Oracle® Communications Diameter Signaling Router (DSR)

SDS Initial Installation and Configuration Guide

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Oracle Communications Diameter Signaling Router SDS Initial Installation and Configuration Guide, Release 5.0

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1.0 INTRODUCTION

1.1 Purpose and Scope

This document describes how install the Eagle XG Subscriber Data Server (SDS) product within a customer network. It makes use of the AppWorks 5.0 network installation and is intended to cover the initial network configuration steps for a SDS/Query Server NE and a DP-SOAM/DP (Blade) NE for production use as part of the DSR 4.0 solution. This document includes switch configuration (Cisco 4948E-F) and validation of the initial SDS configuration.

This document only describes the SDS product SW installation on the HP DL360 Server, deployed using Cisco 4948E-F switches. It does not cover hardware installation, site survey, customer network configuration, IP assignments, customer router configurations, or the configuration of any device outside of the SDS cabinet. Users needing familiarity with these areas of interest should refer sources cited in **Section 1.2, References**.

1.2 References

External (*Customer Facing*):

- [1] TEKELEC Acronym Guide, MS005077, Latest Revision
- [2] Site Survey (Domestic US AC Power), SS005955, Latest Revision
- [3] Site Survey (Domestic US DC Power), SS005956, Latest Revision
- [4] Hardware Verification Plan, VP005629, Latest Revision
- [5] DSR 4.0 HP C-Class Installation, 902-2228-001, Ver 0.7

Internal (ORACLE Communications Personnel Only):

- [6] HP Solutions Firmware Upgrade Pack Release Notes, 795-000-2xx, v2.1.5 (or latest 2.1 version)
- [7] Platform 6.x Configuration Procedure Reference, 909-2209-001, v. A or greater, 2012
- [8] Manufacturing Acceptance Test Procedure Subscriber Data Management Rack Mount Servers, 820-6641-01, Revision B
- [9] DSR IP Network Planning for AT&T Mobility LTE, MS006641, Latest Revision

1.5	Actonyms
Acronym	Meaning
CSV	Comma Separated Values
DR	Disaster Recovery
IMI	Internal Management Interface
ISL	Inter-Switch-Link
NE	Network Element
NOAM	Network Operations, Administration & Maintenance
iLO	HP Integrated Lights-Out
SDS	Subscriber Data Server
SOAM	Systems Operations, Administration & Maintenance
TPD	Tekelec Platform Distribution (Linux OS)
VIP	Virtual IP
XMI	External Management Interface

1.3 Acronyms

Table 1 - Acronyms

1.4 Assumptions

This procedure assumes the following;

- The user has reviewed the latest Customer specific DSR Network Planning document [9] and has received assigned values for all requested information related to SDS, Query Server, DP-SOAM and DP installation.
- The user has taken assigned values from the latest Customer specific DSR Network Planning document [9] and used them to compile XML files (See **Appendix F**) for each SDS and DP-SOAM site's NE prior to attempting to execute this procedure.
- The user conceptually understands DSR topology and SDS network configuration as described in the latest Customer specific DSR Network Planning document [9].
- The user has at least an intermediate skill set with command prompt activities on an Open Systems computing environment such as Linux or TPD.

1.5 XML Files (for installing NE)

The XML files compiled for installation of the each of the SDS and DP-SOAM site's NE must be maintained and accessible for use in Disaster Recovery procedures. The ORACLE Professional Services Engineer (PSE) will provide a copy of the XML files used for installation to the designated Customer Operations POC. The customer is ultimately responsible for maintaining and providing the XML files to Oracle's Tekelec Customer Service (*US: 1-888-367-8552, Intl:* +1-919-460-2150) if needed for use in Disaster Recovery operations.

1.6 How to use this Document

Although this document is primarily to be used as an initial installation guide, its secondary purpose is to be used as a reference for Disaster Recovery procedures. When executing this document for either purpose, there are a few 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.

If a procedural STEP fails to execute successfully, STOP and contact Oracle's Tekelec Customer Service (*US: 1-888-367-8552, Intl: +1-919-460-2150*) for assistance before attempting to continue.

2.0 PRE-INSTALLATION SETUP

2.1 Installation Prerequisites

The following items/settings are required in order to perform installation for HP DL360 based SDS HW:

- A laptop or desktop computer equipped as follows;
 - o 10/100 Base-TX Ethernet Interface.
 - Administrative privileges for the OS.
 - An approved web browser (currently Internet Explorer 7.x or 8.x)
- An IEEE compliant 10/100 Base-TX Ethernet Cable, RJ-45, Straight-Through.
- USB flash drive with at least 1GB of available space.
- TPD "root" user password.

NOTE: When using the iLO for SSH connectivity, supported terminal Emulations are **VT100 or higher** (i.e. VT-102, VT-220, VT-320).

2.2 Physical Connections

A connection to the VGA/Keyboard ports on the HP DL360 rear panel or a connection to the iLO is required to initiate and monitor the progress of SDS installation procedures.



Figure 1 - HP DL360, DC (Rear Panel)

2.3 Access Alternatives for Application Install

This procedure may also be executed using one of the access methods described below:



2.4 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 Communications for archiving post installation.

NOTE: Parts of this procedure will utilize a VGA Monitor (or equivalent) as the active terminal. It is understood that logging is not possible during these times. The user is only expected to provide logs for those parts of the procedures where direct terminal capture is possible (i.e. SSH, serial, etc.).

3.0 INSTALLATION MATRIX

3.1 Installing SDS on the Customer Network

Installing the SDS product is a task which requires multiple installations of varying types. The matrix below provides a guide to the user as to which procedures are to be performed on which site types. The user should be aware that this document only covers the necessary configuration required to complete product install. Refer to the online help or contact the Oracle's Tekelec Customer Care Center for assistance with post installation configuration options.

NOTE: Although the SDS sites are fully redundant by function, we must distinguish between them during installation due to procedural changes based on the installation sequence. The user should be aware that any reference to the "SDS" site refers to the 1st installation of a SDS pair on the customer network while references to the "DR SDS" site refers to the 2nd SDS pair to be installed.



SDS Installation Matrix

Table 2 - SDS Installation Matrix

SDS Installation: List of Procedures

In general, unless following a cross reference or otherwise instructed differently, the procedures listed here are meant to be executed in numeric order.

Procedure No :	Title :	Page No :
1	Installing the SDS Application (All SDS Sites)	11
2	Configuring SDS Servers A and B (1 st SDS site only)	19
3	OAM Pairing (1 st SDS site only)	41
4	Query Server Installation (All SDS sites)	57
5	OAM Installation for DR SDS site	77
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7	Add SDS software images to PMAC servers (All DP-SOAM sites)	107
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Table 3 - SDS Installation: List of Procedures

4.0 APPLICATION INSTALL

4.1 Installing the SDS Application (All SDS Sites)

The user should confirm that the server has been verified through the SDS Hardware Verification Plan [4] before beginning this procedure.

Step	Procedure	Result
1.	Access the HP DL360 server's console.	 Connect to the HP DL360 server's console using one of the access methods described in Section 2.3.
2 .	1) Access the command prompt.	CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.22.0 on an x86_64
	2) Log into the HP DL360 server as the " root " user.	hostname1260476221 login: root Password: <root_password></root_password>
3.	Verify that the correct Date & Time are displayed in GMT (+/- 4 min.).	[root@hostname1260476221 ~]# date -u Wed Nov 16 14:49:17 UTC 2011 [root@hostname1260476221 ~]#

Procedure 1: Installing the SDS Application



IF THE CORRECT DATE & TIME (IN GMT) ARE NOT SHOWN IN THE PREVIOUS STEP, THEN STOP THIS PROCEDURE AND PERFORM THE FOLLOWING STEPS:

- Execute the steps for updating the date and time found in section entitled "HP DL360 G6 ProLiant Server: BIOS Settings and Server IPM" in 820-6641-01, RevB (or higher) [8] using the TPD 6.x.x media which shipped with the SDS cabinet.
- 2) Restart this procedure beginning with Section 4.1 (Installing the SDS Application).

IF THE CORRECT DATE & TIME (IN GMT) ARE SHOWN IN THE PREVIOUS STEP, THEN CONTINUE ON TO STEP 4 OF THIS PROCEDURE.

4.	Verify that the	[root@hostname1260476221 ~]# getPlatRev
	TPD release is	6.0.0-80.21.0
	6.X.X.	[root@hostname1260476221 ~]#



IF THE PLATFORM REVISION SHOWN IN THE PREVIOUS STEP IS 5.x.x, THEN STOP THIS PROCEDURE AND PERFORM THE FOLLOWING STEPS:

Step	Procedure	Result
1)	Execute the section higher) [8] using t	on entitled "HP DL360 G6 ProLiant Server: BIOS Settings and Server IPM" in 820-6641-01, RevB (or he TPD 6.x.x media which shipped with the SDS cabinet.
2)	Restart this proce	dure beginning with Section 4.1 (Installing the SDS Application).
IF THE PROC	E PLATFORM REVIS EDURE.	SION SHOWN IN THE PREVIOUS STEP IS 6.x.x, THEN CONTINUE ON TO STEP 5 OF THIS
5.	Execute "syscheck" to verify the state of the server before Application install.	Last Login: Wed Nov 16 14:49:17 on tty1 [root@hostname1260476221 ~]# syscheck Running modules in class hardware OK
	NOTE: The user should stop and resolve any errors returned from "syscheck" before continuing on to the next step.	Running modules in class disk OK Running modules in class net OK Running modules in class system OK Running modules in class proc OK LOG LOCATION: /var/TKLC/log/syscheck/fail_log [root@hostname1260476221 ~]#
6.	Execute "verifyUpgrade" as a secondary way to verify the state of the server before Application install. NOTE 1: If there are no problems, the user is returned to a command prompt. NOTE 2: The user should stop and resolve any errors returned from "verifyIPM" before continuing on to the next step.	<pre>[root@hostname1260476221 ~]# verifyUpgrade [root@hostname1260476221 ~]#</pre>

Step	Procedure	Result
7.	Verify server hardware is DL360.	<pre>[root@hostname1260476221 ~]# hardwareInfo grep Hardware Hardware ID: ProLiantDL360G6 [root@hostname1260476221 ~]#</pre>
8.	Place the CDROM containing the SDS Application software into the server's optical drive.	Figure 2 - HP DL360 Front Panel: Optical Drive
9.	Login to the " platcfg " utility.	[root@hostname1260476221 ~]# su - platcfg
10.	From the "platcfg" Main Menu Select each option as shown on the right, pressing the <enter></enter> key after each selection.	Main Menu Jpgrade Maintenance Hait Server Diagnostics Backup and Restore Server Configuration Restart Server Remote Consoles Network Configuration Exit 1 Upgrade Menu 2 Upgrade Menu 2

Step	Procedure	Result
11.	Verify that the Application release level shown matches the target release.	Searching for upgrade media 1 Please wait 2 Choose Upgrade Media Menu <table boxes="" linear="" sec<="" second="" td=""></table>
12.	Output similar to that shown on the right may be observed as the Application install progresses.	Determining if we should upgrade Install product is TPD Install product record exists in /etc/tekelec.cfg Install products match Stopping cron service Checking for stale RPM DB locks Installing public key /mmt/upgrade/upgrade/pub_keys/MySQL_public_key.asc Installing public key /mmt/upgrade/upgrade/pub_keys/RPM-GPG-KEY-redhat-beta Installing public key /mmt/upgrade/upgrade/pub_keys/RPM-GPG-KEY-redhat-release

Step	Procedure	Result
13.	Output similar to that shown on the right may be observed as the Application install progresses.	Adding /usr/TKLC/plat/etc/rpm.d/plat.TKLCplat.macro to /etc/rpm/macros [OK] Adding /usr/TKLC/plat/etc/rpm.d/plat.TPD-provd.macro to /etc/rpm/macros [OK] Updating /etc/rpm/macros Now dispatching /mnt/upgrade/upgrade/ugwrapnoexecdispatch OK] Initializing Upgrade Wrapper package TKLCappworks is not installed TKLCappworks is not installed, therefore this must be an initial install. Validating Distribution Validating cdrom
14.	Output similar to that shown on the right may be observed as the Application install progresses.	Performing preupgrade processing Cleaning repackage package repository Repackage Dir: /var/TKLC/backout/pkg No cleaning to do for an incremental upgrade The runlevel transition complete RC file was created as /etc/rc3.d/S99smartd_run level_transition_complete. Changing to run-level 3 **********************************
15.	Output similar to that shown on the right may be observed as the Application install progresses.	Volume logs_process will be created. Success: Volume logs_process was created. Creating filesystem, this may take a while. Creating lv logs_security. Volume logs_security will be created. Success: Volume logs_security was created. Creating filesystem, this may take a while. Creating lv run_db. Volume run_db will be created. Success: Volume run_db was created. Creating filesystem, this may take a while.

Step	Procedure	Result
16.	Output similar to that shown on the right may be observed at the completion of the Application install.	Executing da01_sds_app_enable.sh da01_sds_app_enable.sh: 'Nothing to do if fresh install.' Applications Enabled. Running /usr/TKLC/plat/bin/service_conf reconfig UPGRADE IS COMPLETE Waiting for reboot Updating platform revision file A reboot of the server is required. The server will be rebooted in 10 seconds
17.	Output similar to that shown on the right may be observed as the server initiates a post-install reboot.	scsi7 : SCSI emulation for USB Mass Storage devices scsi8 : SCSI emulation for USB Mass Storage devices input: Intel(R) Multidevice as /class/input/input3 input: USB HID v1.01 Mouse [Intel(R) Multidevice] on usb-00000:00:1d.3-1 input: Intel(R) Multidevice as /class/input/input4 input: USB HID v1.01 Keyboard [Intel(R) Multidevice] on usb-00000:00:1d.3-1 Restarting system. machine restart
18.	After the server has completed reboot	CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.22.0 on an x86_64 hostname1260476221 login: root
	HP DL360 server as the " root " user.	Password: <root_password></root_password>
19.	Output similar to that shown on the right will appear as the server returns to a command prompt.	<pre>*** TRUNCATED OUTPUT *** </pre>

Procedure 1:	Installing the SDS	S Application
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Step	Procedure	Result
20.	Verify successful installation of the Application software.	<pre>[root@hostname1260476221 ~]# grep COMPLETE /var/TKLC/log/upgrade/upgrade.log 1321462900:: UPGRADE IS COMPLETE [root@hostname1260476221 ~]</pre>
21.	Verify that the Application release level shown matches the target release.	[root@hostname1260476221 ~]# rpm -qa grep sds TKLCsds-4.0.0-4.0.0_40.4.0.x86_64 [root@hostname1260476221 ~]#
22.	Accept upgrade to the Application Software.	<pre>[root@hostname126047621 ~]# /var/TKLC/backout/accept Called with options:accept Loading Upgrade::Backout::RPM Accepting Upgrade Setting POST_UPGRADE_ACTION to ACCEPT in upgrade info. Cleaning backout directory. Clearing Upgrade Accept/Reject alarm. Cleaning upgrade Accept/Reject alarm. Cleaning up RPM config backup files Checking / Doot Checking / Doot Checking / Doot Checking / var Checking / var Checking / var Checking /var Checking /var Checking /var/TKLC Checking /var/TKLC Checking /var/TKLC/appw/logs/Process Checking /var/TKLC/appw/logs/Security Checking /var/TKLC/dpw/logs/Security Checking /var/TKLC/dpw/logs/Security Checking /var/TKLC/dpw/logs/Security Checking /var/TKLC/dpw/logs/Security Checking /var/TKLC/mapw Starting cleanup of RCS repository. INFO: Removing '/var/Ib/prelink/force' from RCS repository INFO: Removing '/etc/my.cnf' from RCS repository [root@hostname1260476221 ~]#</pre>
23.	Put the server in trusted time mode	<pre>[root@hostname1260476221 ~]# tw.setdatetrusted [root@hostname1260476221 ~]# prod.start [root@hostname1260476221 ~]#</pre>
24.	Eject the CDROM from the server's optical drive.	[root@hostname1260476221 ~]# eject /dev/scd0 [root@hostname1260476221 ~]#
25.	Remove the CDROM from the server's optical drive.	Figure 3 - HP DL360 Front Panel: Optical Drive

Step	Procedure	Result				
26.	Exit from the command line to return the server console to the login prompt.	<pre>[root@hostname1260476221 upgrade]# exit CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.22.0 on an x86_64</pre>				
		hostname1260476221 login:				
27.	Repeat th procedur	his procedure for each RMS server installed in the cabinet before continuing on to the next e. (e.g. Server A, Server B, Query Server)				
	THIS PROCEDURE HAS BEEN COMPLETED					

5.0 CONFIGURATION PROCEDURES

5.1 Configuring SDS Servers A and B (1st SDS site only)

Assumptions:

- This procedure assumes that the SDS Network Element XML file for the Primary Provisioning SDS site has previously been created, as described in **Appendix F**.
- This procedure assumes that the Network Element XML files are either on a USB flash drive or the laptop's hard drive. The steps are written as if the XML files are on a USB flash drive, but the files can exist on any accessible drive.

This procedure requires that the user connects to the SDS GUI prior to configuring the first SDS server. This can be done either by one of two procedures:

- 1. Configuring a temporary external IP address, as described in Appendix C
- 2. Plugging a laptop into an unused, unconfigured port on the SDS-A server using a direct-connect Ethernet cable, as described in Appendix D.

Step	Procedure	Result							
1.	SDS Server A: Connect to the SDS GUI.	• Execute Appendix D. Establishing a Local Connection for Accessing the SDS GUI							
2.	SDS Server A: Launch an approved web browser and connect to the SDS Server A IP address using https://192.168.100.1 1								
	NOTE: If presented with the "security certificate" warning screen shown to the right, choose the following option: "Continue to this website (not recommended)".	 There is a problem with this website's security certificate. The security certificate presented by this website was not issued by a trusted certificate authority. The security certificate presented by this website was issued for a different website's address. Security certificate problems may indicate an attempt to fool you or intercept any data you send to the server. We recommend that you close this webpage and do not continue to this website. Click here to close this webpage. Continue to this website (not recommended). 							
3.	SDS Server A: The user should be presented the login screen shown on the right.	Tekelec System Login							
	Login to the GUI using the default user and password.	Log In Enter your username and password to log in Username: guiadmin Password: Change password Log In Welcome to the Tekelec System Login. Unauthorized access is prohibited. This Tekelec system requires the use of Microsoft Internet Explorer 7.0 or 8.0 with support for JavaScript and cookies.							

Procedure 2: Configuring SDS Servers A and B (1st SDS site only)

Procedure 2: Configuring SDS Servers A and B (1st SDS site only)

Step	Procedure	Result
4.	SDS Server A: The user should be presented the SDS Main Menu as shown on the right.	Main Menu Main Menu: Main Menu:

Proc	edure 2.1 Config	uring the Network Element
5.	SDS Server A: Select <u>Main Menu</u> → Configuration → Network Elements as shown on the right.	Connected using 10.250.55.124 to hostname1345124587 (ACTIVE NETWORK OAM&P) Main Menu Administration Network Elements Services Resource Domains Servers Server Groups
6.	SDS Server A: From the Configuration / Network Elements screen Select the "Browse" dialogue button (scroll to bottom left corner of screen).	Main Menu: Configuration -> Network Elements Tue Jul 31 18:41:53 2012 Filter Network Element Network Element To create a new Network Element, upload a valid configuration file: Browse_ Upload File Insert Delete Edit NE Network Export

Proc	edure 2.1 Config	uring the Network Element	
7	SDS Server A:		
	Note: This step assumes that the xml files were previously prepared, as described in Appendix F. 1) Select the location containing the site .xml file.	Choose file Image: Choose file Look in: USB (E:) Image: Choose file Image: Choose file My Recent Documents Image: Choose file Image: Desktop Image: So_DEV.ne.xml	
	2) Select the .xml file and click the "Open" dialogue button.	My Documents My Computer My Network File name: Files of type: All Files (*.*)	
8.	SDS Server A: Select the "Upload File" dialogue button (bottom left corner of screen).	Communication Agent SDS Communication Agent To create a new Network Element, upload a valid configuration E:\NO_DEV.ne.xml Browse Upload File Insert Edit Delete Lock/Unlock Report Expo	file:
9.	SDS Server A: If the values in the .xml file pass validation rules, the user will receive a banner information message showing that the data has been successfully validated and committed to the DB.	Main Menu: Configuration -> Network Elements [Upload] Filter Info Info • • • • • • • • • • • • • • • • • • • • • • • • • <t< td=""><td></td></t<>	
	NOTE : You may have to left mouse	Main Menu: Configuration -> Network Elements [Upload	1]
	click the "Info " banner option in	Network Element Commit State	Ę
	order to see the banner output.	Sds_mrsvnc UNLOCKED	

Proc	Procedure 2.2 Configuring Services									
10	SDS Server A:									
	Select	1 1 466								
	Main Menu									
	→ Configuration	Main Menu								
	→ Services	Administration	Main Menu: Config	uration -> Services						
		🗧 💳 Configuration		·						
	as shown on the	🔤 📑 Network Elements								
	right.	Services	Name	Intra-NE Network						
		🔤 📑 Resource Domains	OAM	Unspecified						
		Servers	Replication	Unspecified						
		Server Groups	Signaling	Unspecified						
		Places	HA Primary	Unspecified						
11.	SDS Server A: 1) The user will be presented with the	Main Menu: Configuration -> 9	Services	Wed Jul 25						
	"Services"	Name	Intra-NE Network	Inter-NE Network						
	configuration screen	OAM	Unspecified	Unspecified						
	right.	Replication	Unspecified	Unspecified						
		Signaling	Unspecified	Unspecified						
	2) Select the "Edit"	ComAgent	Unspecified	Unspecified						
		Communication Agent SDS Help Zogout	2							

12.	SDS Server A:	Main Manue Co	nfiguration > C					
	1) With the exception of "Signaling" which is left	Main Menu: Co	niiguration -> Se	Thu Feb 06 15:32:14				
	"Unspecified", set other services values so that all Intra-NE Network traffic is directed	Services						
	across IMI and all Inter-NE Network	Name	Intra-NE Network	ork Inter-NE Network				
	traffic is across XMI.	OAM	IMI •	XMI •				
	2) Select the "Apply" dialogue	Replication	IMI •	XMI •				
	button.	Signaling	Unspecified •	Unspecified •				
	NOTE: These are recommended	HA_Secondary	IMI •	XMI				
	names for SDS 5.0. Service names may	HA_MP_Secondary	IMI •	XMI				
	those used in Appendix F .	Replication_MP	IMI •	XMI •				
		ComAgent	IMI •	XMI •				
		Ok Apply Cancel						
13.	SDS Server A:	Main Menu: Co	nfiguration -> Se	ervices [Edit]				
	1) The user should now click the "Info" tob to be presented	Info 🔻		Thu Feb 06 15:32:14				
	with a banner information	Info 🖑	8					
	message stating "Data committed"	• Data com	mitted!					
	2) Select the "Ok"	Name	Network	Inter-NE Network				
	alalogue button.	OAM	IMI •	XMI •				
		Replication	IMI •	XMI •				
		Signaling	Unspecified •	Unspecified •				
1								

Proc	edure 2.2 Configu	Iring Services						
14.	SDS Server A: The user will be presented with the "Services" configuration screen	Main Menu: Configuration -> Services Thu Feb 06 15:38:06						
	right	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 2.3 Configuring the SDS Server Note: This step thru 15. the last step of this **Tekelec** Subscriber Database Server procedure need to be done for both SDS Server A and Connected using XMI to hostname1326211623 (ACTIVE NETWORK OAM&P) SDS Server B. 🖃 🚊 Main Menu Main Menu: Configuration -> Servers 🛓 🚞 Administration SDS Server A: 📩 🚖 Configuration Filter 💌 Network Elements Select... Services Hostname Role Server Group Servers Main Menu Server Groups → Configuration 🛓 🚞 Network → Servers ...as shown on the right. SDS Server A: 16. SDS Select the "Insert" 🤣 Help dialogue button. Insert Delete Export Report 🔁 Logout

Proc	edure 2.3 Configu	ring the SDS Server	
17	SDS Server A:		
	The user is now	Adding a new server	
	presented with the "Adding a new server"	Attribute Value	Description Unique name for the server. [Default = n/a. Range = A 20-character string. Valid characters are alphanumeric and minus sign. Must start with an alphanumeric and end with an alphanumeric 1
	screen.	Role - Select Role -	Select the function of the server
		System ID	System ID for the NOAMP or SOAM server. [Default = n/a. Range = A 64- character string. Valid value is any text string.]
		Hardware Profile SDS TVOE Guest	Hardware profile of the server
		Network Element Name - Unassigned - 🗸 ^	Select the network element
		Location	Location description [Default = "". Range = A 15-character string. Valid value is any text string.]
		Ok Apply Cancel	
18.	SDS Server A:	Attribute Value Description	
	Input the assigned " hostname " for the SDS Server (A or B).	Host Name sds-mrsvnc-a * Unique name for the server. [Defaul Valid characters are alphanumeric a alphanumeric and end with an alph	t = n/a. Range = A 20-character string. and minus sign. Must start with an anumeric.]
	SDS Server A:	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
19.	Select "NETWORK	Role - Select Role - 💉 Select the function of th	e server
	OAM&P" for the server "Role" from	Hardware Profile SYSTEM OAM Hardware profile of the Network Element SYSTEM OAM	server
	the pull-down mend.	Name MP Select the network elen	nent
		Location Location Location	efault = "". Range = A 1 t
	000 0	······································	* * * * * * * * * * * * * * * * * * * *
20.	SDS Server A:	p	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
	Input the assigned hostname again as	System ID sds-mrs.vnc-a	System ID for the NOAMP or SOAM server. [Default = n/a. Range = A 64- character string. Valid value is any text
	the " System ID " for the SDS Server (A or B)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	string.]
	o. b).		
21.	SDS Server A:		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
	Select "SDS HP Rack Mount" for the	Profile SDS TVOE Guest Hardware profil SDS TVOE Guest	e of the server
	Hardware Profile for the SDS from the	Network SDS HP c-Class Blade V2 Select the netw SDS HP c-Class Blade V0	ork element
	pull-down menu.	Location SDS HP c-Class Blade V1 Location description SDS HP Rack Mount string.]	ption [Default = . Range
			pply Cancel

Proc	edure 2.3 Configu	uring tl	ne SDS S	berver								
າາ	SDS Server A:		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	,	~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~	ÿ		
	Select the Network Element Name for	Netwo Eleme	rk int Name	- Unassig	gned - 🔽	*	Se	elect the network el	ement	<pre>}</pre>		
	the SDS from the pull-down menu.	Locati	on ~~~~~~	sds_mrsv	/nc ///////////////////////////////////		Lo	ocation description	[Default =	Ş		
	NOTE: After the Network Element Name is selected, the Interfaces fields will be displayed, as seen in Step 25 .											
23.	SDS Server A:		~~~~~~	~~~~~~	~~~~~~	~~~~~	~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~	~~~~~	~~~~~	
	Enter the site location.	Location	Morris	wille_NC		Location de is any text s	escrip string.]	tion [Default = . Range :] ///////////////////////////////////	• A 15-chara(cter string. Va	alid value	
	NOTE: Location is an optional field.											
24.	SDS Server A:	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~	~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~
	1) Enter the	Sinterfac Network	es:			IP	IP Address Interface					
	MGMNT_VLAN and		MGMNT_VLAN (169.254.1.0/24)			[169.254.1.11		bond0 💌	VLAN (2)		
	IMI IP addresses for the SDS Server.	XMI (10.240.241.0/24)			[10.250	0.55.124		bond1 💌	VLAN (3)		
		🕺 IMI (169	MI (169.254.100.0/24) 169.25			3.254.100.11 bond0 💌 ☑ VLAN (4)			VLAN (4)			
	2) Set the MGMNT_VLAN and	}	~~~~~	~~~~~	~~~~~	~~~~~	~~~	Ok Apply Cancel	~~~~~	~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~
	"bond0" and check		SDS Serv	ver	MGMN	T_VLAN I	IP	IMI IP	NOTE:	These val	lues	
	each VLAN checkbox.		SDS-A (F	Primary)	169.254	1.1.11		169.254.100.11	should k SDS ins	be used fo tallations	r all where	
	2) Enter the XMUD		SDS-B (F	Primary)	169.254	1.1.12		169.254.100.12	4948E-F switches	⁼ Aggrega s are deplo	tions oved.	
	address for the SDS Server.											
	4) Set the XMI Interface to "bond1" and DO NOT check the VLAN box.											

