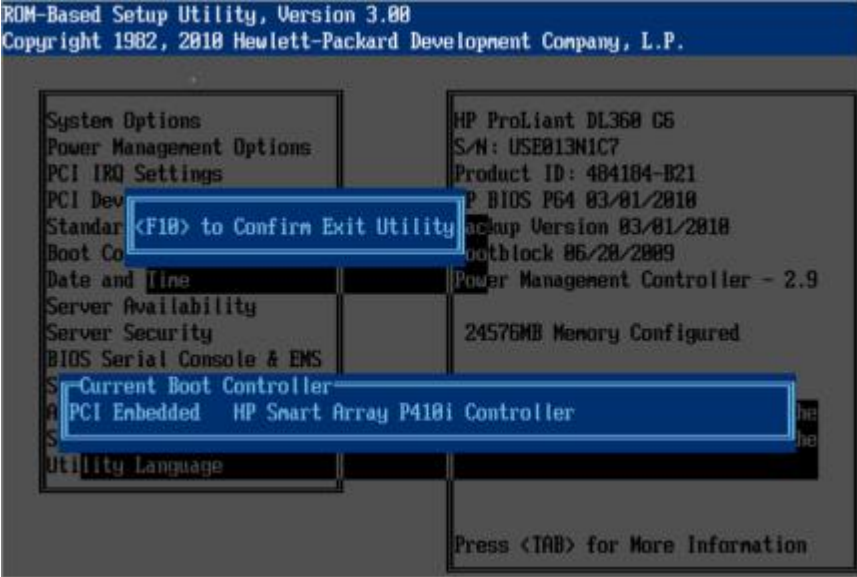
**Appendix F: Disable Hyperthreading**

Step	Procedure	Result
<p>12.</p> <input type="checkbox"/>	<p>Select System Options</p>	<p>Scroll to <i>System Options</i> and press [ENTER]</p>  <p>The screenshot shows the 'ROM-Based Setup' utility. The 'System Options' menu is highlighted, listing: Power Management Options, PCI IRQ Settings, PCI Device Enable/Disable, Standard Boot Order (IPL), Boot Controller Order, Date and Time, Server Availability, Server Security, BIOS Serial Console &amp; EMS, Server Asset Text, Advanced Options, System Default Options, and Utility Language. To the right, system information is displayed: ProLiant BL460c G6, S/N: USE0211MRH, Product ID: 507864-B21, HP BIOS 124 05/05/2011, Backup Version 01/29/2011, Bootblock 01/22/2010, Power Management Controller - 3.4, and 24576MB Memory Configured. Processor information shows two Intel 2.53GHz processors with 8MB L3 Cache. Navigation instructions at the bottom indicate: &lt;Enter&gt; to View/Modify System Specific Options, &lt;↑/↓&gt; for Different Selection; &lt;TAB&gt; for More Info; &lt;ESC&gt; to Exit Utility.</p>
<p>13.</p> <input type="checkbox"/>	<p>Select Processor Options</p>	<p>Select <i>Processor Options</i> option and press [ENTER]</p>  <p>The screenshot shows the 'ROM-Based Setup' utility with the 'Processor Options' menu highlighted. The menu lists: Serial Port Options, Embedded NICs, NIC Personality Options, Advanced Memory Protection, USB Options, Processor Options, Server Availability, Server Security, BIOS Serial Console &amp; EMS, Server Asset Text, Advanced Options, System Default Options, and Utility Language. System information on the right is identical to the previous screenshot. Navigation instructions at the bottom indicate: &lt;Enter&gt; to Display Processor Specific Options, &lt;↑/↓&gt; for Different Configuration Option; &lt;ESC&gt; to Close Menu.</p>