Procedure 2.3 Configuring the SDS Server				
25.	SDS Server A:	NTP Servers:	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
	1) Click the "NTP Servers:" "Add"	NTP Server IP Address	Prefer	Add
	dialogue button.	Ş	Ok Apply C	Cancel
	2) Enter the NTP Server IP Address	·····	~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
	for an NTP Server.	NTP Servers:		
	3) If you have	NTP Server IP Address	Prefer	Add
	another NTP Server	10.250.32.10		Remove
	(1) and (2) to enter it.	<u> </u>	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
	<ol> <li>Optionally, click the "Prefer"</li> </ol>	NTP Server IP Address	Prefer	Add
	checkbox to prefer one NTP Server	10.250.32.51		Remove
	over the other.	10.250.32.10	V	Remove
26.	1) The user should be presented with a banner information message stating "Pre-Validation passed".	Main Menu: Configuration	Data NOT committed	] 1
	dialogue button.	Host Name sds-mrsvnc-a	Valid characters are alphanumeric and e	alphanumeric al and with an alpha
		<pre>&gt; Interfaces:</pre>		<b>~</b> {
		Setwork	IF	Address 2
		MGMNT_VLAN (169.254.1.0/24)	[	169.254.1.11
		XMI (10.240.241.0/24)	[	10.250.55.124
		MI (169.254.100.0/24)	[	169.254.100.11
			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	

Procedure 2.3 Configuring the SDS Server				
27.	SDS Server A: If the values provided match the network ranges assigned to the SDS NE, the user will receive a banner information message showing that the data has been validated and committed to the DB.	Main Menu: Configuration -> Servers [Insert] Info Info <		

Procedure 2.4 Applying the SDS Server Configuration File							
28.	SDS Server A: Select	Tekelec Subscriber Database Server					
	Main Menu → Configuration → Servers	Connected using XMI	to hostname13	e1326377521 (ACTIVE NETWORK OAM&P) Main Menu: Configuration -> Servers			
	as shown on the right.	Network E	lements	Filter	Role	Server Gro	oup Network Element
		Servers Server Gro	ups	sds-mrsvnc-a		1&P	sds_mrsvnc
29.	SDS Server A:	Main Menu: Conf	iguration ->	Servers		Th	Help 🕺 Help 20:36:04
	The "Configuration →Servers" screen should now show the newly added SDS Server in the list.	Filter Hostname	Role	Server Group	Network Element	Location	Details
		sds-mrsvnc-a	Network OAM&P	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.124 IMI: 169.254.100.11
30.	SDS Server A: 1) Use the cursor to solact the SDS	Main Menu: Conf	iguration ->	Servers		Thu	Help 3an 12 18:43:18 2012 UTC
	Select the SDS Server entry added in Steps 15 - 27.	Hostname	Role	Server Group	Network Element	Location	Details
		sds-mrsvnc-a	Network OAM&P		sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.124 IMI: 169.254.100.11
	The row containing the desired SDS Server should now be highlighted in GREEN .						
	2) Select the "Export" dialogue button.	Insert Delete Expor	t Report		000		Pause updates

Procedure 2.4 Applying the SDS Server Configuration File			
31.	SDS Server A: The user will receive a banner information message showing a download link for the SDS Server configuration data. Click on the word "downloaded" to download and save the configuration file. Note: You may be required to click the Info tab to display the Info banner shown here.	Main Menu: Configuration -> Servers [Export] Pelp Thu Jan 12 18:47:28 2012 UTC Filter Info Hostname Info Sds-mrsvnca • Exported server data in TKLCConfligData.sds-mrsvnc-a.sh may e downloaded 10:250.55.124 10:250.55.124 10:250.550	

Proc	edure 2.4 Applyin	g the SDS Server Configuration File
32.	SDS Server A:	File Download
	1) Click the "Save" dialogue button.	Do you want to open or save this file?
	2) Save the SDS Server configuration file to a USB flash drive.	Name: TKLCConfigData.sds-mrsvnc-a.sh Type: sh_auto_file From: 10.250.55.124 Open Save Cancel
	3) Click the "Close" dialogue button	While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not open or save this file. <u>What's the risk?</u>
		Save As
		Savejn: 📼 USB (E:) 💽 🕜 🎓 📰 -
		My Recent Documents 2
		My Documents
		My Computer
		File name: IKLUControData sds-mrsvnc-a.sh Save My Network Save as type: .sh Document Cancel
		Download complete
		Download Complete
		ConfigData.sds-mrsvnc-a.sh from 10.250.55.124
		Downloaded: 0 bytes in 1 sec Download to: E:\TKLCConfigData.sds-mrsvnc-a.sh Transfer rate: 0 bytes/Sec Close this dialog box when download completes
		Open Open Folder Close

Procedure 2.4 Applying the SDS Server Configuration File				
33.	SDS Server A or B: Access the server console.	Connect to the SDS Server A or B console using one of the access methods described in Section 2.3.		
34.	 SDS Server A or B: 1) Access the command prompt. 2) Log into the server as the "root" user. 	CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.22.0 on an x86_64 hostname1260476099 login: root Password: <root_password></root_password>		
35.	SDS Server A or B: Output similar to that shown on the right will appear as the server presents the command prompt.	<pre>*** TRUNCATED OUTPUT *** VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/co magent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@hostname1260476099 ~]#</pre>		
36.	SDS Server A or B: Insert the USB flash drive containing the server configuration file into the USB port on the front panel of SDS Server.	Figure 4 - HP DL360 Front Panel: USB Port		
37.	SDS Server A or B: Output similar to that shown on the right will appear as the USB flash drive is inserted into the SDS Server front USB port. Press the <enter></enter> koute rature to the	<pre>[root@hostname1260476099 ~]# sd 3:0:0:0: [sdb] Assuming drive cache: write through sd 3:0:0:0: [sdb] Assuming drive cache: write through <enter></enter> [root@hostname1260476099 ~]#</pre>		
38.	key to return to the command prompt. SDS Server A or B: Verify that the USB flash drive's partition has been mounted by the OS: Search df for the device named in the previous step's output.	[root@hostname1260476099 ~] # df grep sdb /dev/sdb1 2003076 8 2003068 1% /media/sdb1 [root@hostname1260476099 ~]#		

Procedure 2.4 Applying the SDS Server Configuration File				
39.	SDS Server A or B: Copy the configuration file to the SDS server NOTE: This step can be skipped for SDS Server A because the file should already exist. NOTE: If Appendix C was used to create this interface, un-configure the interface before copying this file.	<pre>[root@hostname1260476099 ~]# cp -p /media/sdb1/TKLCConfigData.sds-mrsvnc- a.sh /var/TKLC/db/filemgmt/. [root@hostname1260476099 ~]#</pre>		
40.	SDS Server A or B: NOTE: If Appendix C was used to create this interface, un-configure the interface.	<pre>[root@hostname1260476099 ~]# netAdm deletedevice=eth02 Interface eth02 removed [root@hostname1260476099 ~]#</pre>		
41.	SDS Server A or B: Copy the server configuration file to the "/var/tmp" directory on the server, making sure to rename the file by omitting the server hostname from the file name. NOTE: The server will poll the /var/tmp directory for the presence of the configuration file and automatically execute it when found.	<pre>Example: TKLCConfigData<.server_hostname>.sh → will translate to →TKLCConfigData.sh [root@hostname1260476099 ~]# op -p /var/TKLC/db/filemgmt/TKLCConfigData.sds-mrsvnc-a.sh /var/tmp/TKLCConfigData.sh [root@hostname1260476099 ~]#</pre>		

Procedure 2.4 Applying the SDS Server Configuration File				
42.	SDS Server A or B:	*** NO OUTPUT FOR \approx 3-20 MINUTES ***		
	After the script completes, a broadcast message will be sent to the terminal.	Broadcast message from root (Thu Dec 1 09:41:24 2011): Server configuration completed successfully! See /var/TKLC/appw/logs/Process/install.log for details.		
	NOTE: The user should be aware that the time to complete this step varies by server and may take from 3-20 minutes to complete.	Please remove the USB flash drive if connected and reboot the server.		
43.	SDS Server A or B: Remove the USB flash drive from the USB port on the front panel of the server.	Figure 4 - HP DL360 Front Panel: USB Port		
	CAUTION: It is important that the USB flash drive be removed from the server before continuing on to the next step.			
44.	SDS Server A or B:	Broadcast message from root (Thu Dec 1 09:41:24 2011):		
	Ignore the output shown and press the <enter></enter> key to return to the command prompt.	Server configuration completed successfully! See /var/TKLC/appw/logs/Process/install.log for details. Please remove the USB flash drive if connected and reboot the server. <enter></enter>		
		[root@hostname1260476099 ~]#		
45.	SDS Server A or B:	<pre>[root@hostname1260476099 ~]# set_ini_tz.pl <time zone=""></time></pre>		
	Configure the time zone.	Note: The following command example uses Etc/UTC time zone. Replace, as appropriate, with the time zone you have selected for this installation. See Appendix H for a list of valid time zones. [root@hostname1260476099 ~]# set ini tz.pl "Etc/UTC"		
46.	SDS Server A or B:	[root@hostname1260476099 ~]# init 6		
	Initiate a reboot of the SDS Server .			

Proc	Procedure 2.4 Applying the SDS Server Configuration File			
47.	SDS Server A or B: Wait ~9 minutes Output similar to that shown on the right may be observed as the server initiates a reboot.	[root@hostname1322679281 ~]# init 6 [root@hostname1322679281 ~]# bonding: bond0: Removing slave eth02 bonding: bond0: Warning: the permanent HWaddr of eth02 - 98:4B:E1:6F:74:56 - is still in use by bond0. Set the HWaddr of eth02 to a different address to avoid c onflicts. bonding: bond0: releasing active interface eth02 bonding: bond0: making interface eth12 the new active one. bonding: bond0: Removing slave eth12 bonding: bond0: releasing active interface eth12 e1000e 0000:07:00.0: eth12: changing MTU from 1500 to 1500 bonding: bond1: Removing slave eth01		
		<pre>*** TRUNCATED OUTPUT *** Initializing USB Mass Storage driver usbcore: registered new driver usb-storage USB Mass Storage support registered. device-mapper: uevent: version 1.0.3 device-mapper: ioctl: 4.11.5-ioctl (2007-12-12) initialised: dm-devel@redhat.com device-mapper: dm-raid45: initialized v0.25941 kjournald starting. Commit interval 5 seconds EXT3-fs: mounted filesystem with ordered data mode. SELinux: Disabled at runtime. type=1404 audit(1322751643.542:2): selinux=0 auid=4294967295 ses=4294967295</pre>		
48.	SDS Server A or B: After the server has completed reboot	CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.22.0 on an x86_64		
	Verify that the server console returns to a login prompt.	Password: <root_password></root_password>		
49.	SDS Server A or B: Output similar to that shown on the right will appear as the server access the command prompt.	<pre>*** TRUNCATED OUTPUT *** VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/co magent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@sds-mrsvnc-a ~]#</pre>		
SDS Server A or B: [root@sds-mrsvnc-a ~]# ifconfig grep in grep -v inet6				
---	------------			
50. bond0 Link encap:Ethernet HWaddr 98:4B:E1:6F:74:68				
IP address input in bond0.4 Link encap:Ethernet HWaddr 98:4B:E1:6F:74:68				
Step 25 has been inet addr: 169.254.100.11 Bcart: 169.254.100.255 Mask: 255.	255.255.0			
applied to bond1 Link encap:Ethernet HWaddr 98:4B:E1:6F:74:6A				
"bond0.4". inet ad r:10.250.55.124 Bcast:10.250.55.255 Mask:255.255	.255.0			
eth01 Link encap:Ethernet HWaddr 98:4B:E1:6F:74:68				
2) Verify that the eth02 Link encap:Ethernet HWaddr 98:4B:E1:6F:74:6A				
XMIIP address eth11 Link encap:Ethernet HWaddr 98:4B:E1:6F:74:68				
input in Step 25 has eth12 Link encap:Ethernet HWaddr 98:4B:E1:6F:74:6A				
been applied to lo Link encap:Local Loopback				
"bond1". inet addr:127.0.0.1 Mask:255.0.0.0				
[root@sds-mrsvnc-a ~]#				
NOTE: The server's				
XMI & IMI				
addresses can be				
verified by reviewing				
life Server				
through the SDS				
GUI.				
i.e.				
Main Menu				
→ Configuration				
→ Servers				
Scroll to line entry				
containing the				
server's nostname.				
SDS Server A or B: [root@sds-mrsvnc-a ~]# ntpq -np				
51. remote refid st t when poll reach delay offs	et jitter			
Use the " ntpq "				
() command to verify that the convertise $(+10.250.32.10 + 192.5.41.209 + 2 + 10.250.32.10 + 192.5.41.209 + 10.250 + 10.250.32.10 + 10.2$.8 230.741			
connectivity to the *10.250.32.51 192.5.41.209 2 u 46 64 377 0.190 -2401	.9 232.170			
assigned Primary [root@sds-mrsvnc-a ~]#				
and Secondary NTP				
server(s).				



IF CONNECTIVITY TO THE NTP SERVER(S) CANNOT BE ESTABLISHED, STOP AND EXECUTE THE FOLLOWING STEPS:

• Have the customer IT group provide a network path from the OAM server IP to the assigned NTP IP addresses.

ONCE NETWORK CONNECTIVITY IS ESTABLISHED TO THE ASSIGNED NTP IP ADDRESSES, THEN RESTART THIS PROCEDURE BEGINNING WITH STEP 51

Proc	Procedure 2.4 Applying the SDS Server Configuration File					
50	SDS Server A or B:	[root@sds-mrsvnc-a ~]# syscheck				
52.	Execute a	Running modules in class system				
	"syscheck" to verify the current	OK				
	health of the server.	Running modules in class proc				
		OK				
		Running modules in class net				
		OK				
		Running modules in class hardware				
		OK				
		Running modules in class disk				
		OK				
		LOG LOCATION: /var/TKLC/log/syscheck/fail log				
		[root@sds-mrsvnc-a ~]#				
53.	SDS Server A or B:	[root@sds-mrsvnc-a ~]# exit				
	Exit from the command line to	CentOS release 5.6 (Final)				
	return the server console to the login	Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.22.0 on an x86_64				
	prompt.	sds-mrsvnc-a login:				
54.	Configure S	DS Server B by repeating steps 15 - 53 of this procedure.				

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IF 4948E-F SWITCH CONFIGURATION HAS NOT BEEN COMPLETED PRIOR TO THIS STEP, STOP AND EXECUTE THE FOLLOWING STEPS:

- 1) APPENDIX E.1
- 2) APPENDIX E.2 (Appendix E.2 references Appendix E.3 where applicable).
- 3) APPENDIX E.4

Proc	edure 2.4 Applyir	ng the SDS Server Configuration File
55.	SDS Server A:	[root@sds-mrsvnc-a ~]# ping 169.254.100.12
	From SDS Server A "ping" the IP address configured for "bond0.4" (IMI) on SDS Server B. NOTE: Use the	64 bytes from 169.254.100.12: icmp_seq=1 ttl=64 time=0.018 ms 64 bytes from 169.254.100.12: icmp_seq=2 ttl=64 time=0.019 ms 64 bytes from 169.254.100.12: icmp_seq=3 ttl=64 time=0.014 ms 64 bytes from 169.254.100.12: icmp_seq=4 ttl=64 time=0.018 ms 64 bytes from 169.254.100.12: icmp_seq=5 ttl=64 time=0.009 ms 64 bytes from 169.254.100.12: icmp_seq=6 ttl=64 time=0.018 ms
	<pre><cirl-c> key combination to terminate the "ping" process after a few seconds.</cirl-c></pre>	169.254.100.12 ping statistics 6 packets transmitted, 6 received, 0% packet loss, time 4997ms rtt min/avg/max/mdev = 0.009/0.016/0.019/0.003 ms [root@sds-mrsvnc-a ~]#
56.	SDS Server A & B: Use "ping" to verify that the "bond1" device now has connectivity to the XMI Gateway address.	<pre>[root@sds-mrsvnc-a ~]# ping 10.250.55.124 PING 10.250.55.124 (10.250.55.124) 56(84) bytes of data. 64 bytes from 10.250.55.124: icmp_seq=1 ttl=64 time=0.019 ms 64 bytes from 10.250.55.124: icmp_seq=2 ttl=64 time=0.007 ms 64 bytes from 10.250.55.124: icmp_seq=3 ttl=64 time=0.008 ms 64 bytes from 10.250.55.124: icmp_seq=5 ttl=64 time=0.007 ms 64 bytes from 10.250.55.124: icmp_seq=5 ttl=64 time=0.007 ms 64 bytes from 10.250.55.124: icmp_seq=6 ttl=64 time=0.008 ms</pre>
	NOTE: Use the <ctrl-c> key combination to terminate the "ping" process after a few seconds.</ctrl-c>	10.250.55.124 ping statistics 6 packets transmitted, 6 received, 0% packet loss, time 4995ms rtt min/avg/max/mdev = 0.007/0.009/0.019/0.005 ms [root@sds-mrsvnc-a ~]#
57.	SDS Server A: Disconnect the laptop from the Server A, eth14 Ethernet port.	HP DL360, DC (Rear Panel) 14 13 12 11
58.	switch1A: Connect the laptop to Port 44 of switch1A (bottom switch).	Port 47 Port 49 Console Port Port 47 Port 49 Console Port Port 2 Port 52 Port 48 Management Port Port 2 Port 48 Management Port

Procedure 2.4 Applying the SDS Server Configuration File					
59.	Laptop: Set a static IP address and netmask within the Management VLAN for the laptop's network interface card (169.254.1.100 <i>is suggested</i>).	• Reference Appendix D . Steps 5-6 <i>if assistance is needed in modifying the laptop's network configuration.</i>			
60.	SDS Server A: Using SSH, login to Server A using its Management VLAN IP address 169.254.1.11	CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.22.0 on an x86_64 sds-mrsvnc-a login: root Password: <root_password></root_password>			
61.	SDS Server A: Output similar to that shown on the right will appear as the server access the command prompt.	<pre>*** TRUNCATED OUTPUT *** VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/co magent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@sds-mrsvnc-a ~]#</pre>			
62.	SDS Server A: Using the " netAdm " utility, delete the eth14 interface.	<pre>[root@sds-mrsvnc-a ~]# netAdm deletedevice=eth14 Interface eth14 removed [root@sds-mrsvnc-a ~]#</pre>			
63.	SDS Server A: Using the "netAdm" utility, re-add the eth14 interface.	<pre>[root@sds-mrsvnc-a ~]# netAdm adddevice=eth14 Interface eth14 added [root@sds-mrsvnc-a ~]#</pre>			
THIS PROCEDURE HAS BEEN COMPLETED					

5.2 OAM Pairing (1st SDS site only)

The user should be aware that during the OAM Pairing procedure, various errors may be seen at different stages of the procedure. During the execution of a step, the user is directed to ignore errors related to values other than the ones referenced by that step.



Step	Procedure	Result					
1.	SDS Server A:	Certificate Error: Navigation Blocked - Windows Internet Explorer					
	Launch an approved web browser and						
	connect to the XMI IP address assigned to	File Edit View Favorites Tools Help Share Browser WebEx					
	"https://"	2 Certificate Error: Navigation Blocked					
		There is a problem with this website's security certificate.					
		The security certificate presented by this website was not issued by a trusted certificate authority. The security certificate presented by this website was issued for a different website's address.					
		Security certificate problems may indicate an attempt to fool you or intercept any data you send to the server.					
		We recommend that you close this webpage and do not continue to this website.					
		Click here to close this webpage.					
		Solution Continue to this website (not recommended).					
		More information					
2.	SDS Server A: The user should be presented the login screen shown on the right.	Tekelec System Login					
	Login to the GUI						
	using the default user and password.	Log In					
		Enter your username and password to log in					
		Username: guiadmin					
		Log In					
		Welcome to the Tekelec System Login.					
		Unauthorized access is prohibited. This Tekelec system requires the use of Microsoft Internet Explorer 7.0 or 8.0 with support for JavaScript and cookies.					

Procedure 3: Pairing the OAM Servers (1st SDS site only)

Step	Procedure		Result	
3.	SDS Server A: The user should be presented the SDS Main Menu as shown on the right.	Connected using XMI to hostname134512 Administration Configuration Configuration Configuration Configuration Security Log Status & Manage Measurements Communication Agent SDS Configuration Maintenance Help Logout	Database Server 0.4.0 Asso (ACTIVE NETWORK OAM&P) Main Menu: [Main] This is the use mill can be m Options 'Adminis	0 Welcome guiadmin [Logout]

Procedure 3.1 Configuring the SDS Server Group						
4.	SDS Server A: Select	Tekelec Subscriber Database Server				
	Main Menu → Configuration → Server Groups as shown on the right.	Connected using XMI to sds-mrsvnc-a (ACTIVE NETWORK OAM&P) Main Menu Administration Administration Network Elements Services Services Server Group Name Level Parent Function Servers Server Groups Network				

S. SDS Server A: 1) The user will be presented with the "Server Groups" Configuration screen as shown on the right. Main Menu: Configuration -> Server Groups Server Groups" Configuration screen as shown on the right. Image: Configuration -> Server Groups Server Groups Name Image: Configuration -> Server Groups Server Groups Name Image: Configuration -> Server Groups Server Group Name Image: Configuration -> Server Groups Server Group Name Image: Configuration -> Server Groups Server Groups Name Image: Configuration -> Server Groups Name Image: Configuration Name Image: Configurati	Proc	edure 3.1 Configu	ring the SDS Serv	ver Group		
1) The user will be presented with the "Server Groups" configuration screen as shown on the right. 2) Select the "Inser" dialogue button from the bottom left comer of the screen. Server Group Name Level Parent Function Servers Server Group Name 2 NOTE: The user may not be button from a control of use the vertical scrubbar in order to make the maximum of the bottom visible. Communication Agent 1 1 Server Group Name 2 6. SDS Server A: The user will be presented with the "Server Groups" (Insert] Main Menu: Configuration -> Server Groups [Insert] Main 0 to 1 a to 0 a to 2 a to 0 a to	5.	SDS Server A:	Main Menu: Confi	guration -> Server	Groups 🛷 H	
**Server Groups'' configuration screen as shown on the right. Server Groups'' allogue button from the bottom left corner of the screen. 2) Select the "Insert" dialogue button from the bottom left corner of the screen. Communication Agent is SDS NOTE: The user may reserved for use the "Insert" dialogue button visible. Insert Edit Delete Report 2 6. SDS Server A: The user will be presented with the "Server Groups Insert" dialogue button the fight. Main Menu: Configuration -> Server Groups [Insert] Mon or 12 at 0 dial 38 at the user will be presented with the "Server Groups Insert" dialogue button the fight. 7. SDS Server A: The user respiration Source for use the "Wan Replication Connection Court" Dial (it will default to "Select Level = "Select Level = "Select Level = "Select Level = "Select Report And Number State of the sense support on the select Proton = Select Reament = Select Reament = at 3 Select Reament = Select Reament = at 3 Select Reament = Select Reament = at 3 Select Reament = at 3 Select reament = Select Reament = at 3 Select reament = select support on the select Proton = Select Reament = at 3 Select reament = select support on the select Proton = Select Reament = at 3 Select reament = select support on the select Proton = Select Reament = select support on the select Proton = Select Level = "Select Level =		1) The user will be presented with the	Filter -		Tue Jul 31 19:59:42 2012 L	
2) Select the "Insert" Communication Agent 2 dialogue button from the bottom left comer of the screen. SDS Plep Insert Edit Delete Report 2 NOTE: The user may need to use the vertical scroll-bar in order to make the insert? SDS Server A: Insert Edit Delete Report 2 6. SDS Server A: The user will be presented with the "Server Groups Insert?" screen as shown on the right. Main Menu: Configuration -> Server Groups [Insert] Mended at the application represented with the Server Group Name Please represented with the server is understored at una application represented with the server is understored at una application represented with the server for out the server is understored at una application represented with the server Group Name Please represented with the server is understored at una application represented with the server is understored at una application represented with the server is understored at una application represented with the server is understored at una application represented with the server for out the server is understored at una application represented with the server is understored at una application represented with the server Group Name Select Function Sectored at una application represented with the server Group Name 7. SDS Server A: Select Function Sectored at una application come application come application come application represented with the server Group Name Select represented with the server Group Name 8. SDS Server A: Select function Sectored at una application represent is		"Server Groups" configuration screen as shown on the right.	Server Group Name Lev	vel Parent Function	on Servers	
NOTE: The user may need to use the vertical scroll-bar in order to make the "Insert" dialogue button visible. Insert Edit Delete Report 6. SDS Server A: Main Menu: Configuration -> Server Groups [Insert] Men det 21 20 08 28 201 7. SDS Server A: NOTE: Leave the "WAN Replication Cometion Count" blank (it will default to 1). Select Level - * Select memory of the select 30 and 30 are done and select Group part of the select 30 and 30 are done and select Group part of the select 30 and 30 are done and select Group part of the select 30 and 30 are done and select 30 are done and 30 are done 30		2) Select the "Insert" dialogue button from the bottom left corner of the screen.	Commun	ication Agent	2	
6. SDS Server A: The user will be presented with the "Server Groups [Insert]" screen as shown on the right. Main Menu: Configuration -> Server Groups [Insert] Mon dot 21 20:08:38 2014 NOTE: Leave the "WAN Replication Connection Count" blank (it will default to 1). Select Level - • Noth Server Group [Default - ns. Range - A select Parent - • Select new of the Levels supported by the system SOAM servers. Level C group contain MP servers.] 7. SDS Server A: Input the Server Group Name. Server Group Select new of the Level - • Unique identifier used to label a Server Group. Select new of the Level - • Unique identifier used to label a Server Group. Select new of the Function supported by the system SOAM servers. Level C group contain MP servers.] 7. SDS Server A: Input the Server Group Name. Server Group Select "A" on the "Level" pull-down menu. Server Group Select Level - • Unique identifier used to label a Server Group Select one of the Levels supported by the system and must not start with a digit.] 8. SDS Server A: Select "A" on the "Level" pull-down menu. Select Level - • • Select one of the Levels supported by the system Query servers.] Level B groups are optional and c contain MP servers.]		NOTE: The user may need to use the vertical scroll-bar in order to make the " Insert " dialogue button visible.	🧼 🧼 Help 🔀 Logout		Insert Edit Delete Report	
Image: Server Groups Field Value Description Insert]" screen as shown on the right. Insert]" screen as shown on the right. Unique identifier used to label a Sener Group. [Default - ns. Range - A. Must contain at least one alpha and must not start with a digit.] Sever Groups Field Value Description "WAN Replication Connection Count" blank (it will default to 1). Select Parent	6.	SDS Server A:	Main Menu: Config	guration -> Server	Groups [Insert]	
Presented with the "Server Group particle of the server Group Name Presented with the server Group Name Unique identifier used to label a Server Group Default - na Range - A Must contain at least one alpha and must not start with a digit.) NOTE: Leave the "WAN Replication Connection Count" blank (it will default to 1). Select Parent Select Level Select Parent		The user will be				
Insert(*) Screen as shown on the right. NOTE: Leave the "WAN Replication Count" blank (it will default to 1). Select Parent - • • • • • • • • • • • • • • • • • •		"Server Groups	Field	Value	Description	
NOTE: Leave the "WAN Replication Connection Count" blank (it will default to 1). Level - Select Level - • Select one of the Level supported by the system SOAM servers. Level B groups are optional and contain SOAM servers. Level B groups are optional and contain Select an existing Server Group or NONE 8. SDS Server A: Input the Server Group Name. Select Level - • * Select one of the Levels supported by the system Query servers. Level B groups are optional and contain and must not start with a digit.] 8. SDS Server A: Input the Server Group Name. Level - Select Level - • * Select one of the Levels supported by the system Query servers. Level B groups are optional and contain Select an existing Server Group or NONE		[Insert]" screen as shown on the right.	Server Group Name	•	Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a diolt 1.	
"WAN Replication Connection Count" blank (it will default to 1). Parent - Select Parent		NOTE: Leave the	Level	- Select Level - 💌	Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]	
Connection Count" blank (it will default to 1). Function Select Function Specify the number of TCP connections that will be used by replication over any WAN connection associated with this Server Group. [Default - 1. Range - An integer between 1 and 8] 7. SDS Server A: Server Group Sads_mrsvnc_grp Unique identifier used to label a Server Group string. Valid characters are alphanumeric and and must not start with a digit.] 8. SDS Server A: Select "A" on the "Level" pull-down menu. Select Level - * Select one of the Levels supported by the system due y servers.] 8. Select "A" on the "Level" pull-down menu. Select Level - * * Select an existing Server Group or NONE		"WAN Replication	Parent	- Select Parent - 💌 *	Select an existing Server Group or NONE	
Diatrik (it with default to 1). WAN Replication Connection Court Specify the number of TCP connection associated with this Server Group. [Default - 1. Range - An Integer between 1 and 8] 7. SDS Server A: Input the Server Group Name. Server Group Name Server Group String. Valid characters are alphanumeric and and must not start with a digit.] 8. SDS Server A: Select "A" on the "Level" pull-down menu. Select Level - * * Select Level - * Select one of the Levels supported by the system Query servers. Level B groups are optional and c contain MP servers.] Parent Select an existing Server Group or NONE		Connection Count"	Function	- Select Function - 😈	Select one of the Functions supported by the system	
The get Hange tange tanded tange tanded tanded tange tand tange tange tange tange tange t		blank (it will default to 1).	WAN Replication Connection Co	unt	Specify the number of TCP connections that will be used by replication over any WAN connection associated with this Server Group. [Default = 1. Bance = An Interpret between 1 and 81	
7. Input the Server Group Name. 8. SDS Server A: Select "A" on the "Level" pull-down menu. Parent Accourt archiver archive				08 8	pply Cance	
Input the Server Group Name. Server Group Name Setver Group Sds_mrsvnc_grp * Unique identifier used to label a Server Group string. Valid characters are alphanumeric and and must not start with a digit.] 8. SDS Server A: Select "A" on the "Level" pull-down menu. Select Level - * Select one of the Levels supported by the system Query servers. Level B groups are optional and c contain MP servers.] Parent Account and the Concernation * Select an existing Server Group or NONE	7	SDS Server A:		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
8. SDS Server A: Select "A" on the "Level "Level " pull-down menu. Parent Accross - arone * Select an existing Server Group or NONE		Input the Server Group Name.	Server Group sds_r	nrsvnc_grp *	Unique identifier used to label a Server Group string. Valid characters are alphanumeric and	
8. SDS Server A: Select "A" on the "Level" pull-down menu. Parent Select an existing Server Group or NONE				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
Select "A" on the "Level" pull-down menu. Parent Select Level - * Select Level - * Select an existing Server Group or NONE Select an existing Server Group or NONE	8	SDS Server A:		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
"Level" pull-down menu. - Select Level - - Construction - Construction Parent - Select Level - - Select an existing Server Group or NONE	o .	Select " A " on the		act Level - 💙 *	Select one of the Levels supported by the system.	
Menu. Parent Accordent Letter SDS Server A: SDS Server A:		"Level" pull-down	- Sele		contain MP servers.]	
		menu.	Parent A	*	Select an existing Server Group or NONE	
	•	SDS Server A:		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	······	
9. Select "None" on the Parent - Select Parent- ♥★ Select an existing Server Group or NONE	9.	Select "None" on the	Parent - Se	elect Parent- 💌 *	Select an existing Server Group or NONE	
Image: "Parent" pull-down menu. Function - Select Parent- * Select one of the Functions supported by		" Parent " pull-down menu.	Function - Se	elect Parent-	Select one of the Functions supported by	
				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	

Proc	edure 3.1 Configu	ring the SDS Server Group
10.	SDS Server A: Select "SDS" on the "Function" pull- down menu.	Function       - Select Function -          - Select Function -        NONE         SDS       Ok Apply Cancel
11.	<ul> <li>SDS Server A:</li> <li>1) The user should be presented with a banner information message stating "Pre-Validation passed".</li> <li>2) Select the "Apply" dialogue button.</li> </ul>	Main Menu: Configuration -> Server Groups [Edit]         Info       1         Info       Image: Configuration passed - Data NOT committed in the server can be added to the set of the levels supported to the level can be added to the setter can be added to the can be added to the setter can be added to the setter can be added to the setter can be added to the can be added to the setter can be added to the can be added to the setter can be added to the setter can be added to the can be added to the setter can be added to the setter can be added to the setter can be added to the can be added to the set
12.	SDS Server A: The user should be presented with a banner information message stating "Data committed".	Info       Description         Info       Description         Unique identifier used to label a Serve         Valid characters are alphanumeric and not start with a digit.]         Level       A

Proc	edure 3.2 Adding	a Server to an OAM Server Group
13.	SDS Server A: Select	Connected using XMI to sds-mrsvnc-a (ACTIVE NETWORK OAM&P)
	Main Menu → Configuration → Server Groups as shown on the right.	<ul> <li>Main Menu</li> <li>Administration</li> <li>Configuration</li> <li>Network Elements</li> <li>Services</li> <li>Resource Domains</li> <li>Server Group Name</li> <li>Level Parent</li> <li>Function</li> <li>sds_mrsvnc_grp</li> <li>Sds_mrsvnc_grp</li> </ul>
14.	SDS Server A: The Server Group entry added in Steps 6 - 12 should now appear on the "Server Groups" configuration screen as shown on the right.	Main Menu: Configuration -> Server Groups         Tue Jul 31 20:05:56 2012         Filter         Server Group Name       Level       Parent       Function       Servers         sds_mrsvnc_grp       A       sds_mrsvnc_grp       SDS       NE       Server       HA Role Pref
15.	<ul> <li>SDS Server A:</li> <li>1) Select the Server Group entry added in Steps 6 - 12. The line entry should now be highlighted in GREEN.</li> <li>2) Select the "Edit" dialogue button from the bottom left corner of the screen.</li> <li>NOTE: The user may need to use the vertical scroll-bar in order to make the</li> </ul>	Main Menu: Configuration -> Server Groups       Image: Configuration -> Server Group Name       Tree Jul 31 20:05:55 2012         Filter       Image: Configuration Agent       Function       Server Server       HA Role Pref         Server Group Name       Level Parent       Function       Servers       HA Role Pref       Image: Configuration Agent       Image: Configuration Agent
	<b>NOTE:</b> The user may need to use the vertical scroll-bar in order to make the " <b>Edit</b> " dialogue button visible.	

Proc	edure 3.2 Adding	a Server	to ar	n OAM Se	erver Group		
16.	SDS Server A:	Main Men	u: Conf	figuration -:	> Server Group	s [Edit]	Tue Jul 31 20:08:09
	The user will be presented with the		Malaa		Description		
	"Server Groups [Edit]" screen as	Server Group	value		Unique identifier used	t to label a Server Group. [Default = n/a. Range = A	1-32-character string. Valid
	shown on the right.	Name		_grp	digit.]	an an an arrest of the system	
		Parent	sds_mrs	vnc_grp 🔽 *	Select an existing Ser	ver Group or NONE	
		Function	SDS	*	Select one of the Fund	ctions supported by the system	ration
		NTP Server 1	10.250.32	2.10	Configurable for level	A only. [Range = A valid IP address or blank]	zation.
		NTP Server 2	10.250.32	2.51	Configurable for level	A only. [Range = A valid IP address or blank]	
		Server	SG Inclusio	on	Preferred HA Role		
		sds-mrsvnc-a	Include	in SG	Preferred Spare		
		sds-mrsvnc-b	Include	in SG	Preferred Spare		
		VIP Assignmer	NID Addre				
			VIP Addie	:55	<u>ا</u>	Add Ik Apply Cancel	
		-					
17.	SDS Server A:	sds_mrs	vnc				
	Select the "A" server	Server		SG Inclusio	on	Preferred HA Role	
	and the " <b>B</b> " server	sds-mrsvnc-a 🔽		Include in SG		Preferred Spare	
	"Servers" by clicking	sds-mrsvnc-b 🗹 Include		in SG	Preferred Spare		
	their names.						
18.	SDS Server A:	Main M	lenu	: Config	uration ->	Server Groups [Edit]	I
	1) The user should be presented with a banner information message stating "Pre-Validation passed".	Info Info	• Pi	re-Validation	ı passed - Data N	NOT committed	1 s d
	2) Select the "Apply" dialogue button.	Level	/	4	*	Select one of the Levels support	e
			VIP Addr	ess		Add	
						Apply Cancel 2	
					U		

Proc	edure 3.2 Adding	a Server to an OAM Server Group
19.	SDS Server A: The user should be presented with a banner information message stating "Data committed".	Main Menu: Configuration -> Server Groups [Edit]
20.	SDS Server A: Click the "Add" dialogue button for the VIP Address.	VIP Assignment VIP Address
21.	SDS Server A: Input the VIP Address	VIP Address Add 10.250.55.125 Remove
22.	<ul> <li>SDS Server A:</li> <li>1) The user should be presented with a banner information message stating "Pre-Validation passed".</li> <li>2) Select the "Apply" dialogue button.</li> </ul>	Main Menu: Configuration -> Server Groups [Edit]
		10.250.55.125 Remove 2
23.	SDS Server A: The user should be presented with a banner information message stating "Data committed".	Main Menu: Configuration -> Server Groups [Edit]         Info         Info

Proc	edure 3.2 Adding	a Server to an OAM Server Group
24.	SDS Server A: Click the "Logout" link on the OAM A server GUI.	Welcome guiad nin [Logout] Fri Nov 18 14:43:32 2011 UTC ge = A 1-32-character string. at least one alpha and must
<b>25</b> .	IMPORTANT: Wait at least 5 minutes before proceeding on to the next Step.	<ul> <li>Now that the server(s) have been paired within a Server Group they must establish a master/slave relationship for High Availability (HA). It may take several minutes for this process to be completed.</li> <li>Allow a minimum of <b>5 minutes</b> before continuing to the next Step.</li> </ul>
26.	SDS VIP: Launch an approved web browser and connect to the XMI Virtual IP Address (VIP) assigned in STEP 21 to the SDS Server Group using "https://".	<ul> <li>Certificate Error: Navigation Blocked - Windows Internet Explorer</li> <li>Image: Stare Browser VebEx -</li> <li>Share Browser VebEx -</li> <li>Certificate Error: Navigation Blocked</li> <li>There is a problem with this website's security certificate.</li> <li>The security certificate presented by this website was not issued by a trusted certificate authority. The security certificate presented by this website was not issued by a trusted certificate authority. The security certificate presented by this website was not issued for a different website's address.</li> <li>Security certificate problems may indicate an attempt to fool you or intercept any data you send to the server.</li> <li>Click here to dose this webpage.</li> <li>Continue to this website (not recommended).</li> <li>More information</li> </ul>

Proc	edure 3.2 Adding	a Server to an OAM S	erver Group
27.	<b>SDS VIP:</b> The user should be presented the login screen shown on the right.	Tekelec System Log	Jin Thu Nov 17 16:02:26 2011 UTC
	Login to the GUI using the default user and password.	Ent Unauthorized access is prohib	Log In         ter your username and password to log in         Username:         guiadmin         Password:         Change password         Log In         Welcome to the Tekelec System Login.         Dited. This Tekelec system requires the use of Microsoft Internet Explorer 7.0 or 8.0 with support for JavaScript and cookies.
28.	SDS VIP: The user should be presented the SDS Main Menu as shown on the right.	Connected using XHI to hostname1349 Mein Menu Administration Administration Alarms & Events Security Log Status & Manage Measurements Communication Agent SDS Configuration Maintenance Help Logout	Per Database Server 40.4.0 51245587 (ACTIVE NETWORK OAM&P) Main Menu: [Main] Main Menu: [Main] Welcome guiadmin [Logout] Main Menu: [Main] Per Database Server Welcome guiadmin [Logout] Main Menu: [Main] Per Database Server Welcome guiadmin [Logout] Per Database Server Per D

Procedure 3.2 Adding a Server to an OAM Server Group											
29.	SDS VIP: Select	Tekelec Subscriber Database Server									
	Main Menu → Status & Manage → Server as shown on the right.	Connected using XMI to so Main Menu Administration Administration Alarms & Events Alarms & Events Security Log Status & Manage Network Eleme Server HA Database	sds-m	Main Menu: St Filter • Network Element sds_mrsvnc sds_mrsvnc	TWORK O	M&P) Manag Server Ho sds-mrsvr	je -> Se stname Ic-a Ic-b	erver			
30.	<ul> <li>SDS VIP:</li> <li>1) The "A" and "B" SDS servers should now appear in the right panel.</li> <li>2) Verify that the "DB" status shows "Norm" and the "Proc" status shows "Man" for both servers before proceeding to the next Step.</li> </ul>	Main Menu: Status & Filter  Network Element Sds_mrsvnc Sds_mrsvnc	Serve sds-n	r Hostname nrsvnc-a nrsvnc-b	Appl State Disabled Disabled	e Alm Err Warn	Tue Ju DB Norm Norm	Reportin Status Norm Norm	Help 39 2012 UTC		

SDS VIP:	Network Flement	Server Hostnamo	Appl State	Alm	DB	Reporting	Droc		
1) Using the mouse.	Network Element	Server nostilallie	Approtate	AIIII	DD	Status	PIUC		
select SDS Server A.	sds_mrsvnc	sds-mrsvnc-a	Disabled	Err	Norm	Norm	Man		
The line entry should	sas_mrsvnc	sas-mrsvnc-b	Disabled	vvarn	Norm	Norm	Man		
GREEN. 2) Select the "Restart" dialogue button from the bottom left corner of the screen. 2) Click the "OK"	■ SDS → Help ■ Logout	Stop	Restart	2 Reboot	~~~				
3) Click the <b>"OK</b> " button on the confirmation dialogue box.	Are you so on the foll sds-mrsv	ure you wish to restart ap lowing server(s)? /nc-a	plication softv	vare					
4) The user should be presented with a confirmation message (in the banner area) for SDS Server A stating: "Successfully	OK Cancel 3 Main Menu: Status & Manage -> Server [Restart]								
restarted	Filter 🔻 Sta	atus 🔻					<b>4</b> }		
<b>NOTE:</b> The user may need to use the	Status	-mrsvnc-a: Successfull	ly restarted a	applicatio	on.	n Re	pl		
vertical scroll-bar in order to make the " <b>Restart</b> " dialogue	sds_mrsvnc	sds-mrsvnc-	b	Disa	ibled W	arn No	rm		
button visible.									
button visible.		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				~~~~~	~~~`}		
SDS VIP: Select	Tekel	ec Subscriber Da	atabase S	erver		2 2 (	····>È		
SDS VIP: Select	Connected using XM	C Subscriber D 4.0.0-4.0.0_40.4	atabase So .0 .ve network	erver		2 2			
button visible. SDS VIP: Select <u>Main Menu</u> → Status & Manage	Connected using XM Main Menu	C Subscriber D 4.0.0-4.0.0_40.4	atabase So .0 .ve network	erver	••••••••••••••••••••••••••••••••••••••	2 2 Server			
button visible. SDS VIP: Select <u>Main Menu</u> → Status & Manage → Server	Connected using XM Main Menu Main Menu	C Subscriber D 4.0.0-4.0.0_40.4	atabase Se .0 .ve network nu: Status	erver coam&p) & Man	0	2 2 Server			
button visible. SDS VIP: Select <u>Main Menu</u> → Status & Manage → Server as shown on the right.	Connected using XM Main Menu Main Menu Administration Alarms & Eve Security Log	C Subscriber D 4.0.0-4.0.0_40.4 I to sds-mrsvnc-a (ACTI Main Men Filter • Network Elem	atabase So .0 WE NETWORK NU: Status	erver OAM&P) & Man	0 hage ->	2 2 Server			
button visible.         SDS VIP:         Select         Main Menu         → Status & Manage         → Status & Manage         -> Server        as shown on the right.	Connected using XM Main Menu Main Menu Administration Alarms & Eve Alarms & Eve Security Log Status & Mar	C Subscriber D 4.0.0-4.0.0_40.4 I to sds-mrsvnc-a (ACTI Main Mer Filter • Network Elem Elements sds mrsvnc	atabase Se .0 VE NETWORK hu: Status	erver (OAM&P) & Man	age ->	2 2 Server			

Proc	edure 3.2 Adding	a Server to an (	DAM Server Group								
33.	SDS VIP:	Main Menu: Status & Manage -> Server									
	Verify that the <b>"Appl</b> State" now shows	Filter									
	"Enabled" and that the "DB, Reporting	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc			
	Status & Proc"	sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm			
	show "Norm" for	sds_mrsvnc	sds-mrsvnc-b	Disabled	Warn	Norm	Norm	Man			
	NOTE: If user chooses to refresh the Server status screen in advance of the default setting (15-30 sec.). This may be done by simply reselecting the "Status & Manage → Server" option from the Main menu										
	on the left.										



Proc	edure 3.2 Adding	a Server to an OAM	Server Group						
35.	SDS VIP: Verify that the "Appl	Main Menu: Status & Manage -> Server							
	State" now shows	Fliter •							
	the "DB, Reporting	Network Element	Server Hostname	Appl State Alm	DB	Reporting Status	Proc		
	Status & Proc" status columns all	sds_mrsvnc	sds-mrsvnc-a	Enabled Er	r Norm	Norm	Norm		
	show "Norm" for	sds_mrsvnc	sds-mrsvnc-b	Enabled Norm	Norm	Norm	Norm		
	SDS Server B before proceeding to the next Step. NOTE: If user chooses to refresh the Server status screen in advance of the default setting (15-30 sec.). This may be done by simply reselecting the "Status & Manage → Server" option from the Main menu on the left.								
36	IMPORTANT:	• Now that the server(	s) have been restarted they	must establish	a master/slav	e relations	hip for		
50.	Wait at least 5	High Availability (HA	.). It may take several minut	tes for this proce	ess to be com	pleted.			
	minutes before proceeding on to the next Step.	Allow a minimum of	5 minutes before continuing	g to the next Ste	p.				

Proc	edure 3.3 Verifyin	g the SDS Server Alarm status
37.	SDS VIP: If there is a context switch, you may be required to login again. Login to the GUI using the default user and password.	Tekelec System Login  The Nor 17 for System Control  Function  Fun
38.	SDS VIP: Select Main Menu → Alarms & Events → View Active as shown on the right.	8.0 with support for JavaScript and cookies.
39.	SDS VIP: Verify that Event ID 14101 ("No remote provisioning clients are connected") is the only alarm present on the system at this time.	Main Menu: Alarms & Events -> View Active         Fri Jan 13 14:53:15 2012 UTC         Seq #       Event ID       Timestamp       Severity       Product       Process       NE       Server         2556       14101       2012-Jan-13 14:34:49.629 UTC       MAJOR       SDS       xds       sds_mrsvnc       sds-mrsvnc-a         2556       14101       2012-Jan-13 14:34:49.629 UTC       MAJOR       SDS       xds       sds_mrsvnc       sds-mrsvnc-a

Proc	edure 3.4 Configu	ring SNMP for Traps from Individual S	ervers
40	SDS VIP:		
	Select	Tekelec Subscriber Database Server	
		Connected using XMI to rome-ada-a (ACTIVE NETWORK OAM&P)	
	Main Menu → Administration	Administration     Main Menu: Administration ->     General Options	Remote Servers -> SNMP Trapping
	→ Remote Servers	Software Managemen Veneble     Software Managemen	Deenption A rende manager to
	→ SNMP Trapping	LDAP Authentics to     Extraction to the second secon	by foliowing the network the part and specified See description for Ma
	as shown on the	Defa Export     DNS Configuration     Namper 2     DNS Configuration     Namper 4	See description for Ma
	right.		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
41.	SDS VIP:		[Default: enabled.]
	1) Using the cursor, place a "check" in the check box for <b>"Traps</b>	Traps from Individual Imabled Servers	Enable or disable SNMP traps from in sent from individual servers, otherwis OAM&P server. [Default: disabled.]
	from Individual		Configured Community Name (SNMP
	Servers".	SNMP/3 Privacy	Privacy protocol (SNMPV3 only) 1) "AES" 12
	2) Click the "Ok"	Type	"DES": Use Data Encryption Standard prive
	dialogue button located at the bottom of the right panel.	SNMPv3 Password	Authentication password (SNMPv3 only). If specified. The length of the password sho password accepts any characters. [Defau he shown publicly here 1
			Ok Cancel
			}
42.	1) Using the cursor	Confirm edit	0
	place a "check" in the	ab WARNING: Changing of SNMP Community Strings o communicate with this server. Community Str	In this server may affect how other TEKELEC products
	check box for "Check to confirm".		ang onenges should be come on a system costs.
		Check	to confirm
	2) Click the "OK" dialogue button	50	
	dialoguo button.		
		01430c52540039377f 0-9 and a-f. Its length s	hould be between 10 and 64. [ Default: on initial installation, no
		an NO server will replace	se an unconfigured Engine ID with a generated one. J
43.	SDS VIP:	Welcome guiadmin [Logout]	
	Click the "Logout"		
	link on the server GUI.	Fri Nov 18 14:43:32 2011 UTC	
		<pre></pre>	
		ge = A 1-32-character string.	
		at least one alpha and must	
		THIS PROCEDURE HAS BEEN COM	PLEIED

#### **5.3 Query Server Installation** (All SDS sites)

The user should be aware that during the Query Server installation procedure, various errors may be seen at different stages of the procedure. During the execution of a step, the user is directed to ignore errors related to values other than the ones referenced by that step.