**Appendix F: Disable Hyperthreading**

Step	Procedure	Result
<p>14.</p> <p><input type="checkbox"/></p>	<p>Select Hyperthreading Options</p>	<p>Select <i>Intel® Hyperthreading Options</i> option and press [ENTER].</p>  <p>The screenshot shows the BIOS ROM-Based Setup interface. The 'Intel(R) Hyperthreading Options' menu item is highlighted in blue. Below it, the status is shown as 'Enabled'. The background displays system information including 'Blant BL468c G6', 'USE821MRH', 'Product ID: 587864-B21', 'BIOS I24 05/05/2011', 'Setup Version 01/29/2011', 'Firmware block 01/22/2010', and 'Server Management Controller - 3.4'. At the bottom, instructions state '&lt;Enter&gt; to Modify Intel(R) Hyperthreading Status; &lt;F1&gt; for Help'.</p>
<p>15.</p> <p><input type="checkbox"/></p>	<p>Set hyperthreading to Disabled.</p>	<p>Select <i>Disabled</i> option and press [ENTER].</p>  <p>The screenshot shows the BIOS ROM-Based Setup interface. The 'Intel(R) Hyperthreading Options' menu item is highlighted in blue. Below it, the status is shown as 'Disabled'. The background displays system information including 'Blant BL468c G6', 'USE821MRH', 'Product ID: 587864-B21', 'BIOS I24 05/05/2011', 'Setup Version 01/29/2011', 'Firmware block 01/22/2010', and 'Server Management Controller - 3.4'. At the bottom, instructions state '&lt;↑/↓&gt; Changes Configuration Selection' and '&lt;Enter&gt; Saves Selection; &lt;ESC&gt; to Cancel'.</p>

**Appendix F: Disable Hyperthreading**

Step	Procedure	Result
<p>16.</p> <p><input type="checkbox"/></p>	<p>Save Configuration and Exit</p>	<p>Press [F10] to save the configuration and exit. The server will reboot</p>  <p><b>Expected Result:</b> Settings are saved and server reboots.</p>
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>		

## APPENDIX G. FINALIZING UPGRADE

### G.1 Enable AppProcControl Replication



**!!! WARNING !!!**

***Procedures in Appendix G ( Finalizing Upgrade) are to be executed only once after all sites/servers on the network have been upgraded to the target release.***

#### Appendix G.1: Enable AppProcControl Replication

Step	Procedure	Result
1. <input type="checkbox"/>	<b>Active Provisioning Site VIP (SSH):</b>  1) Access the command prompt.  2) Log into the server as the "root" user.	CentOS release 5.7 (Final) Kernel 2.6.18-274.7.1.el5prere15.0.0_72.32.0 on an x86_64  sds-mrsvnc-a login: <b>root</b> Password: <b>&lt;root_password&gt;</b>
2. <input type="checkbox"/>	<b>Active Provisioning Site VIP (SSH):</b>  Output similar to that shown on the right will appear as the server access the command prompt.	<b>*** TRUNCATED OUTPUT ***</b>  VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awps7 PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=00 VPATH=/opt/TKLCcomcol/runcm5.13:/opt/TKLCcomcol/cm5.13 PRODPATH= RELEASE=5.13 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awps7:/usr/TKLC/sds PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=0 [root@sds-mrsvnc-a ~]#
3. <input type="checkbox"/>	<b>Active Provisioning Site VIP:</b>  Enable replication for the AppProcControl table.	[root@sds-chltn-c-a ~]# <b>iset -fexcludeTables=' ' NodeInfo where "1=1"</b> === changed 10 records === [root@sds-chltn-c-a ~]#
4. <input type="checkbox"/>	<b>Active Provisioning Site VIP:</b>  Exit from the server command line.	[root@sds-mrsvnc-a ~]# <b>exit</b> logout
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>		

## G.2 Accept Upgrade



**!!! WARNING !!!**

***Procedures in Appendix G ( Finalizing Upgrade) are to be executed only once after all sites/servers on the network have been upgraded to the target release.***



***Executing these procedures before all sites/servers on the network have been upgraded can result in a DB replication outage to all sites that have not yet been upgraded to the target release.***

***Once the procedures in this Appendix are executed, the upgrade becomes permanent and the servers CANNOT be backed to the previous SW release.***