Step	Procedure	Result
Step 1.	Procedure Active SDS VIP: Launch an approved web browser and connect to the XMI Virtual IP address (VIP) assigned to Active SDS site using "https://"	Result         Image: Certificate Error: Navigation Blocked - Windows Internet Explorer         Image: Certificate Error: Navigation Blocked         Image: Certificate Error: Navigation Error: Navigation Blocked         Image: Certificate Error: Navigation Error: Navigati

Procedure 4: Configuring the Query Server (All SDS sites)

#### Procedure 4: Configuring the Query Server (All SDS sites)

Step	Procedure	Result
2.	Active SDS VIP: The user should be presented the login screen shown on the right.	Tekelec System Login
	Login to the GUI using the default user and password.	Log In         Enter your username and password to log in         Username:         guiadmin         Password:         Change password         Log In         Welcome to the Tekelec System Login.         Unauthorized access is prohibited. This Tekelec system requires the use of Microsoft Internet Explorer 7.0 or 8.0 with support for JavaScript and cookies.
3.	Active SDS VIP: The user should be presented the SDS Main Menu as shown on the right.	Main Menu:       Main         Main       Fri Jan 13 15:08:52 2012 UTC

Proc	edure 4.1 Configu	ring the Que	ry Server								
	Active SDS VIP:						,				
4.	Select	📓 Teke	Tekelec Subscriber Database Server								
	Main Menu	Connected using 2	XMI to sds-mrsv	nc-a (ACTI¥E	NETWORK OAM	&P)					
	→ Configuration	🖻 🚚 Main Menu 🗟 🧰 Administra	ation	Main Mer	nu: Configui	ration -> Serve	rs				
	→ Servers	🗖 📥 Configurat	tion K Flomonto	Filter 🔻			\$				
	as shown on the		s	Hostname		Role	Server Group				
	right.	Server Server	s Groups	sds-mrsvnc-k	)	Network OAM&P	sds_mrsvnc_grp				
		🖬 🧰 Networ	k	sds-mrsvnc-a	•	Network OAM&P	sds_mrsvnc_grp				
5.	Active SDS VIP: Select the "Insert" dialogue button.	🔹 🧰 SDS 🤣 Help 🔁 Logo	out	^^^^	Inser	t Delete E	xport Report				
<b>(</b>	Active SDS VIP:										
6.	The user is now	Adding a new	w server								
	presented with the	Attribute Value			Description						
	"Adding a new server" configuration	Host Name	*	Unique name for the server. [Default = n/a. Range = A 20-character string.     Valid characters are alphanumeric and minus sign. Must start with an     alphanumeric and end with an alphanumeric.]							
		Role - S	Select Role -	*	Select the function of the server						
		Hardware Profile	VOE Guest	~	Hardware profi	Hardware profile of the server					
		Network Element - U Name	Unassigned - 💌	*	Select the netw	ork element					
		Location			Location description is any text string	iption [Default = "". Ra g.]	nge = A 15-character st	ring. Valid value			
					Ok Apply	Cancel					
7.	Active SDS VIP:	Adding a	new se	rver	~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				
	"hostname" for the	Attribute	Value			Description		Ş			
	Query Server.	Host Name	qs-mrsv	/nc-1	×	Unique name f alphanumeric	for the server. [De and minus sign. ]	fault = n/a Must start			
		<u> </u>	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~	~~~~~~			~~~~~~			
8.	Active SDS VIP:	Role	- Select Ro		*	Select the t	www.				
	Select "QUERY SERVER" for the	Hardware Profile	- Select Rol NETWORK	e - OAM&P		Hardware	profile of the server				
	the pull-down menu.	Network Element Name	SYSTEM O MP QUERY SE	AM RVER		Select the i	network element				

Proc	edure 4.1 Configu	ring the Query	y Server				
9.	Active SDS VIP: Select "SDS HP Rack Mount" for the Hardware Profile for the SDS from the pull-down menu.	Hardware Profile Network Element Name Location	SDS TVOE SDS TVOE SDS HP c- SDS HP c- SDS HP c- SDS HP R	E Guest E Guest Class Blade V2 Class Blade V0 Class Blade V1 ack Mount		Hardware profile of f Select the network e Location description string.] Ok Apply	the server element n [Default =  . Range
10.	Active SDS VIP: Select the Network Element Name of the SDS site where the Query Server is physically located from the list of available NEs in the pull-down menu.	Network Element Name Location	- Unassig - Unassig sds_mrsv	ned - 💉 * ned - nc	s L	elect the network el	ement [Default =
11.	Active SDS VIP: Enter the site location. NOTE: Location is an optional field.	Location Morri	sville_NC	Location o is any text	descripti string.]	ion [Default =  . Range = A	15-character string. Valid value
12.	<ul> <li>SDS Server A:</li> <li>1) Enter the MGMNT_VLAN and IMI IP addresses for the Query Server.</li> <li>2) Set the MGMNT_VLAN and IMI Interfaces to 1000 million</li> </ul>	Interfaces: Network MGMNT_VLAN (169.25 XMI (10.240.241.0/24) IMI (169.254.100.0/24)	i4.1.0/24)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	IP Addre 169.25 10.250 169.25	ess 4.1.13 .55.127 4.100.13 Ok Apply Cance	Interface bond0 ♥ VLAN (2) bond1 ♥ VLAN (3) bond0 ♥ VLAN (4)
	<ul> <li>"bond0" and check each VLAN checkbox.</li> <li>3) Enter the XMI IP address for the</li> </ul>	SDS-QS SDS-QS SDS-QS	SDS Server         MGMNT_VLAI           SDS-QS (Primary)         169.254.1.13           SDS-QS (DR)         169.254.1.16		N IP	IMI IP         169.254.100.13       169.254.100.16	<b>NOTE:</b> These values should be used for all SDS installations where 4948E-F Aggregations switches are deployed.
	<b>Query Server</b> . <b>4)</b> Set the XMI <b>Interface</b> to " <b>bond1</b> " and <b>DO NOT</b> check the <b>VLAN</b> box.						

Proc	edure 4.1 Configu	ring the Query Server			
13.	SDS Server A:	NTP Servers:	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
	1) Click the "NTP Servers:" "Add"	NTP Server IP Address	Prefer	Add	
	dialogue button.	Ş	Ok Apply	Cancel	
	2) Enter the NTP Server IP Address for an NTP Server.	NTP Servers:	~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	·····
	3) If you have another	NTP Server IP Address	Prefer	Add	
	<b>NTP Server IP</b> address, repeat (1) and (2) to enter it.	10.250.32.10		Remove	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
	<b>4)</b> Optionally, click the " <b>Prefer</b> " checkbox	NTP Servers:			~~~~~~
	to prefer one NTP Server over the other.	NTP Server IP Address	Prefer	Add	
		10.250.32.10		Remove	
				kara kara kara kara kara kara kara kara	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
14.	<ul> <li>Active SDS VIP:</li> <li>1) The user should be presented with a banner information message stating "Pre-Validation passed".</li> <li>2) Click the "Apply" dialogue button.</li> </ul>	Main Menu: Config Info - Info Host Name qs-mrsvn	guration -> Servers [ on passed - Data NOT committed c-1 * Unique nam alphanumer	Insert]	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
		Interfaces:		ID Address	
		MGMNT_VLAN (169.254.1.0/	24)	169.254.1.13	
		S XMI (10.240.241.0/24)		10.250.55.127	
		MI (169.254.100.0/24)		169.254.100.13	Š
			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Ok Apply	Cancel

Proc	Procedure 4.1 Configuring the Query Server			
15.	Active SDS VIP: If the values provided	Main Menu: Configuration -> Servers [Insert]		
	match the network ranges assigned to the NE, the user will receive a banner information message	Info Info Data committed!		
	has been validated	Description		
	and committed to the DB.	Host Name qs-mrsvnc-1 * Unique name for the server. alphanumeric and minus si		
		^^^^		

	eaure 4.2 Applying	g the Query Sei	rver Configu	uration file				
16.	Active SDS VIP:	~						
	Select	🌋 Teke	ec Subsc	riber Databa 0.0_10.7.1	se S	Server	0 1 0	0
	<u>Main Menu</u>	Connected using VI	P to sds-mrsvnd	-a (ACTIVE NET	WOR	K OAM&P)		
	→ Configuration	🗉 🚇 Main Menu		Main Menu:	Cor	figuration	1 -> Serve	ers
	-7 Servers	📑 🔜 Administrati	on on	Filter v		g		
	as shown on the right.	Network	Elements	Hostname Role		Role	Server Grou	p Network Element
		Server G	roups	sds-mrsvnc-a		Network OAM&	P sds_mrsvnc	_grp sds_mrsvnc
		Alarms & Ev	ents	sds-mrsvnc-b		Network OAM&	P sds_mrsvnc	_grp sds_mrsvnc
		 Security Log Status & Ma 	nage	qs-mrsvnc-1	~~~~	Query Server	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	sds_mrsvnc
17.	Active SDS VIP:	Hostname	Role	Server Group	Netwo Eleme	ork ent Loo	cation	Details
	The "Configuration →Servers" screen	sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds_r	mrsvnc Mo	rrisville_NC	XMI: 10.250.55.124 IMI: 169.254.100.11
	now shows the newly added Query Server	sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp	sds_r	mrsvnc Mo	rrisville_NC	XMI: 10.250.55.128 IMI: 169.254.100.12
	in the list.	qs-mrsvnc-1	Query Server)	sds_r	mrsvnc Mo	rrisville_NC	XMI: 10.250.55.127 IMI: 169.254.100.13
18	Active SDS VIP:	Main Menu: Co	onfiguration	-> Server	5			🤌 Hel
	Using the mouse,	Filter -					Fri Jar	13 15:41:05 2012 UT
	Server. The line entry containing the Query	Hostname	Role		Not			
	• • • •			Server Group	Elen	nent L	ocation	Details
	Server should now be highlighted in	sds-mrsvnc-a	Network OAM&F	Server Group	Elen p sds	nent L _mrsvnc M	ocation	Details XMI: 10.250.55.124 IMI: 169.254.100.11
	Server should now be highlighted in GREEN.	sds-mrsvnc-a sds-mrsvnc-b	Network OAM&F	Server Group sds_mrsvnc_gr sds_mrsvnc_gr	p sds	ment L _mrsvnc M _mrsvnc M	ocation Iorrisville_NC Iorrisville_NC	Details XMI: 10.250.55.124 IMI: 169.254.100.11 XMI: 10.250.55.128 IMI: 169.254.100.12
	Server should now be highlighted in GREEN.	sds-mrsvnc-a sds-mrsvnc-b qs-mrsvnc-1	Network OAM&F Network OAM&F Query Server	Server Group sds_mrsvnc_gr sds_mrsvnc_gr	p sds, p sds, p sds, sds,	ment L _mrsvnc M _mrsvnc M _mrsvnc M	ocation Iorrisville_NC Iorrisville_NC	Details XMI: 10.250.55.124 IMI: 169.254.100.11 XMI: 10.250.55.128 IMI: 169.254.100.12 XMI: 10.250.55.127 IMI: 10.250.55.127 IMI: 169.254.100.13
	Server should now be highlighted in GREEN.	sds-mrsvnc-a sds-mrsvnc-b qs-mrsvnc-1	Network OAM&F	Server Group sds_mrsvnc_gr sds_mrsvnc_gr	p sds, sds,	ment L _mrsvnc N _mrsvnc N _mrsvnc N	ocation Iorrisville_NC Iorrisville_NC	Details XMI: 10.250.55.124 IMI: 169.254.100.11 XMI: 10.250.55.128 IMI: 169.254.100.12 XMI: 10.250.55.127 IMI: 169.254.100.13
19.	Server should now be highlighted in GREEN. Active SDS VIP:	sds-mrsvnc-a sds-mrsvnc-b qs-mrsvnc-1 Main Menu: Co	Network OAM&F	Server Group sds_mrsvnc_gr sds_mrsvnc_gr sds_mrsvnc_gr -> Servers	p sds sds	ment L _mrsvnc N _mrsvnc N _mrsvnc N _mrsvnc N	ocation Iorrisville_NC Iorrisville_NC	Details XMI: 10.250.55.124 IMI: 169.254.100.11 XMI: 10.250.55.128 IMI: 169.254.100.12 XMI: 10.250.55.127 IMI: 169.254.100.13
19.	Server should now be highlighted in GREEN. Active SDS VIP: Select the "Export"	sds-mrsvnc-a sds-mrsvnc-b qs-mrsvnc-1 Main Menu: Co Filter V	Network OAM&F	Server Group Sds_mrsvnc_gr Sds_mrsvnc_gr Sds_mrsvnc_gr Sds_mrsvnc_gr	p sds. sds.	ment L _mrsvnc N _mrsvnc N _mrsvnc N _mrsvnc N	ocation Iorrisville_NC Iorrisville_NC	Details XMI: 10.250.55.124 IMI: 169.254.100.11 XMI: 10.250.55.128 IMI: 169.254.100.12 XMI: 10.250.55.127 IMI: 169.254.100.13
19.	Server should now be highlighted in GREEN. Active SDS VIP: Select the "Export" dialogue button.	sds-mrsvnc-a sds-mrsvnc-b qs-mrsvnc-1 Main Menu: Co Filter V Hostname	Network OAM&F	Server Group Sds_mrsvnc_gr Sds_mrsvnc_gr Server Group	Netw Elem	vork Lo	ocation Iorrisville_NC Iorrisville_NC Iorrisville_NC Fri Jan	Details XMI: 10.250.55.124 IMI: 169.254.100.11 XMI: 10.250.55.128 IMI: 169.254.100.12 XMI: 10.250.55.127 IMI: 169.254.100.13
19.	Server should now be highlighted in GREEN. Active SDS VIP: Select the "Export" dialogue button.	sds-mrsvnc-a sds-mrsvnc-b qs-mrsvnc-1 Main Menu: Co Filter V Hostname sds-mrsvnc-a	Network OAM&F Network OAM&F Query Server Triguration Role Network OAM&P	Server Group sds_mrsvnc_gr sds_mrsvnc_gr -> Servers Server Group sds_mrsvnc_grp	Netw Elem sds sds sds sds sds_	MORK nent L _mrsvnc N _mrsvnc N _mrsvnc N cork Lo mrsvnc Mo	ocation Iorrisville_NC Iorrisville_NC Iorrisville_NC Fri Jan cation	Details XMI: 10.250.55.124 IMI: 169.254.100.11 XMI: 10.250.55.128 IMI: 169.254.100.12 XMI: 10.250.55.127 IMI: 169.254.100.13
19.	Server should now be highlighted in GREEN. Active SDS VIP: Select the "Export" dialogue button.	sds-mrsvnc-a sds-mrsvnc-b qs-mrsvnc-1 Main Menu: Co Filter V Hostname sds-mrsvnc-a sds-mrsvnc-b	Network OAM&F Network OAM&F Query Server Tiguration Role Network OAM&P Network OAM&P	Server Group sds_mrsvnc_gr sds_mrsvnc_gr Server Group sds_mrsvnc_grp sds_mrsvnc_grp	P sds, p sds, sds, Netw Elem sds_	MORK nent L _mrsvnc N _mrsvnc N _mrsvnc N _mrsvnc Mo mrsvnc Mo	ocation Iorrisville_NC Iorrisville_NC Iorrisville_NC Fri Jan cation orrisville_NC	Details XMI: 10.250.55.124 IMI: 169.254.100.11 XMI: 10.250.55.128 IMI: 169.254.100.12 XMI: 10.250.55.127 IMI: 169.254.100.13 Petails XMI: 10.250.55.124 IMI: 169.254.100.11 XMI: 10.250.55.128 IMI: 169.254.100.12
19.	Server should now be highlighted in GREEN. Active SDS VIP: Select the "Export" dialogue button.	sds-mrsvnc-a sds-mrsvnc-b qs-mrsvnc-1 Main Menu: Co Filter V Hostname sds-mrsvnc-a sds-mrsvnc-b qs-mrsvnc-1	Network OAM&F Network OAM&F Query Server Role Network OAM&P Query Server	Server Group Sds_mrsvnc_gr Sds_mrsvnc_gr Server Group sds_mrsvnc_grp sds_mrsvnc_grp	Netw p sds, sds, sds_ sds_ sds_	MORK nent L _mrsvnc M _mrsvnc M _mrsvnc Mo mrsvnc Mo mrsvnc Mo	ocation Iorrisville_NC Iorrisville_NC Iorrisville_NC Pri Jan cation orrisville_NC orrisville_NC	Details XMI: 10.250.55.124 IMI: 169.254.100.11 XMI: 10.250.55.128 IMI: 169.254.100.12 XMI: 10.250.55.127 IMI: 169.254.100.13 Details XMI: 10.250.55.124 IMI: 10.250.55.124 IMI: 169.254.100.11 XMI: 10.250.55.124 IMI: 169.254.100.12 XMI: 10.250.55.128 IMI: 169.254.100.12 XMI: 10.250.55.127 IMI: 169.254.100.12
19.	Server should now be highlighted in GREEN. Active SDS VIP: Select the "Export" dialogue button.	sds-mrsvnc-a sds-mrsvnc-b qs-mrsvnc-1 Main Menu: Co Filter V Hostname sds-mrsvnc-a sds-mrsvnc-b qs-mrsvnc-1	Network OAM&F Network OAM&F Query Server Role Network OAM&P Query Server Query Server	Server Group Sds_mrsvnc_gr Sds_mrsvnc_gr Server Group sds_mrsvnc_grp sds_mrsvnc_grp	Netw p sds, sds, sds_ sds_ sds_	VORK nent L _mrsvnc M _mrsvnc M _mrsvnc Mo mrsvnc Mo mrsvnc Mo	ocation Iorrisville_NC Iorrisville_NC Iorrisville_NC Pri Jan cation orrisville_NC orrisville_NC	Details XMI: 10.250.55.124 IMI: 169.254.100.11 XMI: 10.250.55.128 IMI: 169.254.100.12 XMI: 10.250.55.127 IMI: 169.254.100.13 Details XMI: 10.250.55.124 IMI: 169.254.100.11 XMI: 10.250.55.124 IMI: 169.254.100.12 XMI: 10.250.55.124 IMI: 169.254.100.12 XMI: 10.250.55.127 IMI: 169.254.100.12 XMI: 10.250.55.127 IMI: 169.254.100.13
19.	Server should now be highlighted in GREEN. Active SDS VIP: Select the "Export" dialogue button.	sds-mrsvnc-a sds-mrsvnc-b qs-mrsvnc-1 Main Menu: Co Filter V Hostname sds-mrsvnc-a sds-mrsvnc-b qs-mrsvnc-1	Network OAM&F Network OAM&F Query Server Tiguration Role Network OAM&P Network OAM&P Query Server	Server Group sds_mrsvnc_gr sds_mrsvnc_gr Server Group sds_mrsvnc_grp sds_mrsvnc_grp	Networks and a solution of the	VORK nent L _mrsvnc M _mrsvnc M _mrsvnc Ma mrsvnc Ma mrsvnc Ma	ocation Iorrisville_NC Iorrisville_NC Iorrisville_NC Pri Jan cation orrisville_NC orrisville_NC	Details XMI: 10.250.55.124 IMI: 169.254.100.11 XMI: 10.250.55.128 IMI: 169.254.100.12 XMI: 10.250.55.127 IMI: 169.254.100.13 Petails XMI: 10.250.55.124 IMI: 169.254.100.13 Petails XMI: 10.250.55.124 IMI: 169.254.100.11 XMI: 10.250.55.128 IMI: 169.254.100.12 XMI: 10.250.55.127 IMI: 169.254.100.13

Proc	edure 4.2 Applyin	g the Query Server Configuration file
20.	Active SDS VIP:	Main Menu: Configuration -> Servers [Export]
	The user will receive a banner information	Filter V Info V
	message showing a	Hostname Info Sork Elk
	Query Server	sds-mrsvnc-a - Exported server data in TKI CConfigData.gs-mrsvnc-1.sh maybe downloaded mrsvn
	configuration data.	sds-mrsvnc-b
		qs-mrsvnc-1 QUERY SERVER 10.250.55.127 169.254.100.1 sds_mrsvn
	Click on the word "downloaded" to download and save the file.	
	Active SDS VIP:	File Developed
21.	 Click the "Save" dialogue button. Save the Query Server configuration file to a USB flash drive. 	File Download Image: TkicconfigData.qs-mrsvnc-1.sh Image: Name: TkicconfigData.qs-mrsvnc-1.sh Image: Type: sh_auto_file, 1.89KB From: 10.250.55.125 Image: Depen Save Cancel Image: While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not open or save this file. What's the risk?
		Save As
		Savejn: 🗢 USB (E:) 💽 🕜 🤔 📂 🖽 -
		WP Recent Documents Desktop Wp Documents Wy Documents Wy Computer File game: TKLCConfigData.sds-mrsvnc-b.sh Save Save as type: .sh Document
22.	Query Server: Access the server console.	 Connect to the Query Server console using one of the access methods described in Section 2.3.

23. Q 1) cc	Access the ommand prompt.	CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.22.0 on an x86_64 hostname1262121944 login: root Password: <root password=""></root>
S	erver as the " root " ser.	
24. Q	uery Server:	*** TRUNCATED OUTPUT ***
O st w se cc	output similar to that hown on the right ill appear as the erver access the ommand prompt.	<pre>VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/c omagont=gui:/usr/TKLC/comagont:/usr/TKLC/ads</pre>
		PRODPATH=/opt/comcol/prod RUNID=00 [root@hostname1262121944 ~]#
25. Q	uery Server: usert the USB flash	
dr se fil or th	rive containing the erver configuration le into the USB port n the front panel of ne Query Server.	Figure 4 - HP DL360 Front Panel: USB Port
26. O st w U in Se po	Auery Server: Dutput similar to that hown on the right vill appear as the SB flash drive is serted into the SDS erver front USB ort.	<pre>[root@hostname1260476099 ~]# sd 3:0:0:0: [sdb] Assuming drive cache: write through sd 3:0:0:0: [sdb] Assuming drive cache: write through <enter></enter> [root@hostname1260476099 ~]#</pre>
Pi ke	ress the <enter></enter> ey to return to the ommand prompt.	
27. Q fla ha th th th ou	erify that the USB ash drive's partition as been mounted by the OS: Search df for the device named in the previous step's utput.	[root@hostname1260476099 ~]# df grep sdb /dev/sdb1 2003076 8 2003068 1% /media/sdb1 [root@hostname1260476099 ~]#
28. Q C C c c	opy the onfiguration file to	<pre>[root@hostname1262121944 ~]# cp -p /media/sdb1/TKLCConfigData.qs-mrsvnc- 1.sh /var/TKLC/db/filemgmt/. [root@hostname1260476099 ~]#</pre>

Proc	edure 4.2 Applyin	g the Query Server Configuration file
29.	Query Server: Copy the Query Server configuration file to the "/var/tmp" directory on the server, making sure to rename the file by omitting the server hostname from the file name. NOTE: The server will poll the /var/tmp directory for the presence of the configuration file and automatically execute it when found.	<pre>Example: TKLCConfigData<.server_hostname>.sh → will translate to →TKLCConfigData.sh [root@hostname1262121944 ~]# cp -p /var/TLKC/db/filemgmt/TKLCConfigData.qs-mrsvnc-1.sh /var/tmp/TKLCConfigData.sh [root@hostname1260476099 ~]#</pre>
30.	Query Server: After the script completes, a broadcast message will be sent to the terminal. NOTE: The user should be aware that the time to complete this step varies by server and may take from 3-20 minutes to complete.	<pre>*** NO OUTPUT FOR ≈ 3-20 MINUTES *** Broadcast message from root (Mon Dec 14 16:17:13 2009): Server configuration completed successfully! See /var/TKLC/appw/logs/Process/install.log for details. Please remove the USB flash drive if connected and reboot the server.</pre>
31.	Query Server: Remove the USB flash drive from the USB port on the front panel of Query Server. CAUTION: <i>It is</i> <i>important that the</i> <i>USB flash drive be</i> <i>removed from the</i> <i>server before</i> <i>continuing on to the</i> <i>next step.</i>	Figure 4 - HP DL360 Front Panel: USB Port

Proc	edure 4.2 Applying	g the Query Server Configuration file
32.	Query Server:	Broadcast message from root (Mon Dec 14 16:17:13 2009):
	shown and press the ENTER> key to return to the	Server configuration completed successfully! See /var/TKLC/appw/logs/Process/install.log for details.
	command prompt.	Please remove the USB flash drive if connected and reboot the server. <enter></enter>
		[root@hostname1262121944 ~]#
33.	Query Server:	<pre>[root@hostname1262121944 ~]# set_ini_tz.pl <time zone=""></time></pre>
	Configure the time zone.	Note: The following command example uses Etc/UTC time zone. Replace, as appropriate, with the time zone you have selected for this installation. See Appendix H for a list of valid time zones.
		<pre>[root@hostname1262121944 ~]# set_ini_tz.pl "Etc/UTC"</pre>
34.	Query Server:	[root@hostname1262121944 ~]# init 6
	Initiate a reboot of the Query Server.	
35.	Query Server: Output similar to that shown on the right may be observed as the server initiates a reboot.	IrootQhostname1322832264 ~]# init 6 IrootQhostname1322832264 ~]# bonding: bond0: Removing slave eth02 bonding: bond0: Warning: the permanent HWaddr of eth02 - 98:4B:E1:74:16:36 - is still in use by bond0. Set the HWaddr of eth02 to a different address to avoid c omflicts. bonding: bond0: releasing backup interface eth02 bonding: bond0: releasing slave eth12 bonding: bond0: releasing active interface eth12 e1000e 0000:07:00.0: eth12: changing MTU from 1500 to 1500 bonding: bond1: Removing slave eth01
		*** TRUNCATED OUTPUT ***
		Initializing USB Mass Storage driver usbcore: registered new driver usb-storage USB Mass Storage support registered. device-mapper: uevent: version 1.0.3 device-mapper: ioctl: 4.11.5-ioctl (2007-12-12) initialised: dm-devel@redhat.com device-mapper: dm-raid45: initialized v0.25941 kjournald starting. Commit interval 5 seconds EXT3-fs: mounted filesystem with ordered data mode. SELinux: Disabled at runtime. type=1404 audit(1323351578.858:2): selinux=0 auid=4294967295 ses=4294967295
36.	Query Server:	CentOS release 5.6 (Final)
	After the server has completed reboot	Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.22.0 on an x86_64
	Verify that the server console returns to a login prompt.	<pre>qs-mrsvnc-1 login: root Password: <root_password></root_password></pre>

Proc	edure 4.2 Applyin	g the Query Server Configuration file
37.	Query Server:	*** TRUNCATED OUTPUT ***
	Output similar to that shown on the right will appear as the server access the command prompt.	<pre>VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/c omagent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@qs-mrsvnc-1 ~]#</pre>
20	Query Server:	[root@qs-mrsvnc-1 ~]# ifconfig grep in grep -v inet6
38.	 Verify that the IMI IP address input in Step 12 has been applied to "bond0.4". Verify that the XMI IP address input in Step 12 has been applied to "bond1". NOTE: The server's XMI & IMI addresses can be verified by reviewing the server configuration through the SDS GUI. i.e. <u>Main Menu</u> → Configuration → Servers Scroll to line entry containing the paperois bectmame 	<pre>bond0 Link encap:Ethernet HWaddr 98:4B:E1:74:16:34 bond0.4 Link encap:Ethernet HWaddr 98:4B:E1:74:16:34</pre>
	Query Server:	[root@gs=mrsvnc=1 ~]# ping 169 254 100 13
39.	Use "ping" to verify that the "bond0.4" device now has connectivity to the IMI Gateway address associated with the NE.	PING 169.254.100.13 (169.254.100.13) 56(84) bytes of data. 64 bytes from 169.254.100.13: icmp_seq=1 ttl=64 time=0.021 ms 64 bytes from 169.254.100.13: icmp_seq=2 ttl=64 time=0.019 ms 64 bytes from 169.254.100.13: icmp_seq=3 ttl=64 time=0.006 ms 64 bytes from 169.254.100.13: icmp_seq=4 ttl=64 time=0.019 ms 64 bytes from 169.254.100.13: icmp_seq=5 ttl=64 time=0.006
	NOTE: Use the <ctrl-c> key</ctrl-c> combination to terminate the "ping" process after a few seconds.	169.254.100.13 ping statistics 5 packets transmitted, 5 received, 0% packet loss, time 3999ms rtt min/avg/max/mdev = 0.006/0.014/0.021/0.007 ms [root@qs-mrsvnc-1 ~]#

Proc	Procedure 4.2 Applying the Query Server Configuration file			
40.	Query Server:	[root@qs-mrsvnc-1 ~]# ping 10.250.55.127		
	Use "ping" to verify that the "bond1" device now has connectivity to the XMI Gateway address associated with the NE.	64 bytes from 10.250.55.127: icmp_seq=1 ttl=64 time=0.018 ms 64 bytes from 10.250.55.127: icmp_seq=2 ttl=64 time=0.016 ms 64 bytes from 10.250.55.127: icmp_seq=3 ttl=64 time=0.013 ms 64 bytes from 10.250.55.127: icmp_seq=4 ttl=64 time=0.016 ms 64 bytes from 10.250.55.127: icmp_seq=5 ttl=64 time=0.011 ms <ctrl-c></ctrl-c>		
	NOTE: Use the <ctrl-c> key combination to terminate the "ping" process after a few seconds.</ctrl-c>	10.250.55.127 ping statistics 5 packets transmitted, 5 received, 0% packet loss, time 3999ms rtt min/avg/max/mdev = 0.011/0.014/0.018/0.005 ms [root@qs-mrsvnc-1 ~]#		
41.	Query Server: Use the "ntpq"	<pre>[root@ qs-mrsvnc-1 ~]# ntpq -np remote refid st t when poll reach delay offset jitter</pre>		
	command to verify that the server has connectivity to the assigned Primary and Secondary NTP server(s).	+10.250.32.10 192.5.41.209 2 u 184 256 175 0.220 46.852 35.598 *10.250.32.51 192.5.41.209 2 u 181 256 377 0.176 7.130 22.192 [root@qs-mrsvnc-1 ~]#		



IF CONNECTIVITY TO THE NTP SERVER(S) CANNOT BE ESTABLISHED, STOP AND EXECUTE THE FOLLOWING STEPS:

Have the customer IT group provide a network path from the OAM server IP to the assigned NTP IP addresses.

ONCE NETWORK CONNECTIVITY IS ESTABLISHED TO THE ASSIGNED NTP IP ADDRESSES, THEN RESTART THIS PROCEDURE BEGINNING WITH STEP 41

42.	Query Server:	[root@qs-mrsvnc-1 ~]# syscheck
. <u>.</u> .	Execute a	Running modules in class hardware
	"syscheck" to verify	OK
	the current health of	Running modules in class disk
	the server.	OK
		Running modules in class net
		OK
		Running modules in class system
		OK
		Running modules in class proc
		OK
		LOG LOCATION: /var/TKLC/log/syscheck/fail_log
		[root@qs-mrsvnc-1 ~]#

Procedure 4.2 Applying the Query Server Configuration file		
12	Query Server:	[root@qs-mrsvnc-1 ~]# exit
43.	Exit from the command line to	logout
return the server CentOS release 5.6 (Final)		CentOS release 5.6 (Final)
	console to the login prompt.	Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.22.0 on an x86_64
		qs-mrsvnc-1 login:

Proc	edure 4.3 Adding	the Query Server to the SDS Server Group
44.	Active SDS VIP: Select Main Menu → Configuration → Server Groups as shown on the right.	Image: Server Groups Subscriber Database Server 0 Subscriber Database Server 4.0.0-4.0.0_40.4.0 Image: Server Server Server Groups Image: Server Server Groups Image: Server Groups Image: Server Groups
45.	Active SDS VIP: The user will be presented with the "Configuration -> Server Groups" screen as shown on the right	Main Menu: Configuration -> Server Groups Tue Jul 31 21:37:09 2012 UT Filter Server Group Name Level Parent Function Servers Server Group Name Level Parent Function Servers Sds_mrsvnc_grp A sds_mrsvnc_grp SDS sds_mrsvnc sds-mrsvnc-a 10.250.55.125 sds_mrsvnc sds-mrsvnc-b SPARE 10.250.55.125
46.	 Active SDS VIP: 1) Using the mouse, select the SDS Server Group associated with the Query Server being installed. 2) Select the "Edit" dialogue button from the bottom left corner of the screen. NOTE: The user may need to use the vertical scroll-bar in order to make the "Edit" dialogue button visible. 	Filter Image: Server Group Name Level Parent Function Servers HA Role Pref VIPs VIPs Sds_mrsvnc_grp A sds_mrsvnc_grp SDS sds_mrsvnc sds-mrsvnc-b SPARE 10.250.55.125 VIPs 20.250.55.125 VIPs

Procedure 4.3 Adding the Query Server to the SDS Server Group						
47	Active SDS VIP:	Main Menu: Configuration -> Server Groups [Edit]				
	The user will be presented with the "Server Groups [Edit]" screen as shown on the right.					
		Field Value		Description		
		Server Group Name sds_mrsvnc_grp		Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]		
		Level A 👻 *		Select one of the Levels supported by the system		
		Parent NO	DNE 🔽 *	Select an existing Server Group or NONE		
		Function SD	SDS Select one of the Functions supported by the system			
		NTP Server 1 10.	250.32.10	The IP Address of a reachable NTP server to be used for clock synchronization. Configurable for level A only. [Range = A valid IP address or blank]		
		NTP Server 2 10.	250.32.51	The IP Address of a backup NTP server (optional).		
		sds_mrsvnc				
		Server SG Inclusion		Preferred HA Role		
		sds-mrsvnc-a 🗵 Include in SG		Preferred Spare		
		sds-mrsvnc-b 🗹 Include in SG		Preferred Spare		
		qs-mrsvnc-1 🔲 Include in SG		Preferred Spare		
		VIP Assignment				
		VIP	VIP Address Add			
		10.250.55.125 Remove				
		Ok Apply Cancel				
48.	Active SDS VIP:					
		sds_mrsvnc				
	Select the "Query Server" from the list of "Available Servers in Network Element" by clicking	Server SG Inclusi		n Preferred HA Role		
		sds-mrsvnc-a 🛛 🗹 Includ		e in SG	Preferred Spare	
		sds-mrsvnc-b 🗹 Includ		e in SG	in SG Preferred Spare	
	on the check box next	qs-mrsvnc-1 🛛 🗹 Include		in SG Preferred Spare		
49.	Active SDS VIP:	VIP Address Add				
	Click the "Apply"	10.250.55.125 Remove				
	dialogue button from	Remove				
	the bottom of the	Ok Apply Cancel				
	screen.					
	Active SDS VIP:					
50.		Main Menu: Configuration -> Server Groups [Edit]				
	The user should be					
	presented with a	Info 🔻				
	banner information message stating "Data committed".					
		l Info		8	Description	}
			 Data committe 	d! *	Unique identifier used to label a Se Valid characters are alphanumeric not start with a digit.]	and underscore
		Network	sds_mrsvnc	*	Select the Network Element for this	Server Group
			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
Proc	Procedure 4.3 Adding the Query Server to the SDS Server Group					
------	---------------------------------------------------------------------------------------	---	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--	
51.	IMPORTANT: Wait at least 5 minutes before proceeding on to the next Step.	•	Now that the Query Server has been paired within its SDS Server Group, it must establish DB replication with the Active SDS server. It may take several minutes for this process to be completed. Allow a minimum of <b>5 minutes</b> before continuing to the next Step.			

Proc	edure 4.4 Restarti	ing the Query Serve	r Applie	cation								
52	Active SDS VIP:								B			
	Select	🚿 Tekeled	Subscriber Database 3					e Server				
	<u>Main Menu</u> ➔ Status & Manage	Connected using VIP to s	sds-mrsvi	nc-a (ACTIVE NET	WORK OA	M&P)						
	→ Server	Main Menu		Main Menu:	Status	& Man	age ->	• Server	$\mathbf{x}$			
	as shown on the	<ul> <li>Configuration</li> <li>Alarms &amp; Events</li> </ul>		Filter -					Ş			
	right.	Security Log		Network Element	t	Server	Hostnam	e	<pre>}</pre>			
		Status & Manage	ents	sds_mrsvnc		sas-m	rsvnc-a rsvnc-b		÷			
		Server		sds mrsvnc		gs-mr	svnc-1		\$			
		Replication		_					Ş			
			~~~~		~~~~~	~~~~~	~~~~~	~~~~~	X			
53	Active SDS VIP:	Main Menu: Status	& Man	age -> Serv	ver				lelp 🔗			
	Verify that the "DB and Reporting	Filter -		5		w	ed Aug O	1 17:05:46	2012 UTC			
	Status" status columns show "Norm" for the Query	Network Element	Server Ho	ostname	Appl State	Alm	DB	Reporting Status	Proc			
	Server at this point.	sds_mrsvnc	sds-mrsvi	nc-a	Enabled	Err	Norm	Norm	Norm			
	should show "Man".	sds_mrsvnc	sds-mrsvi	nc-b	Enabled	Norm	Norm	Norm	Norm			
		sds_mrsvnc	qs-mrsvn	p-1 🤇	Disabled	Warn	Norm	Norm	Man			
	NOTE: If user chooses to refresh the Server status screen in advance of the default setting (15-30 sec.). This may be done by simply reselecting the "Status & Manage → Server" option from the Main menu on the left.											



Proc	edure 4.4 Restart	ing the Query Se	erver Application					
55.	Active SDS VIP:	Main Menu: Sta	atus & Manage -> Se	erver				🥏 Help
	Verify that the "Appl State" now shows	Filter -			w	ed Aug O	1 17:07:41 2	2012 UTC
	State" now shows "Enabled" and that the "Alm, DB, Reporting Status &	Reporting Status	Proc					
	Proc" status columns	sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm
	all show "Norm" for	sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm
	une Query Server .	sds_mrsvnc	qs-mrsvnc-1	Enabled	Norm	Norm	Norm	Norm
	the default setting (15-30 sec.). This may be done by simply reselecting the "Status & Manage → Server" option from the Main menu on the left.							
56.	Active SDS VIP: Click the "Logout" link on the SDS server GUI.	Fri Nov 18 14 ge = A 1-32-charact at least one alpha a	Help Help H:43:32 2011 UTC					

5.4 OAM Installation for DR SDS site

Assumptions:

- This procedure assumes that the SDS Network Element XML file for the Disaster Recovery SDS Provisioning site has previously been created, as described in **Appendix F.**
- This procedure assumes that the Network Element XML files are either on a USB flash drive or the laptop's hard drive. The steps are written as if the XML files are on a USB flash drive, but the files can exist on any accessible drive.

Procedure 5: Configuring an OAM Server for DR SDS site

Step	Procedure	Result
1.	Active SDS VIP: Launch an approved web browser and connect to the XMI Virtual IP Address (VIP) of the Active SDS site using "https://"	 Certificate Error: Navigation Blocked - Windows Internet Explorer Image: Share Browser WebEx Share Browser WebEx Certificate Error: Navigation Blocked Certificate Error: Navigation Blocked There is a problem with this website's security certificate. The security certificate presented by this website was not issued by a trusted certificate authority. The security certificate presented by this website was issued for a different website's address. Security certificate problems may indicate an attempt to fool you or intercept any data you send to the server. Click here to close this webpage. Continue to this website (not recommended). More information

Procedure 5: Configuring an OAM Server for DR SDS site

Step	Procedure	Result
2.	Active SDS VIP: The user should be presented the login screen shown on the right.	Tekelec System Login
	Login to the GUI using the default user and password.	Log In Enter your username and password to log in Username: guiadmin Password: •••••• Change password Log In Welcome to the Tekelec System Login. Unauthorized access is prohibited. This Tekelec system requires the use of Microsoft Internet Explorer 7.0 or 8.0 with support for JavaScript and cookies.
3.	Active SDS VIP: The user should be presented the SDS Main Menu as shown on the right.	Image: Security Log Image: Security Log

Proc	edure 5.1 Config	uring the Network Element (DR SDS)
4.	Active SDS VIP: Select	Tekelec Subscriber Database Server
5.	Main Menu → Configuration → Network Elements as shown on the right. Active SDS VIP: From the Configuration / Network Elements screen Select the "Browse" dialogue button (scroll to bettom loft correct of	Connected using XMI to sds-mrsvnc-a (ACTIVE NETWORK OAM&P) Main Menu Administration Configuration Network Elements Services Resource Domains Servers Server Groups SDS All Logout Main Menu: Configuration -> Network Element Filter Network Element Sds_mrsvnc To create a new Network Element, upload a valid configuration file: Browse Upload File Insert Edit Delete Lock/Unlock Report Export
	bottom left corner of screen).	
6.	Active SDS VIP: Note: This step assumes that the xml files were previously prepared, as described in Appendix F. 1) Select the location containing the site .xml file. 2) Select the .xml file and click the "Open" dialogue button.	Choose file Look in: USB (E:) Image: DR_NO_DEV.ne.xml No_DEV.ne.xml No_DEV.ne.xml Image: DR_NO_DEV.ne.xml Image: DR_NO_NO_NO_NO_NO_NO_NO_NO_NO_NO_NO_NO_NO_
7.	Active SDS VIP: Select the "Upload File" dialogue button (bottom left corner of screen).	Image: SDS Image: SDS Image: SDS I

Proc	Procedure 5.1 Configuring the Network Element (DR SDS)					
8.	Active SDS VIP: If the values in the .xml file pass validation rules, the user will receive a banner information message showing that the data has been successfully validated and committed to the DB.	Main Menu: Configuration -> Network Elements [Upload] Fri Jan 13 16:11:07 20 Filter Info Info Info				

Proc	edure 5.2 Config	uring the OAM Server(DR	SDS)		
9.	Active SDS VIP: Select Main Menu → Configuration → Servers as shown on the	Connected using VIP to sds-mrsvr Main Menu Administration Configuration	criber Database Serve 3.0.0_10.7.1 Ic-a (ACTIVE NETWORK OAM Main Menu: Configu Filter •	er 1&P) Iration -> Serv	ers
	ngnt.	Services	sds-mrsvnc-a sds-mrsvnc-b	Role Server G nc-a Network OAM&P sds_mrs nc-b Network OAM&P sds_mrs	sds_mrsvnc_grp
10.	Active SDS VIP: Select the "Insert" dialogue button (bottom left corner of screen).	🔹 🚞 SDS - 🤣 Help - 🔁 Logout	Insert Delet	e Export Rep	port

Proc	edure 5.2 Config	uring the OA	M Server (DR SI	DS)				
11.	Active SDS VIP: The user is now presented with the "Adding a new server"	Adding a ne	Adding a new server					
		A thaile sta	Additional Value Description					
		Host Name	*	Unique name for Valid characters alphanumeric ar	the server. [Default = n/a. Range = A 20-character string. are alphanumeric and minus sign. Must start with an id end with an alphanumeric.]			
	configuration	Role	Select Role - 🗸 *	Select the function	on of the server			
		Hardware Profile	VOE Guest	Hardware profile	of the server			
		Network Element Name	Unassigned - 💌 *	Select the networ	rk element			
		Location		Location descript is any text string.	tion [Default = . Range = A 15-character string. Valid value			
				Ok Apply	Cancel			
12.	Active SDS VIP:	Adding	a new server	~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
	"hostname" for	Attribute	Value	D	escription			
	OAM Server.	Attribute	Tuluo		Inique name for the conver (Default			
		Host Name	drsds-dallastx-a	Valid characters are alphanumeric at				
			alphanumeric and end with an alpha					
			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~	······			
	Active SDS VIP:							
13.		Role	- Select Role -	Select the function of the server				
	OAM&P" for the	Hardware Prof	ILE - Select Role -	Hard	ware profile of the server			
	server "Role" from	Network Eleme	ent SYSTEM OAM	0.1				
	the pull-down menu.	Name						
		Location	GOERT BERVER	Loca	tion description [Default = "". Range = A 1 😫			
			~~~~~~	~~~~~~	······			
	Active SDS VIP:	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
14.	Input the assigned hostname again as	System ID	drsds-dallastx-a		System ID for the NOAMP or SOAM server. [Default = n/a. Range = A 64- character string. Valid value is any text string. 1			
	the "System ID" for		SDS HP Pask Mount		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
	the SDS DR Server (A or B).							
	Active SDS VIP:	· · · · · · · · · · · · · · · · · · ·	~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
15.	Select "SDS HP	Hardware	SDS TVOE Gues	t 🗸	Hardware profile of the server			
	Rack Mount" for the	Frome	SDS TVOE Guest	t				
	Hardware Profile	Network Element Nam	SDS HP c-Class	Blade V2	Select the network element			
	pull-down menu.	Liementivan	SDS HP c-Class	Blade V0				
		Location	SDS HP C-Class	blade V I	string.]			
					Ok Apply Cancel			

Proc	edure 5.2 Config	uring the OAI	M Server ((DR SDS)			
16.	Active SDS VIP: Select the Network Element Name for the SDS from the pull-down menu. NOTE: After the Network Element Name is selected, the Interfaces fields will be displayed, as	Network Element Name Location	- Unassign - Unassign dr_dallastx sds_mrsvn	red - 💉 * ed -	Selec Locat string	t the network eler tion description [[. Valid value is ar	ment)efault ny text s
17.	Active SDS VIP: Enter the site location.	Location	Dallas_TX		Loca any t	ation description	
	NOTE: Location is an optional field.						
18.	SDS Server A: 1) Enter the MGMNT_VLAN and IMI IP addresses for the SDS Server.	Interfaces: Network MGMNT_VLAN (169. XMI (10.240.241.0/24	254.1.0/24)		IP Address 169.254.1 10.250.55		Interface bondD ♥ VLAN (2) bond1 ♥ VLAN (3)
	2) Set the MGMNT_VLAN and IMI Interfaces to		4)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	169.254.1	OK Apply Cancel	bondu VLAN (4)
	" bond0 ″ and check each VLAN	SDS S	erver	MGMNT_VLAN	N IP	IMI IP	NOTE: These values
	checkbox.	SDS-A	(DR)	169.254.1.14		169.254.100.14	should be used for all SDS installations where
	3) Enter the XMI IP address for the SDS Server.	SDS-B	(DR)	169.254.1.15		169.254.100.15	4948E-F Aggregations switches are deployed.
	4) Set the XMI Interface to "bond1" and DO NOT check the VLAN box.						

Proc	edure 5.2 Configu	ring the OAM Server(DR S	SDS)		
10	SDS Server A:				
	1) Click the "NTP	NTP Servers:	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
	Servers:" "Add"	NTP Server IP Address	Prefer	Add	
	dialogue button.	}	Ok Apply Ca	ancel	
	2) Enter the NTP	<u>}</u>	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	+
	Server IP Address				
		NTP Servers:		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1000
	3) If you have	NTP Server IP Address	Prefer	Add	
	IP address, repeat	10.250.32.10		Remove	
	(1) and (2) to enter it.	}	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
	4) Optionally, click	NTP Servers:	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	+
	the " Prefer " checkbox to prefer	NTP Server IP Address	Prefer	Add	
	one NTP Server	\$ 10.250.32.51		Remove	
	over the other.	\$ 10.250.32.10		Remove	
		<u>}</u>			
20.	Active SDS VIP: 1) The user should be presented with a	Main Menu: Configura	ation -> Servers [I	nsert]	
	banner information	Info 🔻		`	
	message stating "Pre-Validation	Info		8	
	passed".	Pre-Validation pas	ssed - Data NOT committed		
	2) Click the "Apply" dialogue button.	Host Name drode dollast	v o Vnique r	hame for the server. [Default =	
			and minu	us sign. Must start with an alp	
		<pre>interfaces:</pre>	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
		Network	IF	PAddress 2	
		Section (169.254.1.0/24)	ŀ	169.254.1.14	
		XMI (10.240.241.0/24)	[10.250.55.128	
		MI (169.254.100.0/24)	[169.254.100.14	
				Ok Apply Cancel	

Procedure 5.2 Configuring the OAM Server (DR SDS)					
21.	Active SDS VIP: If the values provided match the network ranges assigned to the NE, the user will receive a banner information message showing that the data has been validated and committed to the	Main Menu: Configuration -> Servers [Insert] Info Info Info Info Unique name for the server			
	DB.	Host Name drsds-dallastx-a * Valid characters are alphan alphanumeric and end with			
		have not h			