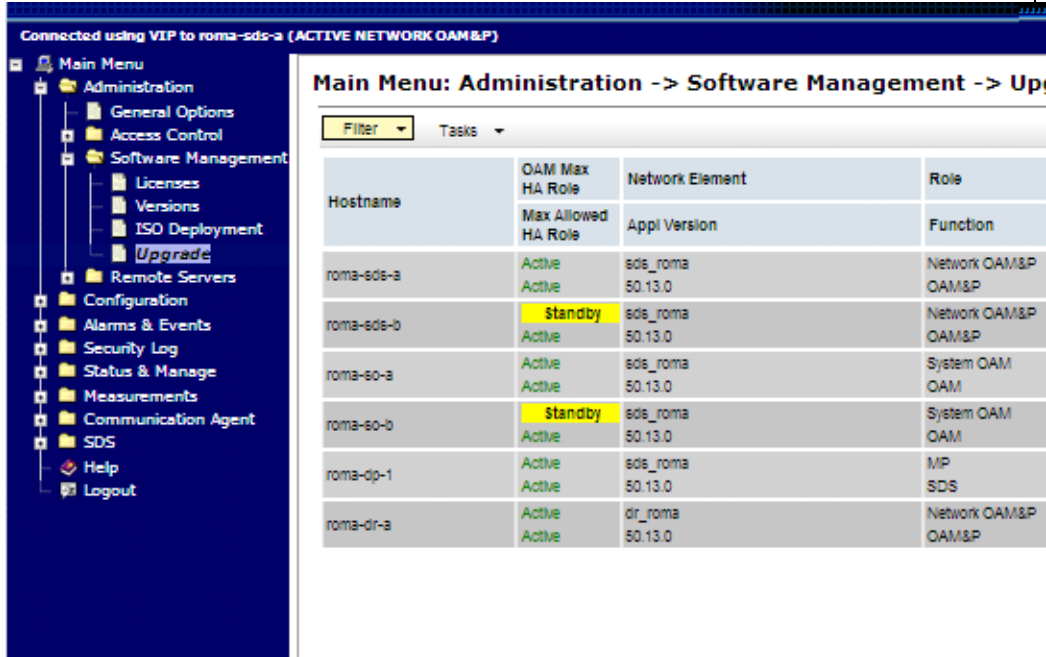
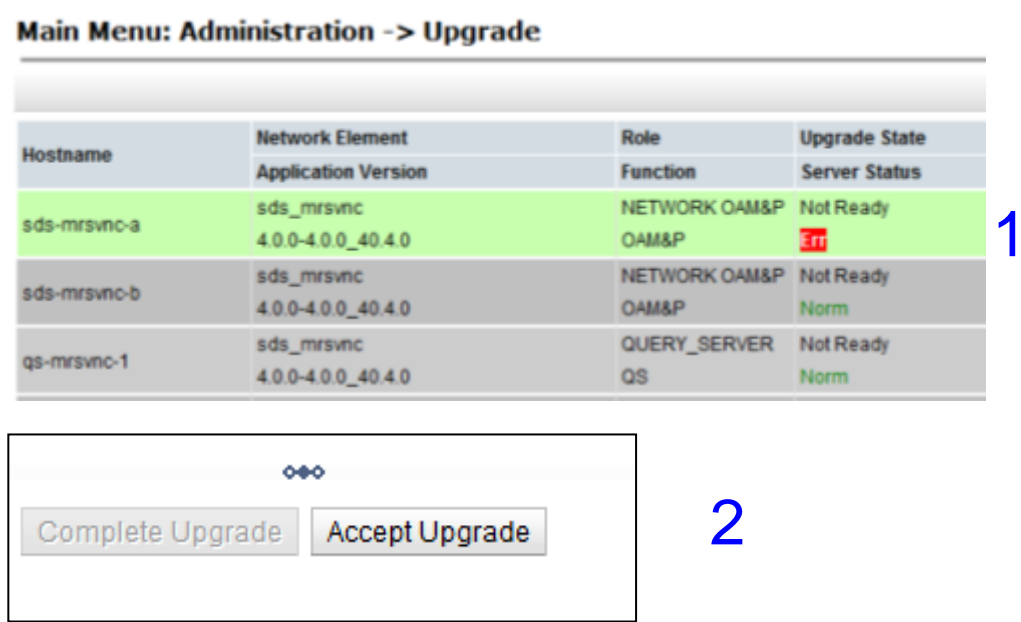
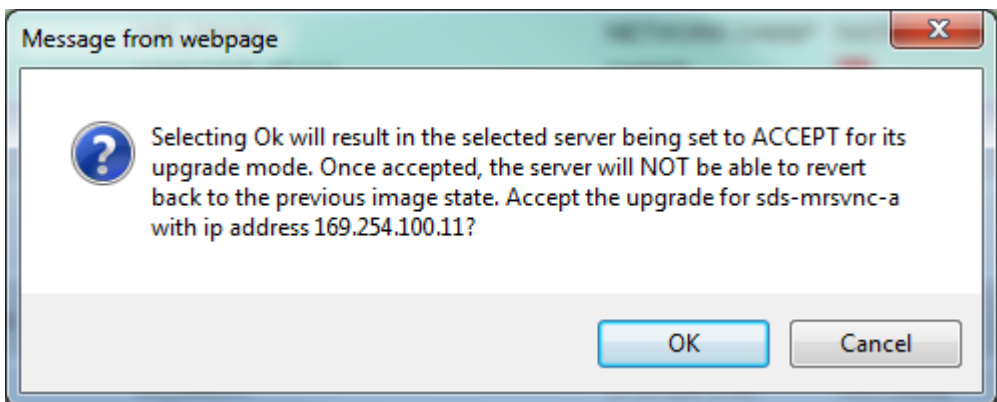
### Appendix G.2: Accept Upgrade

Step	Procedure	Result
1. <input type="checkbox"/>	Using the <b>VIP</b> address, access the Primary Provisioning Site GUI.	<ul style="list-style-type: none"> <li>Access the Primary Provisioning Site GUI as specified in <b>Appendix A.</b></li> </ul>
2. <input type="checkbox"/>	<b>Active Provisioning Site VIP:</b> Launch an approved web browser and connect to the XMI IP address assigned to <b>SDS NOAM VIP</b> using "https://"	

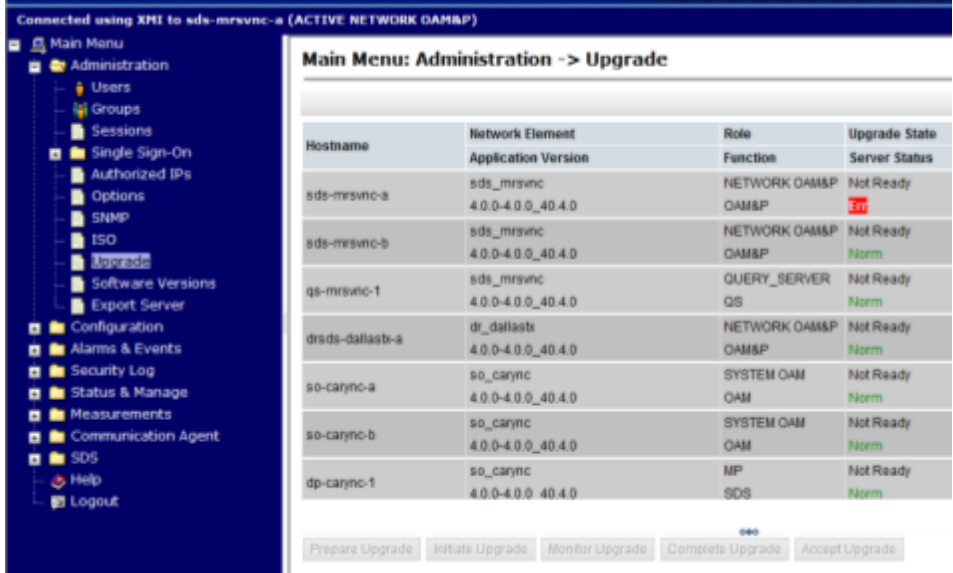
**Appendix G.2: Accept Upgrade**

Step	Procedure	Result
<p>3.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user should be presented with a login screen similar to the one shown on the right.</p> <p>Login to the GUI using the default user and password.</p>	
<p>4.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>The user should be presented the SDS Main Menu as shown on the right.</p>	

Appendix G.2: Accept Upgrade

Step	Procedure	Result
<p>5.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b> Select...</p> <p><b>Main Menu</b> → Administration → Software Managmnt → Upgrade</p> <p>...as shown on the right.</p>	
<p>6.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>1) Highlight the next server awaiting acceptance by clicking on its row.</p> <p>2) Select the “Accept Upgrade” dialogue button.</p>	
<p>7.</p> <p><input type="checkbox"/></p>	<p><b>Active Provisioning Site VIP:</b></p> <p>A message box will display to confirm the acceptance.</p> <p>Click the “OK” button to confirm.</p>	

**Appendix G.2: Accept Upgrade**

Step	Procedure	Result
<p>8.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b> The screen will refresh.</p>	
<p>9.</p> <input type="checkbox"/>	<p><b>Active Provisioning Site VIP:</b> Repeat for all servers, all network elements.</p>	<ul style="list-style-type: none"> <li>• <b>Accept Upgrade on all servers by repeating steps 5 - 8 of this procedure.</b></li> </ul>
<p><b>THIS PROCEDURE HAS BEEN COMPLETED</b></p>		



## APPENDIX H. CREATE NEW LOGICAL VOLUME FOR NETBACKUP CLIENT

This section is to be run only on **SDS NOAM** and **SDS DR NOAM** servers, and only when the LV does not already exist.