Proc	Procedure 5.3 Applying the OAM Server Configuration file (DR SDS)									
າາ	Active SDS VIP:									
	Select	🚿 Teke	Tekelec Subscriber Database Server							
	<u>Main Menu</u>	Connected using V	Connected using VIP to sds-mrsvnc-a (ACTIVE NETWORK OAM&P)							
	→ Configuration	 Main Menu 								
	→ Servers	🖬 🚞 Administra	tion	Main Menu: Configuration -> Servers						
	as shown on the	📮 📥 Configurat	ion k Elements	Filter -			}			
	right.	Services	S	Hostname	Ro	le	Server Group			
		Server (a Groups	sds-mrsvnc-a	Ne	etwork OAM&P	sds_mrsvnc_grp			
		🖬 🧰 Networl	k	sds-mrsvnc-b	Ne	etwork OAM&P	sds_mrsvnc_grp			
			vents	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~	·····›			
23.	Active SDS VIP:	Main Menu: Config	uration -> Serv	erc			🔊 Help			
	On the "Configuration	Filter	- Mon Jan 16 16:02:10 2012 UTC							
	→Servers" screen,	Hostname	Role	Server Group	Network Element	Location	Details			
	find the newly added	sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.124 IMI: 169.254.100.11			
	list.	sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.128 IMI: 169.254.100.12			
		qs-mrsvnc-1	Query Server	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.127 IMI: 169.254.100.13			
		drsds-dallastx-a	Network OAM&P		dr_dallastx	Dallas_TX	XMI: 10.250.55.161 IMI: 169.254.100.14			
			~~~~~~	~~~~~~						
24.	Active SDS VIP:	Main Menu: Config	uration -> Serv	ers			Help 🛷 Mon Jan 16 16:02:30 2012 UTC			
	Use the cursor to	Filter -								
	select the new OAM	Hostname	Role	Server Group	Network Element	Location	Details			
	server entry added in the <b>Steps11 - 21</b> .	sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.124 IMI: 169.254.100.11			
	•	sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.128 IMI: 169.254.100.12			
	The row containing	qs-mrsvnc-1	Query Server	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.127 IMI: 169.254.100.13			
	now be highlighted.	drsds-dallastx-a	Network OAM&P		dr_dallastx	Dallas_TX	XMI: 10.250.55.161 IMI: 169.254.100.14			
	Active SDS VIP:			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		****			
25.	Soloot the "Fur art"	drsds-dallastx-a	Network OAM&P	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	dr_dallastx	Dallas_TX	XMI: 10.250.55.161 IMI: 169.254.100.14			
	Select the "Export" dialogue button									
	(bottom left corner of screen).	Insert Delete Export	Report		000		Pause updates			

Proc	edure 5.3 Applyir	ng the OAM Server Configuration file (DR SDS)
26.	Active SDS VIP: The user will receive a banner information message showing a download link for the Server configuration data.	Main Menu: Configuration -> Servers [Export]         Filter • Info •         Hostname         Info         sds-mrsvnc-a         • Exported server data in TKLCConfigData.drsds-dallastx-a.sh maybe downloader
	Click on the word "downloaded" to download and save the OAM server configuration file.	sds-mrsvnc-b Network OAM&P sds_mrsvnc_grp sds_mrsvnc Morrisville_NC

Proc	edure 5.3 Applyir	ng the OAM Server Configuration file (DR SDS)
27.	Active SDS VIP:	File Download
	<ol> <li>Click the "Save" dialogue button.</li> <li>Save the OAM server configuration file to a USB flash drive.</li> <li>Click the "Close" dialogue button</li> </ol>	Do you want to open or save this file?       1         Image: TKLCConfigData.drsds-dallastx-a.sh       1         Type: sh_auto_file, 2.31KB       1         From: 10.250.55.125       Image: Cancel         Image: While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not open or save this file. What's the risk?
		Save As         Save pr         USB (E)         UP Flood         Destrop         Wy Connerts         Save at type         It Document         Save at type         Download Complete         Save at type         Download to:         E\type         Download to:         E\type         Download to:         E\type         Download to:         E\type         Download to:         E\type<
28.	OAM Server: Access the server console.	Connect to the OAM Server console using one of the access methods described in Section 2.3.

Proc	edure 5.3 Applyii	ng the OAM Server Configuration file (DR SDS)
29.	<ul> <li>OAM Server:</li> <li>1) Access the command prompt.</li> <li>2) Log into the OAM server as the "root" user.</li> </ul>	CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.22.0 on an x86_64 hostname1260476035 login: root Password: <root_password></root_password>
30.	OAM Server: Output similar to that shown on the right will appear as the server access the command prompt.	<pre>*** TRUNCATED OUTPUT *** VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/co magent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@hostname1260476035 ~]#</pre>
31.	OAM Server: Insert the USB flash drive containing the server configuration file into the USB port on the front panel of the server.	Figure 4 - HP DL360 Front Panel: USB Port
32.	OAM Server: Output similar to that shown on the right will appear as the USB flash drive is inserted into the SDS Server front USB port. Press the <b><enter></enter></b> key to return to the command prompt.	<pre>[root@hostname1260476099 ~]# sd 3:0:0:0: [sdb] Assuming drive cache: write through sd 3:0:0:0: [sdb] Assuming drive cache: write through <b><enter></enter></b> [root@hostname1260476099 ~]#</pre>
33.	OAM Server: Verify that the USB flash drive's partition has been mounted by the OS: Search df for the device named in the previous step's output.	[root@hostname1260476099 ~] <b># df  grep sdb</b> /dev/sdb1 2003076 8 2003068 1% <b>/media/sdb1</b> [root@hostname1260476099 ~]#

Proc	edure 5.3 Applyir	ng the OAM Server Configuration file (DR SDS)
34.	OAM Server:	[root@hostname1260476035 ~]# cp -p /media/sdb1/TKLCConfigData.drsds- dallastx-a.sh /var/TKLC/db/filemgmt/.
	Copy the configuration file to the SDS server with the server name as shown in red	[root@hostname1260476035 ~]#
35.	OAM Server:	Example:
	Copy the server configuration file to the "/var/tmp" directory on the server, making sure to rename the file by omitting the server hostname from the file name.	<pre>TKLCConfigData&lt;.server_hostname&gt;.sh → will translate to →TKLCConfigData.sh [root@hostname1260476035 ~]# cp -p /var/TKLC/db/filemgmt/TKLCConfigData.drsds-dallastx-a.sh /var/tmp/TKLCConfigData.sh [root@hostname1260476035 ~]#</pre>
	<b>NOTE:</b> The server will poll the / <b>var/tmp</b> directory for the presence of the configuration file and automatically execute it when found.	
36.	OAM Server:	*** NO OUTPUT FOR $\approx$ 3-20 MINUTES ***
	After the script completes, a broadcast message will be sent to the terminal.	Broadcast message from root (Mon Dec 14 15:47:33 2009): Server configuration completed successfully! See /var/TKLC/appw/logs/Process/install.log for details.
	<b>NOTE:</b> The user should be aware that the time to complete this step varies by server and may take from 3-20 minutes to complete.	Please remove the USB flash drive if connected and reboot the server. <enter> [root@hostname1260476099 ~]#</enter>
37	OAM Server:	
	Remove the USB flash drive from the USB port on the front panel of <b>OAM</b> server.	Figure 4 - HP DL360 Front Panel: USB Port
	<b>CAUTION:</b> It is important that the USB flash drive be removed from the server before continuing on to the next step.	

Proc	edure 5.3 Applyii	ng the OAM Server Configuration file (DR SDS)				
38	OAM Server:	<pre>[root@hostname1260476099 ~]# set_ini_tz.pl <time zone=""></time></pre>				
	Configure the time zone.	Note: The following command example uses Etc/UTC time zone. Replace, as appropriate, with the time zone you have selected for this installation. See Appendix H for a list of valid time zones.				
		<pre>[root@hostname1260476099 ~]# set_ini_tz.pl "Etc/UTC"</pre>				
39.	OAM Server:	[root@hostname1260476035 ~]# init 6				
	Initiate a reboot of the OAM server.					
	OAM Server:	[root@hostname1322679281 ~]# init 6				
40.	Wait ~9 minutes Output similar to that shown on the right may be observed as the server initiates a reboot.	<pre>Irootenostname1322679281 ~1# Time o Iroot@hostname1322679281 ~1# bonding: bond0: Removing slave eth02 bonding: bond0: Warning: the permanent HWaddr of eth02 - 98:4B:E1:6F:74:56 - is still in use by bond0. Set the HWaddr of eth02 to a different address to avoid c onflicts. bonding: bond0: releasing active interface eth02 bonding: bond0: making interface eth12 the new active one. bonding: bond0: Removing slave eth12 bonding: bond0: releasing active interface eth12 e1000e 0000:07:00.0: eth12: changing MTU from 1500 to 1500 bonding: bond1: Removing slave eth01</pre>				
		*** TRUNCATED OUTPUT ***				
		Initializing USB Mass Storage driver usbcore: registered new driver usb-storage USB Mass Storage support registered. device-mapper: uevent: version 1.0.3 device-mapper: ioctl: 4.11.5-ioctl (2007-12-12) initialised: dm-devel@redhat.com device-mapper: dm-raid45: initialized v0.25941 kjournald starting. Commit interval 5 seconds EXT3-fs: mounted filesystem with ordered data mode. SELinux: Disabled at runtime. type=1404 audit(1322751643.542:2): selinux=0 auid=4294967295 ses=4294967295				
11	OAM Server:	CentOS release 5.6 (Final)				
41.	After the server has completed reboot	Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.22.0 on an x86_64				
	Verify that the server console returns to a login prompt.	Password: <root_password></root_password>				

Proc	edure 5.3 Applyir	ng the OAM Server Configuration file (DR SDS)				
42.	OAM Server: Output similar to that shown on the right will appear as the server access the command prompt.	<pre>*** TRUNCATED OUTPUT *** VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/co magent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@drsds-dallastx-a ~]#</pre>				
43.	OAM Server: 1) Verify that the IMI IP address input in Step 18 has been applied to "bond0.4". 2) Verify that the XMI IP address input in Step 18 has been applied to "bond1". NOTE: The server's XMI & IMI addresses can be verified by reviewing the server configuration through the SDS GUI. i.e. <u>Main Menu</u> → Configuration → Servers Scroll to line entry containing the	<pre>[root@drsds-dallastx-a ~]# [root@drsds-dallastx-a ~]# ifconfig  grep in  grep -v inet6 bond0 Link encap:Ethernet HWaddr 98:4B:E1:74:15:2C bond0.4 Link encap:Ethernet HWaddr 98:4B:E1:74:15:2C inec addr:169.254.100.14 PCast:169.254.100.255 Mask:255.255.255.0 bond1 Link encap:Ethernet HWaddr 98:4B:E1:74:15:2E eth01 Link encap:Ethernet HWaddr 98:4B:E1:74:15:2C eth02 Link encap:Ethernet HWaddr 98:4B:E1:74:15:2C eth12 Link encap:Ethernet HWaddr 98:4B:E1:74:15:2E lo Link encap:Local Loopback inet addr:127.0.0.1 Mask:255.0.0.0 [root@drsds-dallastx-a ~]#</pre>				
44.	SDS Server B: Use the " <b>ntpq</b> " command to verify that the server has connectivity to the assigned Primary and Secondary NTP server(s).	<pre>[root@drsds-dallastx-a ~]# ntpq -np remote refid st t when poll reach delay offset jitter +10.250.32.10 192.5.41.209 2 u 59 64 377 0.142 -2468.3 99.875 *10.250.32.51 192.5.41.209 2 u 58 64 377 0.124 -2528.2 128.432 [root@drsds-dallastx-a ~]#</pre>				



IF CONNECTIVITY TO THE NTP SERVER(S) CANNOT BE ESTABLISHED, STOP AND EXECUTE THE FOLLOWING STEPS:

1) Contact the customer to verify that the IP addresses for the NTP server(s) are correct.

2) Have the customer IT group provide a network path from the OAM server IP to the assigned NTP IP addresses.

# ONCE NETWORK CONNECTIVITY IS ESTABLISHED TO THE ASSIGNED NTP IP ADDRESSES, THEN RESTART THIS PROCEDURE BEGINNING WITH STEP 43.

Proc	rocedure 5.3 Applying the OAM Server Configuration file (DR SDS)				
45	OAM Server:	[root@drsds-dallastx-a ~]# <b>syscheck</b>			
	Execute a	Running modules in class hardware			
	"syscheck" to	OK			
	verify the current	Running modules in class disk			
	fieduri of the server.	UK Dunning modulos in close not			
		or			
		Running modules in class system			
		OK			
		Running modules in class proc			
		OK			
		LOG LOCATION: /var/TKLC/log/syscheck/fail_log			
		[root@drsds-dallastx-a ~]#			
46	OAM Server:	[root@drsds-dallastx-a ~]# <b>exit</b>			
	Exit from the	logout			
	command line to				
	return the server	CentOS release 5.6 (Final)			
	prompt.	Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.22.0 on an x86_64			
		root@drsds-dallastx-a login:			
47.					
	Contigure D	R SDS Server B by repeating steps 9 - 46 of this procedure.			



# IF 4948E-F SWITCH CONFIGURATION HAS NOT BEEN COMPLETED PRIOR TO THIS STEP, STOP AND EXECUTE THE FOLLOWING STEPS:

- 1) APPENDIX E.1
- 2) APPENDIX E.2 (Appendix E.2 references Appendix E.3 where applicable).
- 3) APPENDIX E.4

Proc	edure 5.3 Applyii	ng the OAM Server Configuration file (DR SDS)				
40	DR SDS Server A:	[root@drsds-dallastx-a ~]# ping 169.254.100.15				
40.		PING 169.254.100.14 (169.254.100.15) 56(84) bytes of data.				
	From SDS Server A	64 bytes from 169.254.100.15: icmp_seq=1 ttl=64 time=0.021 ms				
	"ping" the IP	64 bytes from 169.254.100.15: icmp_seq=2 ttl=64 time=0.011 ms				
	for " <b>bond0.4</b> " (IMI)	64 bytes from 169.254.100.15: icmp_seq=3 ttl=64 time=0.020 ms				
	on SDS Server B.	64 bytes from 169.254.100.15: icmp_seq=4 ttl=64 time=0.011 ms				
		64 bytes from 169.254.100.15: icmp_seq=5 ttl=64 time=0.023 ms <ctrl-c></ctrl-c>				
	NOTE: Use the					
	<ctrl-c> key</ctrl-c>	169.254.100.15 ping statistics				
	terminate the "ping"	5 packets transmitted, 5 received, 0% packet loss, time 3999ms				
	process after a few	rtt min/avg/max/mdev = 0.011/0.017/0.023/0.005 ms				
	seconds.	[root@drsds-dallastx-a ~]#				
	DR SDS Server(s)	[root@so-carvnc-a ~]# ping 10.250.55.161				
49.	A & B	PING 10 250 55 161 (10 250 55 161) 56(84) bytes of data				
	Adb	64 bytes from 10.250.55.161: icmp seg=1 ttl=64 time=0.021 ms				
	Use "ping" to verify	64 bytes from 10.250.55.161: icmp seg=2 ttl=64 time=0.017 ms				
	that the "bond1"	64 bytes from 10.250.55.161: icmp seq=3 ttl=64 time=0.017 ms				
	device now has	64 bytes from 10.250.55.161: icmp seq=4 ttl=64 time=0.022 ms				
	XMI Gateway	64 bytes from 10.250.55.161: icmp_seq=5 ttl=64 time=0.012 ms <ctrl-c></ctrl-c>				
	address.					
		10.250.55.161 ping statistics				
	NOTE: Use the	5 packets transmitted, 5 received, 0% packet loss, time 3999ms				
	combination to	rtt min/avg/max/mdev = 0.012/0.017/0.022/0.006 ms				
	terminate the "ping"	[root@drsds-dallastx-a ~]#				
	process after a few seconds.					
		I FIG PROCEDURE HAS BEEN COMPLETED				

# 5.5 OAM Pairing for DR SDS site

The user should be aware that during the OAM Pairing procedure, various errors may be seen at different stages of the procedure. During the execution of a step, the user is directed to ignore errors related to values other than the ones referenced by that step.

#### Procedure 6: Pairing the OAM Servers for DR SDS site

Step	Procedure	Result			
1.	Active SDS VIP:	Certificate Error: Navigation Blocked - Windows Internet Explorer			
	Launch an approved	G + ttp://10.250.55.125/			
	web browser and connect to the XMI Virtual IP Address	File     Edit     View     Favorites     Tools     Help       Share Browser     WebEx			
	(VIP) of the Active SDS site using "https://"	Image: Second			
		There is a problem with this website's security certificate.			
		The security certificate presented by this website was not issued by a trusted certificate authority. The security certificate presented by this website was issued for a different website's address.			
		Security certificate problems may indicate an attempt to fool you or intercept any data you send to the server.			
		We recommend that you close this webpage and do not continue to this website.			
Ø Click here to close this webpage.					
	Scontinue to this website (not recommended).				
		More information			
2	Active SDS VIP:				
	The user should be				
	Login to the GUI using the default user and password.	lekelec			
		Thu Nov 17 16:03:36 2011 UTC			
		Log In			
		Enter your username and password to log in			
		Username: guiadmin			
		Password:			
		Change password			
		Log In			
		Welcome to the Tekelec System Login.			
		Unauthorized access is prohibited. This Tekelec system requires the use of Microsoft Internet Explorer 7.0 or 8.0 with support for JavaScript and cookies.			

# Procedure 6: Pairing the OAM Servers for DR SDS site

Step	Procedure	Result	
3.	Active SDS VIP: The user should be presented the SDS Main Menu as shown on the right.	Main Menu:       Main Menu: <td></td>	

Procedure 6.1 Configuring the OAM Server Group (DR SDS)							
4.	Active SDS VIP: Select	Tekelec Subscrib	er Database Serv _40.4.0	er			
	Main Menu → Configuration → Server Groups	Connected using XMI to sds-mrsvnc-	A (ACTIVE NETWORK OAM&P)  Main Menu: Configuration -> Server Groups  Filter				
	as shown on the right.		Server Group Name	A	Parent sds_mrsvnc_grp	Function SDS	Servers NE sds_mrsvnc sds_mrsvnc sds_mrsvnc

Proc	edure 6.1 Configu	ring the (	OAM Se	rver Gro	up (DR S	DS)				
5.	Active SDS VIP:	Main Menu: Configuration -> Server Groups								
	1) The user will be	Wed Aug 01 17:38:35						17:38:35		
	presented with the "Server Groups"	Server Grou	pName Le	vel Parent	Function	Servers			<b>\</b>	
	configuration screen as shown on the right.	sds_mrsvnc	_grp A	sds_mrsvno	s_grp SDS	NE sds_mrsvnc sds_mrsvnc sds_mrsvnc	Server qs-mrsvnc-1 sds-mrsvnc-a sds-mrsvnc-b	HA Role Pref	10.250.5 10.250.5 10.250.5	
	2) Select the "Insert" dialogue button from the bottom left corner of the screen. NOTE: The user may need to use the vertical scroll-bar in	2000 2000 2000 2000 2000 2000 2000 200	Commu SDS Help Logout	nication A	Agent		it Delete	Report	2	
	order to make the " <b>Insert</b> " dialogue button visible.									
6.	Active SDS VIP: The user will be presented with the	Main Me	nu: Confi	iguration -	> Server Gi	roups [Inser	t]	Wed Aug 01	17:41:56 2012	
	"Server Groups	Field	Value		Description					
	[Insert]" screen as shown on the right.	Server Group Name		Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character * string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]						
		Level	- Select Le	evel - * Select one of the Levels supported by the system Query servers. Level B groups are optional and c contain MP servers.]				Level A groups contain NOAMP and ntain SOAM servers. Level C groups		
		Parent	- Select Pa	arent - 💌 *	Select an existin	ng Server Group or N	NONE			
		Function	- Select Fu	inction - 💌 *	Select one of the Functions supported by the system					
					Ok	Apply Cancel				
7	Active SDS VIP:	Field	Value	~~~~~~	~~~~~~	Description	~~~~~~	~~~~~~	$\sim$	
	Input the <b>Server</b> Group Name.	Server Gro Name	up drsds	s_dallastx_gr	rp *	Unique ident string. Valid and must no	ifier used to lab characters are a t start with a dig	oel a Server Gro alphanumeric a git.]	nd	
		·~~~~	~~~~~	~~~~~	~~~~~~	~~~~~	~~~~~	~~~~~	~~	
8.	Active SDS VIP: Select "A" on the "Level" pull-down		/el - Select Level - * *		Select one of the Levels supported by the syst Query servers. Level B groups are optional an contain MP servers.]			tional and co		
	menu.	Parent	<u>A</u>		*	Select ar	n existing Serv	er Group or NC		
	Active SDS VIP:		~~~~~	~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~	~~~~~~	~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
9.	Select Parent	Parent	- :	Select Pare	ent- 💌 *	Sel	ect an existin	g Server Grou		
	"NONE" on the pull- down menu.	Function	N		*	Sel	ect one of the	Functions su	upported by	

Proc	edure 6.1 Configu	ing the OAM Server Group (DR SDS)
<b>10.</b>	Active SDS VIP: Select "SDS" on the "Function" pull- down menu.	Function       - Select Function -        *       Select one of the Functions supported by the system         - Select Function -        NONE       Ok       Apply       Cancel         SDS       SDS       SDS       SDS       SDS
11.	<ul> <li>Active SDS VIP:</li> <li>1) The user should be presented with a banner information message stating "Pre-Validation passed".</li> <li>2) Select the "Apply" dialogue button.</li> </ul>	Main Menu: Configuration -> Server Groups [Insert]         Info         Info
12.	Active SDS VIP: The user should be presented with a banner information message stating "Data committed".	Main Menu: Configuration -> Server Groups [Insert]         Info         Info         Description         Unique identifier used to label a 1-32-character string. Valid chara underscore. Must contain at leas

Proc	edure 6.2 Adding	a Server to the OAM Server Group (DR SDS)
13.	Active SDS VIP: Select	Tekelec Subscriber Database Server
		Connected using XMI to sds-mrsvnc-a (ACTIVE NETWORK OAM&P)
	Main Menu → Configuration	■ Administration         ■ Administration         ■ Configuration
	$\rightarrow$ Server Groups	Filter  Filter
	as shown on the	Services Server Group Name Level Parent Function Servers
	right.	Servers     Server Groups     Server Groups     Me     sds_mrsvnc_grp     A     sds_mrsvnc_grp     SDS     NE     sds_mrsvnc_grp     SDS     sds_mrsvnc_grp
14.	Active SDS VIP:	Main Menu: Configuration -> Server Groups
	The Server Group entry should be	Wed Aug 01 17:45:40 2012 UTC
	shown on the "Server Groups"	Server Group Name Level Parent Function Servers
	configuration screen	drsds_dallastv_grp A sds_mrsvnc_grp SDS NE Server HA Role Pret VIPs
	as shown on the right.	sds_mrsvnc_grp     A     sds_mrsvnc_grp     SDS     sds_mrsvnc qs-mrsvnc-1     10.250.55.125       sds_mrsvnc     sds_mrsvnc     sds-mrsvnc-a     10.250.55.125       sds_mrsvnc     sds-mrsvnc-b     SPARE     10.250.55.125
15.	SDS Server A:	Main Menu: Configuration -> Server Groups
	1) Select the Server	Wed Aug 01 17:45:40 2012 010
	Group entry applied	Server Group Name Level Parent Function Servers
	in <b>Step 12</b> . The line	drsds_dallastx_grp A sds_mrsvnc_grp SDS NE Server HA Role Pref VIPs
	entry should now be highlighted in GREEN.	sds_mrsvnc_grp     A     sds_mrsvnc_grp     SDS     NE     Server     HA Role Pref     VIPs       sds_mrsvnc_grp     A     sds_mrsvnc_grp     SDS     sds_mrsvnc     qs-mrsvnc-1     10.250.55.125       sds_mrsvnc     sds_mrsvnc     sds-mrsvnc-a     10.250.55.125       sds_mrsvnc     sds-mrsvnc-b     SPARE     10.250.55.125
	2) Select the "Edit" dialogue button from the bottom left corner of the screen. NOTE: The user may need to use the vertical scroll-bar in order to make the "Edit" dialogue button visible.	Communication Agent SDS Agent Agent Communication Agent SDS Agent Logout Communication Agent Communication Agent Communicati

Active SDS VIP:						
Main Menue Contiguration -> Server Groups LEdit	Main Menu: Configuration -> Server Groups [Edit]					
The user will be	Fri Aug 17 17:20:52 2					
"Server Groups						
[Edit]" screen as Field Value Description						
shown on the right. Server Group Name disds_dallastx_grp * 1-32-character string. Valid characters contain at least one alpha and must n	are alphanumeric and underscore. Must ot start with a digit.]					
Level A Select one of the Levels supported by	the system					
Parent NONE - * Select an existing Server Group or NO	NE					
Function SDS - Select one of the Functions supported	by the system					
NTP Server 1       10.250.32.10       The IP Address of a reachable NTP set Configurable for level A only. [Range =	rver to be used for clock synchronization. A valid IP address or blank]					
NTP Server 2         10.250.32.51         The IP Address of a backup NTP serve Configurable for level A only. [Range =	er (optional). A valid IP address or blank]					
dr_dallastx						
Server SG Inclusion Preferred HA Role						
dallastx-b Include in SG Preferred Spare	Preferred Spare					
drsds- dallastx-a						
VIP Assignment	VIP Assignment					
VIP Address Add						
Ok Apply Cancel						
17. Active SDS VIP: dr_dallastx						
Select the "A" server Server SG Inclusion Preferred H/	Role					
and the "B" server from the list of "Servers" by clicking disds- dallastx-b	Spare					
the check box next to their names. drsds-dallastx-a	Spare					
18. SDS Server A: Main Menu: Configuration -> Server Grou	ps [Edit]					
1) The user should be	Ž					
presented with a Info	_ 1 \$					
message stating						
"Pre-Validation passed". • Pre-Validation passed - Data NOT committed	used to label a Server Group					
	git.]					
2) Select the "Apply" dialogue button. Network Element dr_dallastx   * Select the Network	vork Element for this Server Grc					
2) Select the "Apply" dialogue button.	vork Element for this Server Grc					

Proc	edure 6.2 Adding	a Server to the OAM Server Group (DR SDS)					
19.	SDS Server A:	Main Menu: Configuration -> Server Groups [Edit]					
	presented with a						
	message stating	Info Description					
	"Data committed".	Data committed!     The set of the set					
		Network Element dr_dallastx Select the Network Element for this Server Gr					
20.	Active SDS VIP: Click the "Add" dialogue button for the VIP Address.	VIP Address Add					
21.	Active SDS VIP: Input the VIP Address	VIP Address Add 10.250.55.163 Remove					
22.	<ul> <li>SDS Server A:</li> <li>1) The user should be presented with a banner information message stating "Pre-Validation passed".</li> <li>2) Select the "Apply" dialogue button.</li> </ul>	Main Menu: Configuration -> Server Groups [Edit]         Info         Info         Pre-Validation passed - Data NOT committed         used to label a Server Group are alphanumeric and unders git.]         Network         Immediate and the server Group are alphanumeric and unders git.]         Network         Immediate and the server Group are alphanumeric and unders git.]         Network         Immediate and the server Group are alphanumeric and unders git.]         Network         Immediate and the server Group are alphanumeric and unders git.]         Network         Immediate and the server Group are alphanumeric and unders git.]         Network         Immediate and the server Group are alphanumeric and unders git.]         Network         Immediate and the server Group are alphanumeric and unders git.]         Network         Immediate and the server Group are alphanumeric and unders git.]         Network         Immediate and the server Group are alphanumeric and unders git.]         Network         Immediate and the server Group are alphanumeric and unders git.]         Network       Immediate and the server Group are alphanumeric and unders git.]         Immediate and the server group are alphanumeric and unders git.]         Immediate and the server group are alphanumer					
23.	SDS Server A: The user should be presented with a banner information message stating "Data committed".	Main Menu: Configuration -> Server Groups [Edit]         Info					

Proc	Procedure 6.2 Adding a Server to the OAM Server Group (DR SDS)					
<b>24.</b>	IMPORTANT: Wait at least 5 minutes before proceeding on to the next Step.	<ul> <li>Now that the server(s) have been paired within a Server Group they must establish a master/slave relationship for High Availability (HA). It may take several minutes for this process to be completed.</li> <li>Allow a minimum of <b>5 minutes</b> before continuing to the next Step.</li> </ul>				

Procedure 6.3 Restarting the OAM Server Application (DR SDS)											
25.	Active SDS VIP:										
	Select	🛛 🌃 Tekele	C Sub:	<b>so</b> 1-3	criber Data .0.0_10.5.0	abase S	erver				Ş
	Main Menu										
	→ Status & Manage	Connected using VIP to	o sds-mrsv	<b>/</b> n	c-a (ACTIVE	NETWORK	COAM8	(P)			Ş
	→ Server	😑 🚇 Main Menu 🤠 🛅 Administration		Γ	Main Mei	nu: Stat	tus &	Mai	nage	-> Serv	/er
	as shown on the right.	<ul> <li>Configuration</li> <li>Alarms &amp; Event</li> </ul>	5		Filter 🔻						Ì
	C	🚽 🧰 Security Log	-		Network Ele	ment		Serve	er Hostna	me	Ş
		😑 😋 Status & Manag	ge		dr_dallastx			drsds-dallastx-b			
		🚽 🦉 Network Ele	ments		dr_dallastx			drsds-dallastx-a			Ś
		Server		sds_mrsvnc				sds-mrsvnc-a			Ś
		Replication	💓 Replication		sds_mrsvnc			sds-mrsvnc-b			Ż
			~~~~~		~~~~~~	~~~~~	~~~~	~~~~	~~~~~	~~~~~	~~~~
26.	Active SDS VIP: 1) The "A" and "B"	Network Element	Server Hos	stn	ame	Appl State	Alm	DI	в	Reporting Status	Proc
	DR SDS servers	dr_dallastx	drsds-dalla	ast	tx-b	Disabled	War	n N	lorm	Norm	Man
	should now appear in the right panel.	dr_dallastx	drsds-dalla	ast	tx-a	Disabled	War	n N	lorm	Norm	Man
	5 1 2	sds_mrsvnc	sds-mrsvn	IC-l	b	Enabled	Err	N	lorm	Norm	Norm
	2) Verify that the	sds_mrsvnc	sds-mrsvn	IC-a	3	Enabled	Err	N	lorm	Norm	Norm
	"DB" status shows "Norm" and the	so_carync	so-carync-a	а		Enabled	Norm	N	lorm	Norm	Norm
	"Proc" status shows	so_carync	so-carync-b	b		Enabled	Norm	N	lorm	Norm	Norm
	"Man" for both	so_carync	dp-carync-1	1		Enabled	Norm	N	lorm	Norm	Norm
	proceeding to the next Step.										

Procedure 6.3 Restarting the OAM Server Application (DR SDS)



Proc	edure 6.3 Restarti	ng the OAM Server	Applica	tion (DR S	SDS)						
28	Active SDS VIP:										
	Select	🚿 Tekele	C Sub	scriber Dat -3.0.0_10.5.0	abase S	Ser∨er					
	<u>Main Menu</u>										
	→ Status & Manage	Connected using VIP to	sds-mrsv	∕nc-a (ACTI¥E	NETWOR	K OAM&F	r)		È		
	→ Server	 Main Menu Administration 		Main Menu: Status & Manage -> Sen							
	as shown on the	🔄 🧾 Configuration	-	Filter 🔻					Ę		
	ngnt.	🙀 🧮 Alamis & Evend	>	Network Ele	ment	:	Server Hos	tname	Š		
		🚊 🚖 Status & Manag	je	dr_dallastx			drsds-dalla	istx-a	È		
		- 💽 Network Elei	ments	dr_dallastx			drsds-dalla	istx-b	Ş		
		Server		sds_mrsvnc		:	sds-mrsvn	c-a	Ş		
		Collection		sds_mrsvnc		:	sds-mrsvn	c-b	È		
		- The HA							Ş		
			~~~~~~	~~~~~~			~~~~~		~~~~		
29.	Active SDS VIP:	Main Menu: Statu	s & Man	age -> Sei	ver				🤣 Help		
	Verify that the "Appl State" now shows	Filter -					Fri Aug	g 17 17:27:49	2012 EDT		
	"Enabled" and that the "Alm, DB, Benesting Status 8	Network Element	Server Hos	stname	Appl State	Alm	DB	Reporting Status	Proc		
	Proc" status columns	dr_dallastx	drsds-dalla	astx-a	Enabled	Warn	Norm	Norm	Norm		
	all show "Norm" for	dr_dallastx	drsds-dalla	astx-b	Disabled	Warn	Norm	Norm	Man		
	before proceeding to	sds_mrsvnc	sds-mrsvn	c-b	Enabled	Err	Norm	Norm	Norm		
	the next Step.	sds_mrsvnc	sds-mrsvn	c-a	Enabled	Err	Norm	Norm	Norm		
		so_carync	so-carync-l	b	Enabled	Norm	Norm	Norm	Norm		
	NOTE: If user	so_carync	so-carync-a		Enabled	Norm	Norm	Norm	Norm		
	the Server status	so_carync	dp-carync-	1	Enabled	Norm	Norm	Norm	Norm		
	screen in advance of the default setting (15-30 sec.). This may be done by simply reselecting the "Status & Manage → Server" option from the Main menu on the left										



Proc	Procedure 6.3 Restarting the OAM Server Application (DR SDS)							
31.	Active SDS VIP: Verify that the "Appl	Main Menu: Status & Manage -> Server Fri Aug 17 17:29:12						
	State" now shows "Enabled" and that the "Alm, DB, Penerting Status &	Filter   Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Ргос
	Proc" status columns	dr_dallastx	drsds-dallastx-b	Enabled	Norm	Norm	Norm	Norm
	all show "Norm" for	dr_dallastx	drsds-dallastx-a	Enabled	Norm	Norm	Norm	Norm
	OAM Server B	sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm
	before proceeding to the next Step. <b>NOTE:</b> If user chooses to refresh the Server status screen in advance of the default setting (15-30 sec.). This may be done by simply reselecting the <b>"Status &amp; Manage</b> → Server" option from the Main menu on the left.	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
<b>32.</b>	Active SDS VIP: Add the Query Server for the DR SDS Server	Repeat all Server Gro	steps listed in Proced oup instead of the Prin	lure 4 exce nary (1 st S	ept use t DS) site	the DR S 's NE an	DS site's Id Server	NE and Group.
THIS PROCEDURE HAS BEEN COMPLETED								

# 5.6 Add SDS software images to PMAC servers (All DP-SOAM sites)

This procedure must be done once for each DSR signaling site, which is also an SDS DP-SOAM site. This procedure assumes that the PMAC server has already been installed, as described in [5].

Procedure 7:	Add SDS software	e images to PMAC	servers for DSR	signaling sites
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Step	Procedure	Result
Step	Procedure PMAC Server: Launch an approved web browser and connect to the XMI IP Address of the PMAC server at the DP-SOAM site using "https://"	Result         Certificate Error: Navigation Blocked - Windows Internet Explorer         Image: Certificate Error: Navigation Blocked         Image: Certificate Error: Navigation Blocked<
		<ul> <li>Click here to close this webpage.</li> <li>Continue to this website (not recommended).</li> </ul>
		More information

# **Procedure 7:** Add SDS software images to PMAC servers for DSR signaling sites

Step	Procedure	Result				
2.	<ul><li>PMAC Server:</li><li>The user should be presented the login screen shown on the right.</li><li>Login to the PMAC using the default user and password.</li></ul>	Tekelec System Login       Mon Dec 521:49:45 2011 UTC         Image: Comparison of the end of the e				
3.	<b>PMAC Server:</b> Place the CDROM containing the SDS Application software into the server's optical drive.					
4.	PMAC Server: Select <u>Main Menu</u> → Software → Manage Software Images as shown on the right.	<ul> <li>Site 502.18 ] ::</li> <li>Tekelec Platform Management &amp; Configuration 4.0.0_40.11.</li> <li>Main Menu</li> <li>Hardware</li> <li>Software</li> <li>Software Inventory</li> <li>Manage Software Images</li> <li>VM Management</li> <li>Storage</li> <li>Administration</li> <li>Task Monitoring</li> <li>Logout</li> </ul>				
**Procedure 7:** Add SDS software images to PMAC servers for DSR signaling sites

Step	Procedure	Result				
5	PMAC Server:	Manage Software Images				
J.	Select	Fri Dec 16 21:02:29 2011 UTC				
	Main Menu	Image Name Type Architecture Description				
	→ Software	SDS3.0.0_10.5.0872-2358-103x86_64 Upgrade x86_64				
	→ Manage Software Images	DSR3.0.0_30.13.1872-2329-102x86_64 Upgrade x86_64 DSR 30.13 test ISO with PMAC VM Profiles				
	Soltware innages	AWPSS75.0.0_50.10.0872-2332-101 x86_64 Upgrade x86_64 SS7 test ISO				
	Select the "Add	TPD5.0.0_72.28.0x86_64         Bootable         x86_64         official TPD 5.0.0-72.28.0 Release				
	Image" button	TPD5.0.0_72.20.0x86_64         Bootable         x86_64         Official TPD 72.20 release				
		TPD5.0.0_72.8.0x86_64 Bootable x86_64 ISO for CPA				
		DSR3.0.0_30.14.1872-2329-103x86_64 Upgrade x86_64 Iso for ComAgent/CPA performance testing				
		DSR3.0.0_30.13.0872-2329-102x86_64 Upgrade x86_64 official DSR 30.13.0 Release				
		DSR3.0.0_30.15.0872-2329-103x86_64 Upgrade x86_64				
		DSR3.0.0_30.11.0872-2329-101x86_64 Upgrade x86_64 Official DSR 30.11 build.				
		TVOE1.0.0_72.30.0872-2290-101x86_64 Bootable x86_64 latest TVOE ISO				
6.	PMAC Server: Click the "Path:" drop box and select device://dev/scd0 from the list.	Add Software Image				
<b>7</b> .	PMAC Server: Select "Add New Image" button	Add New Image				

## Procedure 7: Add SDS software images to PMAC servers for DSR signaling sites

Step	Procedure	Result			
8.	<b>PMAC Server:</b> An info message will be raised to show a new background	Info Software image device://dev/scd0 will be added in the background. The ID number for this task is: 773.			
9.	task. <b>PMAC Server:</b> Watch the extraction progress in the lower task list on the same page.	D         Task         Target         Status         Running Time         Start Time         Progress           773         Add Image         Extracting/Verifying image source.         0:00:00         2011-12-05         11%           762         Add Image         Done: 872-2329-103-3.0.0_30.14.0-         0:00:05         2011-12-05         100%           739         Add Image         Done: 872-2329-101-3.0.0_30.12.1-         0:00:06         2011-11-30         100%           739         Add Image         Done: 872-2329-101-3.0.0_30.13.0-         0:00:06         2011-11-30         100%			
10.	<b>PMAC Server:</b> When the extraction task is complete, a new software image will be displayed.	Image Name         Type         Architecture         Description           SDS3.0.0_10.4.0872-2358-102x86_64         Upgrade         x86_64         DSR 30.13 test ISO with PMAC VM Profiles           DSR3.0.0_30.13.1872-2329-102x86_64         Upgrade         x86_64         DSR 30.13 test ISO with PMAC VM Profiles           AWVPSS75.0.0_50.10.0872-2332-101x86_Upgrade         x86_64         SS7 test ISO           TPD5.0.0_72.28.0x86_64         Bootable         x86_64         Official TPD 5.0.0-72.28.0 Release           TPD5.0.0_72.20.0x86_64         Bootable         x86_64         ISO for CPA           DSR3.0.0_30.12.1872-2329-101x86_64         Upgrade         x86_64         Iso for CPA/ComAgent testing           DSR3.0.0_30.13.0872-2329-101x86_64         Upgrade         x86_64         Official DSR 30.13.0 Release           DSR3.0.0_30.14.0872-2329-101x86_64         Upgrade         x86_64         Official DSR 30.14 release           DSR3.0.0_30.11.0872-2329-101x86_64         Upgrade         x86_64         Official DSR 30.11 build.           TVOE1.0.0_72.30.0872-2329-101x86_64         Upgrade         x86_64         Official DSR 30.11 build.			
11.	Remove the <b>CDROM</b> from the server's optical drive.	Figure 6 - HP DL360 Front Panel: Optical Drive			
12.	<b>PMAC Server:</b> Click the " <b>Logout</b> " link on the PMAC server GUI.	Welcome pmacadinin [Logout] Welcome pmacadinin [Logout] Tue Dec 06 18:01:10 2011 UTC Status Rt			
	THIS PROCEDURE HAS BEEN COMPLETED				

## 5.7 OAM Installation for DP-SOAM sites (All DP-SOAM sites)

#### **Assumptions:**

- This procedure assumes that the DP-SOAM Network Element XML file for the DP-SOAM site has previously been created, as described in **Appendix F.**
- This procedure assumes that the Network Element XML files are either on a USB flash drive or the laptop's hard drive. The steps are written as if the XML files are on a USB flash drive, but the files can exist on any accessible drive.

This procedure is for installing the DP-SOAM software on the OAM server blades located at each DSR Signaling Site. The DP-SOAM and DSR OAM servers run in 2 virtual machines on the same HP C-Class blade.

This procedure assumes that the DSR 4.0 or later OAM has already been installed in a virtual environment on the server blade, as described in as described in *DSR 4.0 HP C-Class Installation*, 902-2228-001, Ver 0.7 (or higher) [5]. This assumption also implies that the PMAC server has been installed and that TVOE has been installed in the OAM server blades.

This procedure also assumes that the SDS software image has already been added to the PMAC server, as described in section 5.6.

Step	Procedure	Result
1.	PMAC Server:	Certificate Error: Navigation Blocked - Windows Internet Explorer
	Launch an approved	C→C→ → I= https://10.240.39.4/
	connect to the XMI IP Address of the PMAC server at the DP-SOAM site using "https://"	Eile Edit View Favorites Tools Help         Share Browser WebEx •
		2 Certificate Error: Navigation Blocked
		There is a problem with this website's security certificate.
		The security certificate presented by this website was not issued by a trust The security certificate presented by this website was issued for a different
		Security certificate problems may indicate an attempt to fool you or intercessory server.
		We recommend that you close this webpage and do not continue to
		Click here to close this webpage.
		Solution Continue to this website (not recommended).
		More information
		••••••••••••••••••••••••••••••••••••••
2.	<b>PMAC Server:</b> The user should be presented the login screen shown on the right.	Tekelec Tekelec System Login
	Login to the GUI using the default user and password.	Log In Enter your username and password to log in
		Session was logged out at 2:55:32 pm.
		Username: pmacadmin
		Change password
		Log In
		Unauthorized access is prohibited. This Tekelec system requires the use of Microsoft® Internet Explorer 7.0 or 8.0 with support for JavaScript and cookies.





#### Step Procedure Result PMAC Server: ..:: [ site 502.18 ] ::.. 6. **Tekelec** Platform Management & Configuration 4.0.0, 40.11. Select ... Main Menu → VM Management 🖃 🚊 Main Menu Virtual Machine Management 🤠 🚞 Hardware ...as shown on the 💼 Software right. 📱 VM Management 🛓 🚞 Storage VM Entities C) ④ 🛓 🚞 Administration - 🔜 Enc: 50101 Bay: 11F Task Monitoring SR_NOAMP_A 🖾 Logout 🔳 💻 Enc: 50101 Bay: 12F B DSR_NOAMP_B Create Guest **PMAC Server:** Virtual Machine Management Help Mon Dec 05 17:33:21 2011 UTC 7. 1) In the VM Entities box, select the VM Entities ۵ 🕄 View VM Host desired server Enc: 50101 Bay: 11F DSR_NOAMP_A Enc: 50101 Bay: 12F DSR_NOAMP_B Name: hostname1321643947 Enclosure: 50101 Bay: 11F ...as shown on the VM Info Software Network right. Storage Pools Guests Capacity MB Allocation MB Available MB Name Status Name DSR_NOAMP_A Running vgguests 266304 102400 163904 2) Click the "Create Guest" dialogue Bridges button Device control imi xmi Create Guest

#### Step Procedure Result **PMAC Server:** 8. Virtual Machine Management Click the "Import Profile" dialogue Info • button VM Entities () Create VM Guest ...as shown on the - 🔜 Enc: 50101 Bay: 11F Name: right. B DSR_NOAMP_A Host: Enc: 50101 Bay: 12F 💙 🔳 🛄 Enc: 50101 Bay: 12F DSR_NOAMP_B VM Info Num vCPUs: 1 🖨 VM UUID: Memory (MBs): 1024 🖨 Virtual Disks Prim Size (MB) **Host Pool** Host Vol Name 12288 vgguests $\checkmark$ Virtual NICs Add Delete Host Bridge **Guest Dev Name** control control Create Import Profile



Step	Procedure	Result		
11.	PMAC Server: Verify that task successfully completes. The user should see a screen similar to the one on the right with <b>Progress</b> value of <b>100%</b> .	VM Entities       Image: Solution of the system of the syste		
		Virtual NICs         Host Bridge       Guest Dev Name       MAC Addr         control       control       52:54:00:15:eb:6c         xmi       xmi       52:54:00:09:ba:7f         Edit       Delete       Install OS       Upgrade       Clone Guest         ovo       ovo         ID       Task       Target       Status       Running Time       Start Time       Progress         767       VirtAction: Create       Enc:50101 Bay:11F       Guest creation completed       0:00:04       2011.12-05       100%		
12.	PMAC Server: Install the operating system by clicking the "Install OS" dialogue button	Virtual NICs Host Bridge Guest Dev Name MAC Addr control control 52:54:00:15:eb:6c xmi xmi 52:54:00:d9:ba:7f Edit Delete Install OS Upgrade Clone Guest ovo Target Status Running Time Start Time		
13.	<b>PMAC Server:</b> The user should see a screen similar to the one on the right.	Software Install - Select Image         Tue Dec 06 16:07:15 2011 UTC         Tue Dec 06 16:07:15 2011 UTC         Tue Dec 06 16:07:15 2011 UTC         Select an ISO to Install on the listed Entities         Image Name       Type       Architecture       Description         TPD-5.0.0_72.28.0-x86_64       Bootable       x86_64       official TPD 5.0.0-72.28.0 F         TPD-5.0.0_72.28.0-x86_64       Bootable       x86_64       Official TPD 72.20 release         TPD-5.0.0_72.28.0-x86_64       Bootable       x86_64       ISO for CPA       TVOE-1.0.0_72.30.0872-2290-101-x86_64       Bootable       x86_64       Iatest TVOE ISO		

Step	Procedure	Result			
14.	PMAC Server: 1) Select the desired	Select an ISO to I	nstall on the	listed Entiti	es
	IPD Image	Image Name	Туре	Architecture	Description
	2) Click the "Start	TPD5.0.0_72.28.0x86_64	Bootable	x86_64	official TPD 5.0.0-72.28.0 F
	Install" dialogue	TPD5.0.0_72.20.0x86_64	Bootable	x86_64	Official TPD 72.20 release
	button.	TPD5.0.0_72.8.0x86_64	Bootable	x86_64	ISO for CPA
		TVOE1.0.0_72.30.0872-2290-101x86_64	Bootable	x86_64	latest TVOE ISO
			Start Install		
45	PMAC Server:				
15.	The user should be presented with an " <b>Are you sure you</b> <b>want to install</b> " message box as shown on the right.	Windows Internet Explorer  Are you sure you want to install  OK	TPD5.0.0_72	2.28.0x86_64	on the listed entities?
	Click the " <b>OK</b> " dialogue button.				
16.	<b>PMAC Server:</b> An installation task will be started. This task takes ~11 minutes. The user can monitor this task by doing the following:	: [ site 502.18 ] ::         Tekelec       Platform Management & Configura         4.0.0_40.11.         Hardware         Software         YM Management         Storage         Main instration         Task Monitoring         Itask Monitoring         Logout	tion ing et Sta IP::85ff:feda:2210 Dot i: <u>DP_SOAM_A</u> Dot i: <u>D0_SOAM_A</u> Dot	ttus ne: TPD5.0.0_72.28.0x86 ne: TPD5.0.0_72.28.0x86	Welcome pmacadmin [Logout]           Welcome pmacadmin [Logout]           Welcome pmacadmin [Logout]           Tue Dec 06 16:21:37 2011 UTC           Running Time         Start Time           2011.12.06         Progress           100%         11:14:21           264         0:15:28         12011:18
	Select		~~~~~	~~~~~	
	<u>Main Menu</u> → Task Monitoring				
	Wait until you see the <b>Progress</b> value equal <b>100%</b>				

Step	Procedure	Result			
17.	PMAC Server: 1) Select	It is the 502.18 ] :: Platform Management & Configuration			
	<ul> <li>Main Menu</li> <li>→ VM Management</li> <li>2) Select the "Software" tab</li> <li>3) Verify the operating system has been installed.</li> <li>4) Verify the "Application Details" section is blank.</li> </ul>	Welcome pmacadmin [Logo Hardware Software Minimistration Task Monitoring Enc: 50101 Bay: 11F Desc. NOAMP_A Desc. NOAMP_A Desc. Solub Bay: 12F Desc. NOAMP_B Desc.			
18.	<ul> <li>PMAC Server:</li> <li>1) Select the "Network" tab</li> <li>2) Make note of the control IP address for this OAM; it will be referenced later.</li> <li>3) Select the "Upgrade" dialogue button</li> </ul>	Edit       Delete       Install OS       Upgrade       Clone Guest         Virtual Machine Management       Mon         VM Entities       Q OP       Q OP       SOAM_A       View VM Guest         Image: DP_SOAM_A       Image: DP_SOAM_A       Current Power       Change to         Image: DP_SOAM_B       Image: DP_SOAM_B       Name: DP_SOAM_A       Current Power         Image: DP_SOAM_B       Image: DP_SOAM_B       Name: DP_SOAM_B       Change to         Image: DP_SOAM_B       Image: DP_SOAM_B       Network       Image: DP_SOAM_B         Image: DP_SOAM_B       Image: DP_SOAM_B       Network Interfaces       Image: DP_SOAM_B         Image: DSR_NOAMP_B       Port       IP Addr       Admin       Oper         Image: DSR_NOAMP_B       Edit       Delete       Install OS       Upgrade       Clone Guest			
19.	<b>PMAC Server:</b> The user should be presented the Select Image screen as shown on the right	Select an ISO to Upgrade on the listed Entities           Entity         Status           Host IP::85ff:feda:22f0         Image Name         Type         Architecture         Descr           SDS3.010.4.0872-2358-102x86_64         Upgrade         x86_64         Image Name         Image Name	iptior		

Step	Procedure	Result				
20.	PMAC Server:	Select an ISO to	Upgrade or	the listed E	ntities	
	1) Select the correct	Image Name	Туре	Architecture	Description	
	the "Image Name"	TPD6.0.0_80.15.0x86_64	Bootable	x86_64		
	list. The line entry	SDS4.0.0_40.3.0872-2469-001x86_64	Bootable	x86_64		
	should now be	TVOE2.0.0_80.16.0872-2290-104x86_64	Bootable	x86_64		
	highlighted in GREEN.	DSR4.0.0_40.8.1872-2438-107x86_64	Bootable	x86_64		
		TPD6.0.0_80.16.0x86_64	Bootable	x86_64		
	2) Select the "Start	DSR4.0.0_40.8.2872-2438-107x86_64	Bootable	x86_64	Test ISO for VM prof	iles
	Upgrade" dialogue	TPD6.0.0_80.17.0x86_64	Bootable	x86_64		
	button	SDS4.0.0_40.4.0872-2469-102x86_64	Bootable	x86_64		
		DSR4.0.0_40.9.1872-2438-108x86_64	Bootable	x86_64	DSR 40.9.1 softwar	e
		•				
21.	The user should be presented with an "Are you sure you want to upgrade" message box as shown on the right. Click the "OK" dialogue button.	Are you sure you want to upgrade to SDS	4.0.0_40.3.0{	372-2469-001	X86_64 on the listed	ancel
22.	<ul> <li>PMAC Server:</li> <li>An upgrade task will be started. This task takes ~8 minutes. The user can monitor this task by doing the following:</li> <li>Select</li> <li>Main Menu <ul> <li>Task Monitoring</li> </ul> </li> <li>Wait until you see the Progress value</li> </ul>	Isite 502.18 ] ::.     Platform Management & Con     4.0.0_40.11.      Main Menu     Hardware     Software     Munapement     Storage     Munapement     Istask Monitoring     Logout	figuration oring arget lost IP:85ffJeda:2270 uest: <u>DP: SOAM A</u> nc:50101 Bay:4E	Success	Running Time 0:06:24 0:09:14	Welcome pmacadmi           Tue Dec 06 17:55:40           Start Time         Progress           2011.12.06         100%           2011.12.06         100%
23.	equal <b>100%</b> Repeat <b>Steps 4 - 23</b> o	f this procedure for the <b>DP-SOAM B Ser</b>	ver.			

Step	Procedure	Result
24.	PMAC Server: Click the "Logout" link on the PMAC server GUI.	Welcome pmacadinin [Logout] Tue Dec 06 18:01:10 2011 UTC Status Rt

25.	Active SDS VIP:	Certificate Error: Navigation Blocked - Windows Internet Explorer	
	Launch an approved	A transformed and tran	✓ 4→ ×
	web browser and connect to the XMI Virtual IP address	Ele     Edit     View     Favorites     Tools       Help     Share Browser     WebEx     VebEx	
	(VIP) assigned to Active SDS site	2 Certificate Error: Navigation Blocked	
	using "https://"	There is a problem with this website's security certificate.	
		The security certificate presented by this website was not issued by a trusted The security certificate presented by this website was issued for a different we	certificate authority. ebsite's address.
		Security certificate problems may indicate an attempt to fool you or intercept server.	any data you send to the
		We recommend that you close this webpage and do not continue to the	is website.
		Click here to close this webpage.	
		S Continue to this website (not recommended).	

Proc	edure 8.1 Config	uring the Network Element (DP-SOAM)
Proc	edure 8.1 Configu Active SDS VIP: The user should be presented the login screen shown on the right. Login to the GUI using the default user and password. Active SDS VIP: The user should be presented the SDS Main Menu as shown on the right.	Aring the Network Element (DP-SOAM)
28.	Active SDS VIP: Select Main Menu → Configuration → Network Elements as shown on the right.	<pre>     Connected using XMI to sds-mrsvnc-a (ACTIVE NETWORK OAM&amp;P)      Main Menu     Administration     Administration     Network Elements     Services     Services     Servers     Servers     Network Elements     Servers     Network </pre>

Proc	Procedure 8.1 Configuring the Network Element (DP-SOAM)			
29.	Active SDS VIP: From the Configuration / Network Elements screen Select the "Browse" dialogue button (scroll to bottom left corner of screen).	<ul> <li>SDS</li> <li>Help</li> <li>Logout</li> <li>To create a new Network Element, upload a valid configuration file:</li> <li>Browse Upload File</li> <li>Insert Edit Delete Lock/Unlock Report Export</li> </ul>		
<b>30.</b>	Active SDS VIP: Note: This step assumes that the xml files were previously prepared, as described in Appendix F. 1) Select the location containing the site .xml file. 2) Select the .xml file and click the "Open" dialogue button.	Choose file   Look in:   USB (E:)   Image: DR_NO_DEV.ne.xml   Image: DR_NO_DEV.ne.xml		
31.	Active SDS VIP: Select the "Upload File" dialogue button (bottom left corner of screen).	To create a new Network Element, upload a valid configuration file: Help Logout Insert Edit Delete Lock/Unlock Report Export		

Proc	Procedure 8.1 Configuring the Network Element (DP-SOAM)					
32.	Active SDS VIP: If the values in the .xml file pass validation rules, the user will receive a banner information message showing that the data has been successfully validated and	Main Menu: Configuration -> Network Elements Wed Aug Filter Info Network Element insert successful from /tmp/SO_DEV.ne.xml. Gr_dallastx				
	committed to the DB.	Main Menu: Configuration -> Network Elements				
		Filter  Info  Filter				
		Network Element				
		sds_mrsvnc				
		dr_dallastx				
		So_carync				
		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				

Proc	Procedure 8.2 Configuring the SOAM Server				
33.	Active SDS VIP: Select		scriber Database Serve 3.0.0_10.7.1	er	
	Main Menu → Configuration → Servers as shown on the right.	Connected using VIP to sds-mrsvi Main Menu Administration Configuration Network Elements Services	nc-a (ACTIVE NETWORK OAN Main Menu: Configu Filter 🔻 Hostname	M&P) Jration -> Serv Role	Vers Server Group
		Servers Server Groups Network Alarms & Events	sds-mrsvnc-a sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp sds_mrsvnc_grp
34.	Active SDS VIP: Select the "Insert" dialogue button (bottom left corner of screen).	🖬 🧰 SDS 🤣 Help 🖉 Logout	Insert Delet	e Export Re	port

Proc	edure 8.2 Config	uring the S	SOAM S	erver					
35.	Active SDS VIP:	Adding a	Adding a new server						
	ne user is now	Attribute	Value		Description				
	"Adding a new server"	Host Name		*	Unique nam Valid charac alphanumer	ie for th ters ar ic and	ne server. [Default = n e alphanumeric and end with an alphanu	/a. Range = A 20-charao minus sign. Must start w meric.]	ter string. /ith an
	screen.	Role	- Select R	lole - 💉 *	Select the fu	nction	of the server		
		Hardware Profile	TVOE Gu	est (Hardware p	rofile of	f the server		
		Network Element Name	- Unassig	ned - 💌 *	Select the n	etwork	element		
		Location			Location des	scriptio ring.]	n [Default = "". Range	e = A 15-character string	. Valid value
					Ok Apply	/ Ca	ancel		
36.	Active SDS VIP:	Adding	ja ne	w server	~~~~~~	~~~~	~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~
	"hostname" for	Attribute	Valu	Je		Des	scription		
0	OAM Server.	Host Nam	ne <mark>so</mark>	-carync-a		Un cha	ique name for t aracters are alp	he server. [Defau hanumeric, minu	lt = n/a. Ra s sign, uno
			~~~~~	~~~~~~	~~~~~~	an ~~~	aipna and end	with an aiphanun	neric.j
	Active SDS VIP		~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~	$\sim \sim \sim$	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~5
7.	Active SDS VIP: Select "SYSTEM OAM" for the Role from the pull-down menu.	Role	- Se	elect Role -	*	5	Select the functi	on of the server	Ş
		Hardware Profile	- Se NET	lect Role - WORK OAM	&P	<b>~</b> H	lardware profile	e of the server	
		Network Element Name		ERY SERVER	2	\$	Select the netwo	ork element	
0	Active SDS VIP:								
<b>o.</b>	lanu (4.4 han a '				1	~ ~ ~ ·		Sustem ID for the NOAMD	or SOAM
	hostname again as	System ID	so-car	ync-a				server. [Default = n/a. Ran character string. Valid valu	ge = A 64- ie is any text
	the SO Server (A or B).	Hardware Profile			~~~~	~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Hardware profile of the set	¥
_	Active SDS VIP:	·····	~~~~~		~~~~~~	~~~~	~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
9.	Select "SDS TVOE	Hardware Profile	S	DS TVOE Gu	est	*	Hardware pro	file of the server	
	Guest" for the Hardware Profile for the DP-SOAM	Network Element N	lame S	DS TVOE Gu DS HP c-Clas	est is Blade V2 is Blade V0	2	Select the net	work element	
	from the pull-down menu.	Location	S	DS HP c-Clas DS HP Rack	s Blade V1 Mount	, 	Location deso string.]	cription [Default =	. Range
							Ok /	Apply Cancel	]