### Appendix H: Create new Logical Volume for NetBackup Client

Step	Procedure	Result
1. <input type="checkbox"/>	Verify procedure is run on every server where netBackup will be installed.	If a logical volume for NetBackup has not already been created, execute this procedure on every NOAMP and SOAM server in every Network Element in the system that has NetBackup client software installed.
2. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP (SSH):</b></p> <p>If not already logged in...</p> <p>1) Access the command prompt.</p> <p>2) Log into the server as the "root" user.</p>	<p>CentOS release 5.7 (Final) Kernel 2.6.18-274.7.1.el5prere15.0.0_72.32.0 on an x86_64</p> <p>sds-mrsvnc-a login: <b>root</b> Password: <b>&lt;root_password&gt;</b></p>
3. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP (SSH):</b></p> <p>Output similar to that shown on the right will appear as the server access the command prompt.</p>	<p><b>*** TRUNCATED OUTPUT ***</b></p> <pre>VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpss7 PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=00 VPATH=/opt/TKLCcomcol/runcm5.13:/opt/TKLCcomcol/cm5.13 PRODPATH= RELEASE=5.13 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpss7:/usr/TKLC/sd s PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=0 [root@sds-mrsvnc-a ~]#</pre>
4. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP (SSH):</b></p> <p>Mount the upgrade media</p>	<p>Depending on whether the server is a blade server, a VM guest, or a rack-mount server, and depending on whether your upgrade media is an actual DVD disk or an ISO image, make the upgrade media available to the server.</p> <p>Then, mount the upgrade media on the server from the command line. Your command will look something like this example, depending on how you have made the upgrade media available:</p> <p><b>Optical Drive (DVD):</b></p> <pre>[root@sds-mrsvnc-a ~]# mount /dev/sr0 /mnt/upgrade</pre> <p><b>ISO Alternative (after ISO Administration):</b></p> <pre># mount -o loop /var/TKLC/upgrade/&lt;sds_application_iso&gt; /mnt/upgrade</pre>
5. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP (SSH):</b></p> <p>Verify that the script is available on the media</p>	<p>To be sure it is available on the upgrade media, execute the "ls" command to list the relocateNetBackup script, like this:</p> <pre>[root@sds-mrsvnc-a ~]# ls /mnt/upgrade/upgrade/bin/relocateNetBackup</pre> <p>Verify that the relocateNetBackup script is indeed there.</p>

## Appendix H: Create new Logical Volume for NetBackup Client

Step	Procedure	Result
6. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP (SSH):</b></p> <p>Verify that there is sufficient space available</p>	<p>Verify that the filemgmt filesystem has more than 2049 Megabytes of free space. Execute the df command and examine the response.</p> <pre>[root@sds-mrsvnc-a ~]# df -B M /var/TKLC/db/filemgmt/</pre> <p>Verify that the available space is 2049 Megabytes or greater.</p> <p>If there is not sufficient space, remove unneeded files until there is sufficient space.</p>
7. <input type="checkbox"/>	<p><b>Active Provisioning Site VIP (SSH):</b></p> <p>Execute the relocate script .</p>	<p>Execute the relocate script:</p> <pre>[root@sds-mrsvnc-a ~]# /mnt/upgrade/upgrade/bin/relocateNetBackup</pre> <p>Verify that it executes without error.</p> <p>NOTE: It has been observed that the service restart of netbackup may return a warning. This is a function of the NetBackup client software.</p>
8. <input type="checkbox"/>	<p><b>Server XMI IP (SSH):</b></p> <p>Unmount upgrade media.</p>	<pre>[root@sds-mrsvnc-a ~]# umount /mnt/upgrade</pre>
9. <input type="checkbox"/>	<p><b>Server XMI IP (SSH):</b></p> <p>Exit from the server command line.</p>	<pre>[root@sds-mrsvnc-a ~]# exit</pre> <p>Logout</p>
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>		

## APPENDIX I. RESIZE SHARED SEGMENTS AND LOGICAL VOLUMES

This procedure increases database size needed by imports in SDS 5.0 and re-aligns existing partition sizes to meet the new resource demands of SDS 5.0.

This section is to be run only for a **MAJOR** upgrade (4.x to 5.x) and should be run for *all* servers. The procedure can be run at any time during or after the upgrade procedure. This script can be run for all servers at once or for one server at a time. The script does change the **init** level of every affected server.

### Appendix I: Resize Shared Segments and Logical Volumes

Step	Procedure	Result
1. <input type="checkbox"/>	<p>To validate <i>all</i> servers at the same time, skip to Step 3.</p> <p>To validate <i>one</i> server, login to that server (or any server that has been upgraded) to verify if ready for the fix.</p>	<p>Run this command to validate <i>one</i> server:</p> <pre>[root@hostname~]# /usr/TKLC/sds/bin/lv50fix validate &lt;hostname&gt;</pre> <p><b>NOTE:</b> <i>This script produces much output and verifies if the specified one server in the SDS network is ready to have its shared segments and logical volumes resized.</i></p>
2. <input type="checkbox"/>	<p>To update <i>all</i> servers, at the same time, skip to Step 4.</p> <p>To update <i>one</i> server, login to that server (or any server that has been upgraded) to execute the fix.</p> <p><b>NOTE:</b> <i>After this step, skip all remaining steps.</i></p>	<p>Run this command to update <i>one</i> server:</p> <pre>[root@hostname ~]# /usr/TKLC/sds/bin/lv50fix execute &lt;hostname&gt;</pre> <p><b>NOTE:</b> <i>This script produces much output and, first, verifies if just the specified one server in the SDS network is ready to have its shared segments and logical volumes resized. Then it performs those changes on that one server in the SDS network.</i></p> <p><b>NOTE:</b> <i>After this step, skip all remaining steps.</i></p>
3. <input type="checkbox"/>	<p>To validate <i>all</i> servers, login to the Active NOAM (or any server that has been upgraded) to verify if ready for the fix.</p>	<p>Run this command to validate <i>all</i> servers:</p> <pre>[root@hostname ~]# /usr/TKLC/sds/bin/lv50fix validate all</pre> <p><b>NOTE:</b> <i>This script produces much output and verifies if all servers in the SDS network are ready to have their shared segments and logical volumes resized.</i></p>
4. <input type="checkbox"/>	<p>To update <i>all</i> servers, login to the Active NOAM (or any server that has been upgraded) to execute the fix.</p>	<p>Run this command to update <i>all</i> servers:</p> <pre>[root@hostname ~]# /usr/TKLC/sds/bin/lv50fix execute all</pre> <p><b>NOTE:</b> <i>This script produces much output and, first, verifies if all servers in the SDS network are ready to have their shared segments and logical volumes resized. Then it performs those changes on all servers in the SDS network.</i></p>
<b>THIS PROCEDURE HAS BEEN COMPLETED</b>		

## APPENDIX J. ACCESSING ORACLE'S TEKELEC CUSTOMER SUPPORT SITE

Access to Oracle's Tekelec Customer Support site is restricted to current Tekelec customers. This section describes how to log into the Customer Support site and how to locate upgrade procedures. Viewing these files requires Adobe Acrobat Reader.

1. Go to Oracle's Tekelec Customer Support login page at <https://support.tekelec.com/index.asp>
2. Enter your assigned username and chosen password and click **Login**.

**Or**, if you do not have access to the Customer Support site, click **Need an Account?**  
Follow instructions on the screen.

**NOTE: After 20 minutes of inactivity, you will be logged off, and you must repeat this step to regain access.**

3. After successful login, select a product from the Product Support drop-down menu.
4. Select a release number from the Product Support Release drop-down menu.
5. Locate the Upgrade Procedures section.
6. To open the procedure in the same window, click the procedure name. To open the procedure in a new window, right-click the procedure name and select **Open in New Window**.
7. To download the procedure, right-click the procedure name and select **Save Target As**.