Proc	edure 8.2 Config	uring the SO	AM Server			
<b>40.</b>	Active SDS VIP: Select the Network Element Name for the SDS from the pull-down menu.	Network Element Name	- Unassigned - Unassigned sds_mrsvnc	- • • • • • • • • • • • • • • • • • • •	Select the network elect	ment
	<b>NOTE:</b> After the Network Element Name is selected, the Interfaces fields will be displayed, as seen in <b>Step 42</b> .		so_carync	Ok (4	Apply Cancel	
41.	Active SDS VIP: Enter the site location. NOTE: Location is an optional field.	Location	Cary_NC	······································	Location description [D character string. Valid v	efault =
40	Active SDS VIP:	Interfaces:	~~~~~~	~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
42.	1) Enter the XMI IP	Network		IP Address	Interface	
	address and IMI IP address for the DP-	XMI (10.240.39	9.128/25)	10.240.39.150	xmi 💌	VLAN (3)
	SOAM Server.	IMI (10.240.38	.64/26)	10.240.38.78	imi 💌	VLAN (4)
	<ul> <li>2) Set the XMI Interface to "xmi" and do NOT check the VLAN box.</li> <li>3) Set the IMI Interface to "imi"</li> </ul>		~~~~~	~~~~~	~~~~~	·······
	and do NOT check the <b>VLAN</b> box.					

ocedure 8.2 Config	uring the SOAM Serve	r						
Active SDS VIP:								
• 1) Click the "NTP	NTP Servers:							
Servers:" "Add"	NTP Server IP Address	Prefer	Add					
dialogue button.			poly Cancel					
2) Enter the NTP								
Server IP Address								
for an NTP Server.	NTP Servers:	~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					
3) If you have	NTP Server IP Address	Prefer						
another NTP Server			Add					
<b>IP address</b> , repeat			Remove					
it.	^~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~							
	ו••••	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					
4) Optionally, click	NTP Servers:							
the "Preter" checkbox to prefer	NTP Server IP Address	Prefer	Add					
one NTP Server	\$ 10.250.32.51		Remove					
over the other.	10.250.32.10		Remove					
		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~						
Active SDS VIP:	Main Manue Conf	inuration -> Corver	[Incort]					
1) The user should			s[Insert]					
be presented with a banner information	Info 🔻		Ž					
message stating	luc.							
"Pre-Validation	Into							
passeu .	Pre-Validati	ion passed - Data NOT commit	ted					
2) Click the "Apply"			<u>}</u>					
dialogue button.		Unique	name for the server					
	Hest Name		acter string. Valid ch					
	Host Name so-cary-nc	and min	nus sign. Must start 🖓					
		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~					
		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					
	Interfaces: Network	ID Address						
	VML (10.040.00.400/05)	10 040 20 450						
	XMI (10.240.39.128/25)	10.240.39.150	xmi 🚩 📋 VLAN (3)					
	IMI (10.240.38.64/26)	10.240.38.78	imi 💟 🗌 VLAN (4)					
			cal					
		CK Appiy Can						

Procedure 8.2 Configuring the SOAM Server				
45.	Active SDS VIP: If the values provided match the network ranges assigned to the NE, the user will receive a banner information message showing that the data has been validated and committed to the DB.	Main Menu: Configuration -> Servers [Insert] Info Info • Data committed! Host Name so-carync-a * Unique name for the server. alphanumeric and minus signature		

Procedure 8.3 Applying the SOAM Server Configuration file								
40	Active SDS VIP:							
46.	Select	Subscriber Database Server					Š	
			IEKEIEC 3.0.0-3.0.0_10.7.1					
	<u>Main Menu</u>	Connected using	VIP to sds-mrsvnd	-a (ACTIVE NETW	ORK OAM&P)			
	→ Configuration	🔳 🖳 Main Menu		Main Manue G	onfiguratio			
	\rightarrow Servers	🖬 🧰 Administr	ation		onngurauo	n-> serve		
	as shown on the	E Sonngura	ork Elements	Filter -		<u> </u>		
	right.	- Servic	es	Hostname	Role		Server Group	
		Serve	rs Groups	sds-mrsvnc-a	Netwo	rk OAM&P	sds_mrsvnc_grp	
		🖬 🧰 Netwo	ork Events	sds-mrsvnc-b	Netwo	rk OAM&P	sds_mrsvnc_grp	
		~~~~~~~~~~~	~~~~~	~~~~~~		~~~~~~	······	
47.	Active SDS VIP:	Main Manue Car	Course Course				<b>A</b>	
	On the "Configuration	Main Menu: Con	inguration -> Serv	vers		Tu	Help e Jan 17 19:02:31 2012 UTC	
	→Servers" screen,	Hostname	Role	Server Group	Network Element	Location	Details	
	System OAM server	sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.124	
	in the list.	sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.128 IMI: 169.254.100.12	
		qs-mrsvnc-1	Query Server	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.127 IMI: 169.254.100.13	
		drsds-dallastx-a	Network OAM&P	drsds_dallastx_grp	dr_dallastx	Dallas_TX	XMI: 10.250.55.161 IMI: 169.254.100.14	
		so-carync-a	System OAM		so_carync	Cary_NC	XMI: 10.240.39.150 IMI: 10.240.38.78	
	Active SDS VIP							
48.		Hostname	Network OAM&P	sds mrsvnc arn	sds mrsvnc	Location	XMI: 10.250.55.124	
	select the new DP-	sds-mrsvnc-b	Network OAM&P	sds mrsvnc arp	sds mrsvnc	Morrisville NC	IMI: 169.254.100.11 XMI: 10.250.55.128	
	SOAM server entry added in the Step	qs-mrsvnc-1	Query Server	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	IMI: 169.254.100.12 XMI: 10.250.55.127	
	36.	drsds-dallastx-a	Network OAM&P	drsds_dallastx_grp	dr_dallastx	Dallas_TX	XMI: 109.254.100.13 XMI: 10.250.55.161	
	The row containing	so-carvnc-a	System OAM		so carvnc	Cary NC	XMI: 10.240.39.150	
	the server should now be highlighted.		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	IMI: 10.240.38.78	
	Active SDS VIP:		~~~~~~	~~~~~~		~~~~~~		
<b>49.</b>	Select the "Export"	so-carync-a	System OAM		so_carync	Cary_NC	XMI: 10.240.39.150 IMI: 10.240.38.78	
	dialogue button							
	(bottom left corner of screen).	Insert Delete Exp	Report	000			Pause updates	
50.	Denest Otarra 00, 40			Comion				
	кереаt <b>Steps 33- 49</b> (	of this procedure fo	or the DP-SOAM E	s Server.				

Proc	edure 8.3 Applyii	ng the SOAM Server Configuration file
51.	Active SDS VIP: Click the "Logout" link on the SDS server GUI.	Welcome guiadmin [Logout] Pri Nov 18 14:43:32 2011 UTC ge = A 1-32-character string. at least one alpha and must
52.	Active SDS Server: Access the server console.	<ul> <li>Connect to the Active SDS VIP console using one of the access methods described in Section 2.3.</li> </ul>
53.	Active SDS Server: 1) Access the command prompt. 2) Log into the OAM server as the "root" user.	CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.22.0 on an x86_64 hostname1260476035 login: root Password: <root_password></root_password>
54.	Active SDS Server: Output similar to that shown on the right will appear as the server access the command prompt.	<pre>*** TRUNCATED OUTPUT *** VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/co magent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@hostname1260476035 ~]#</pre>
55.	Active SDS Server: Change directory into the file management space.	[root@hostname1260476035 ~]# cd /var/TKLC/db/filemgmt
<b>56.</b>	Active SDS Server: Get a directory listing and find the configuration files with the OAM server A and B name as shown in red. Note: These should appear toward the	<pre>[root@hostname1260476035 ~]# ls -ltr TKLCConfigData*.sh *** TRUNCATED OUTPUT *** -rw-rw-rw- 1 root root 2208 Dec 19 16:37 TKLCConfigData.so-carync-a.sh -rw-rw-rw- 1 root root 2208 Dec 19 16:50 TKLCConfigData.so-carync-b.sh</pre>

Proc	edure 8.3 Applyi	ng the SOAM Server Configuration file
57.	Active SDS Server: Copy the configuration files found in the previous step to the PMAC.	<pre>[root@hostname1260476035 ~]# scp -p <configuration_file-a> <configuration_file-b> root@<pmac_ip>:/tmp root@10.240.39.4's password: TKLCConfigData.so-carync-a.sh 100% 1741 1.7KB/s 00:00 TKLCConfigData.so-carync-b.sh 100% 1741 1.7KB/s 00:00 [root@sds-mrsvnc-a filemgmt]#</pmac_ip></configuration_file-b></configuration_file-a></pre>
58.	<b>PMAC Server:</b> Access the server console.	<ul> <li>Connect to the PMAC Server console using one of the access methods described in Section 2.3.</li> </ul>
<b>59.</b>	PMAC Server: Copy the server configuration file to the Control IP for the SOAM. Note: The Control IP for each OAM is obtained in Step 18 of this procedure.	<pre>[root@pmac ~]# scp -p /tmp/<configuration_file> root@<dp_soam_control_ip>:/var/TKLC/db/filemgmt root@192.168.1.199's password: TKLCConfigData.so-carync-a.sh 100% 1741 1.7KB/s 00:00 [root@pmac ~]#</dp_soam_control_ip></configuration_file></pre>
<b>60.</b>	PMAC Server: Connect to the SOAM server console from the PMAC Server Console	<pre>[root@pmac ~]# ssh <oam_control_ip> root@192.168.1.199's password: <root_password></root_password></oam_control_ip></pre>
61.	SOAM Server: Output similar to that shown on the right will appear as the server access the command prompt	<pre>*** TRUNCATED OUTPUT *** VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/co magent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@hostname1326744539 ~]#</pre>

Proc	edure 8.3 Applyir	ng the SOAM Server Configuration file
62	SOAM Server:	Example:
<b>62.</b>	Copy the server configuration file to the "/var/tmp"	TKLCConfigData<.server_hostname>.sh → will translate to →TKLCConfigData.sh
	directory on the server, making sure to rename the file by omitting the server hostname (shown in red) from the file name.	<pre>[root@so-carync-a ~]# cp -p /var/TKLC/db/filemgmt/TKLCConfigData.so-carync- a.sh /var/tmp/TKLCConfigData.sh</pre>
	<b>NOTE:</b> The server will poll the / <b>var/tmp</b> directory for the presence of the configuration file and automatically execute it when found.	
63.	SOAM Server:	*** NO OUTPUT FOR $\approx$ 3-20 MINUTES ***
	After the script completes, a broadcast message	Broadcast message from root (Mon Dec 14 15:47:33 2009):
	will be sent to the terminal	Server configuration completed successfully!
		See /var/TKLC/appw/logs/Process/install.log for details.
	<b>NOTE:</b> The user should be aware that the time to complete this step varies by server and may take from 3-20 minutes to complete	Please remove the USB flash drive if connected and reboot the server.

Proc	edure 8.3 Applyii	ng the SOAM Server Configuration file
64.	Accept upgrade to the Application Software.	<pre>[root@hostname1260476221 ~]# /var/TKLC/backout/accept Called with options:accept Loading Upgrade::Backout::RPM Accepting Upgrade Setting POST_UPGRADE_ACTION to ACCEPT in upgrade info. Cleaning backout directory. Clearing Upgrade Accept/Reject alarm. Cleaning message from MOTD. Cleaning up RPM config backup files Checking / Checking / Checking / Doot Checking / Doot Checking / Upgrade Checking / var Checking /var Checking /var Checking /var/TKLC Checking /var/TKLC Checking /var/TKLC/appw/logs/Process Checking /var/TKLC/appw/logs/Security Checking /var/TKLC/dpb/filemgmt Checking /var/TKLC/db/filemgmt Checking /var/TKLC/rundb Starting cleanup of RCS repository. INFO: Removing '/var/lib/prelink/force' from RCS repository INFO: Removing '/etc/my.cnf' from RCS repository</pre>
65.	SOAM Server: Configure the time zone.	<pre>[root@hostname1260476221 ~]# set_ini_tz.pl <time zone=""> Note: The following command example uses Etc/UTC time zone. Replace, as appropriate, with the time zone you have selected for this installation. See Appendix H for a list of valid time zones. [root@hostname1260476221 ~]# set_ini_tz.pl "Etc/UTC"</time></pre>
66.	SOAM Server: Initiate a reboot of the OAM server.	[root@hostname1260476221 ~]# init 6
67.	SOAM Server: Output similar to that shown on the right may be observed as the server initiates a reboot.	<pre>[root@hostname1260476221 ~]# Connection to 192.168.1.199 closed by remote host. Connection to 192.168.1.199 closed. [root@pmac ~]#</pre>

Proc	edure 8.3 Applyii	ng the SOAM Server Configuration file
68.	PMAC Server: After the DP-SOAM server has completed reboot Re-connect to the DP-SOAM server console from the PMAC Server Console	<pre>[root@pmac ~]# ssh <oam_control_ip> root@192.168.1.199's password: <root_password></root_password></oam_control_ip></pre>
	SOAM Server:	
69.	Output similar to that shown on the right will appear as the server access the command prompt.	<pre>VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/co magent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@so-carync-a ~]#</pre>
	SOAM Server:	[root@so-carync-a ~]# <b>ifconfig  grep in  grep -v inet6</b>
70.	<ol> <li>Verify that the IMI IP address input in Step 42 has been applied to "bond0.4".</li> <li>Verify that the XMUD address</li> </ol>	<pre>control Link encap:Ethernet HWaddr 52:54:00:23:DC:32 inet addr:192.168.1.199 Bcast:192.168.1.255 Mask:255.255.255.0 imi Link encap.Ethernet HWaddr 52:54:00:33:DC:DC inet addr:10.240.38.78 Bcast:10.240.38.127 Mask:255.255.255.192 lo Link encap:Local Loopback inet addr:127.0.0.1 Mask:255.0.0.0 xmi Link encap:Ethernet Hwaddr 52:54:00:63:63:BD inet addr:10 240 39 150 Bcast:10 240 39 255 Mack:255 255 255 128</pre>
	input in <b>Step 42</b> has been applied to <b>"bond1</b> ".	[root@so-carync-a ~]#
	<b>NOTE:</b> The server's <b>XMI</b> & <b>IMI</b> addresses can be verified by reviewing the server configuration through the SDS GUI.	
	i.e. <u>Main Menu</u> → Configuration → Servers	
	Scroll to line entry containing the server's <b>hostname.</b>	

Proc	edure 8.3 Applyii	ng the SOAM Server Configuration file				
	SOAM Server:	[root@so-carync-a ~]# <b>ping 10.240.39.150</b>				
71.	Use <b>"ping"</b> to verify that the <b>"bond0.4"</b> device now has connectivity to the	PING 10.240.39.150 (10.240.39.150) 56(84) bytes of data. 64 bytes from 10.240.39.150: icmp_seq=1 ttl=64 time=0.024 ms 64 bytes from 10.240.39.150: icmp_seq=2 ttl=64 time=0.033 ms 64 bytes from 10.240.39.150: icmp_seq=3 ttl=64 time=0.032 ms				
	IMI Gateway address (swtch1A) associated with the NE.	64 bytes from 10.240.39.150: icmp_seq=4 ttl=64 time=0.026 ms 64 bytes from 10.240.39.150: icmp_seq=5 ttl=64 time=0.027 ms 64 bytes from 10.240.39.150: icmp_seq=6 ttl=64 time=0.026 ms <ctrl-c></ctrl-c>				
	<b>NOTE:</b> Use the <b><ctrl-c> key</ctrl-c></b> combination to terminate the "ping" process after a few seconds.	10.240.39.150 ping statistics 6 packets transmitted, 6 received, 0% packet loss, time 5004ms rtt min/avg/max/mdev = 0.024/0.028/0.033/0.003 ms [root@so-carync-a ~]#				
72.	SOAM Server:	[root@so-carync-a ~]# ping 10.240.38.78				
	Use " <b>ping</b> " to verify that the " <b>bond1</b> " device now has connectivity to the <b>XMI Gateway</b> <b>address</b> associated with the NE.	PING 10.240.38.78 (10.240.38.78) 56(84) bytes of data. 64 bytes from 10.240.38.78: icmp_seq=1 ttl=64 time=0.031 ms 64 bytes from 10.240.38.78: icmp_seq=2 ttl=64 time=0.017 ms 64 bytes from 10.240.38.78: icmp_seq=3 ttl=64 time=0.031 ms 64 bytes from 10.240.38.78: icmp_seq=4 ttl=64 time=0.028 ms 64 bytes from 10.240.38.78: icmp_seq=5 ttl=64 time=0.030 ms 64 bytes from 10.240.38.78: icmp_seq=6 ttl=64 time=0.028 ms				
	<b>NOTE:</b> Use the <b><ctrl-c> key</ctrl-c></b> combination to terminate the "ping" process after a few seconds.	10.240.38.78 ping statistics 6 packets transmitted, 6 received, 0% packet loss, time 5000ms rtt min/avg/max/mdev = 0.017/0.027/0.031/0.007 ms [root@so-carync-a ~]#				
73.	SOAM Server:	[root@so-carync-a ~]# <b>ntpq -np</b>				
	Use the " <b>ntpq</b> " command to verify that the server has connectivity to the assigned Primary and Secondary NTP server(s).	+10.250.32.10 192.5.41.209 2 u 139 1024 377 2.008 1.006 1.049 *10.250.32.51 192.5.41.209 2 u 979 1024 377 0.507 1.664 0.702 [root@so-carync-a ~]#				



IF CONNECTIVITY TO THE NTP SERVER(S) CANNOT BE ESTABLISHED, STOP AND EXECUTE THE FOLLOWING STEPS:

1) Contact the customer to verify that the IP addresses for the NTP server(s) are correct.

2) Have the customer IT group provide a network path from the OAM server IP to the assigned NTP IP addresses.

# ONCE NETWORK CONNECTIVITY IS ESTABLISHED TO THE ASSIGNED NTP IP ADDRESSES, THEN RESTART THIS PROCEDURE BEGINNING WITH STEP 73.

Procedure 8.3 Applying the SOAM Server Configuration file					
74	SOAM Server:	[root@so-carync-a ~]# <b>syscheck</b>			
/ <del>4</del> .	Execute a	Running modules in class hardware			
	"syscheck" to	OK			
	health of the server.	Running modules in class disk			
		OK			
		Running modules in class net			
		OK			
		Running modules in class system			
		OK			
		Running modules in class proc			
		OK			
		LOG LOCATION: /var/TKLC/log/syscheck/fail log			
		[root@so-carync-a ~]#			
75	SOAM Server:	[root@so-carync-a ~]# exit			
75.	Exit from the DP-	Connection to 192.168.1.199 closed.			
	SOAM command	[root@pmac ~]#			
	PMAC server				
	console prompt.				
76.	If you have just compl for <b>SOAM Server B</b> .	eted this procedure for the SOAM Server A in the enclosure then repeat Steps 33 - 75 this procedure			
77.	PMAC Server:	[root@pmac ~]# exit			
	Exit from the PMAC server				
		THIS PROCEDURE HAS BEEN COMPLETED			

# 5.8 OAM Pairing for DP-SOAM sites (All DP-SOAM sites)

The user should be aware that during the OAM Pairing procedure, various errors may be seen at different stages of the procedure. During the execution of a step, the user is directed to ignore errors related to values other than the ones referenced by that step.

#### Procedure 9: Pairing the OAM Servers for DP-SOAM sites

Step	Procedure	Result						
1.	Active SDS VIP:	Certificate Error: Navigation Blocked - Windows Internet Explorer						
	Launch an approved	G → Image: A the state of t						
	connect to the XMI Virtual IP Address	Eile Edit View Favorites Iools Help						
	(VIP) of the Active SDS site using "https://"	Certificate Error: Navigation Blocked						
	11190.17	There is a problem with this website's security certificate.						
		The security certificate presented by this website was not issued by a trusted certificate authority. The security certificate presented by this website was issued for a different website's address.						
		Security certificate problems may indicate an attempt to fool you or intercept any data you send to the server.						
		We recommend that you close this webpage and do not continue to this website.						
		Click here to close this webpage.						
		Solution Continue to this website (not recommended).						
		• More information						
°,	Active SDS VIP:							
<b>Z</b> .	The user should be presented the login screen shown on the right.	Tekelec System Login						
	Login to the GUI							
	using the default user and password.	Log In						
		Enter your username and password to log in						
		Username: guiadmin						
		Password:						
		Change password						
		Log In						
		Welcome to the Tekelec System Login.						
		Unauthorized access is prohibited. This Tekelec system requires the use of Microsoft Internet Explorer 7.0 or 8.0 with support for JavaScript and cookies.						

#### Procedure 9: Pairing the OAM Servers for DP-SOAM sites

Step	Procedure		Resul	t	
3.	Active SDS VIP: The user should be presented the SDS Main Menu as shown on the right.	Connected using XMI to hostname1345 Main Menu Administration	er Database Server _40.4.0 5124587 (ACTIVE NETWORK OAM&P) Main Menu: [Main]	This is the user-defined welcome message. It can be modified using the 'Options' tab under the 'Administration' menu.	Welcome guiadmin [Logout] @ Help — Thu Aug 16 17:50:29 2012 UTC

#### Procedure 9.1 Configuring the SOAM Server Group (SOAM) Active SDS VIP: 4. **Tekelec** Subscriber Database Server Select... Connected using XMI to sds-mrsvnc-a (ACTIVE NETWORK OAM&P) Main Menu 🖃 🚊 Main Menu → Configuration Main Menu: Configuration -> Se 🛓 🚞 Administration → Server Groups 🚖 Configuration -Filter < Network Elements ...as shown on the Services Server Group Name Level Parent right. Resource Domains drsds_dallastx_grp sds_mrsvnc_grp A Servers Server Groups 10 🛓 🚞 Network sds_mrsvnc_grp sds_mrsvnc_grp

Proc	edure 9.1 Configu	ring the SOAM Server Group (SOAM)						
5.	Active SDS VIP:	Main Menu: Configuration -> Server Groups						
	1) The user will be	Wed Aug 01 19:45:57 2012 UT(						
	"Server Groups"	Server Group Name Level Parent Function Servers						
	configuration screen as shown on the right.	drsds_dallastx_grp A sds_mrsvnc_grp SDS NE Server HA Role Pref VIPs						
		sds_mrsvnc_grp         A         sds_mrsvnc_grp         SDS         NE         Server         HA Role Pref         VIPs           sds_mrsvnc_grp         A         sds_mrsvnc_grp         SDS         sds_mrsvnc         gs-mrsvnc-1         10.250.55.125						
	2) Select the "Insert"	sds_mrsvnc sds-mrsvnc-b SPARE 10.250.55.125						
	dialogue button from the bottom left corner of the screen.	Communication Agent 2						
	NOTE: The user may need to use the vertical scroll-bar in order to make the "Insert" dialogue button visiblo	A Help Insert Edit Delete Report						
6.	Active SDS VIP:	Main Menu: Configuration -> Server Groups [Insert]						
	The user will be	Mon Oct 21 20:08:38 2013						
	"Server Groups	Field Value Description						
	[Insert]" screen as shown on the right.	Server Group Name Server Group Name Galaction Server Gal						
	NOTE: Leave the "WAN Replication Connection Count" blank (it will default to	Level A Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]						
		Parent NONE Select an existing Server Group or NONE						
		Function SDS * Select one of the Functions supported by the system						
	1).	WAN Replication Connection Count Annual Connection Count Annual Connection Count Connection Count Annual Count Connection Count Range – An Integer between 1 and 8.]						
		OK Eppy Gander						
7.	Active SDS VIP:	Field Value Description						
	Input the Server Group Name.	Server Group Name * Unique identifier used to label a Server Gro string. Valid characters are alphanumeric a alpha and must not start with a digit.]						
8.	Active SDS VIP:	Select one of the Levels supported by the						
	Select " <b>B</b> " on the " <b>Level</b> " pull-down menu	Level - Select Level - * servers. Level B groups are optional and servers.]						
		Parent B Select an existing Server Group or NONE						
		hannen ha						
4.0	Active SDS VIP:							
	Select the 1 st SDS	Parent sds_mrsvnc_grp 😪 * Select an existing Server Group						
	Site's server group, as entered in	Function - Select Parent- sds mrsvnc grp * Select one of the Functions sup						
	Procedure 6, Step 7, on the "Parent" pull- down menu	······						

Proc	edure 9.1 Configu	ring the SOAM Server Group (SOAM)
11.	Active SDS VIP: Select "SDS" on the "Function" pull- down menu.	Function       - Select Function - <ul> <li>Select Function -</li> <li>NONE</li> <li>SDS</li> </ul>
12.	Active SDS VIP: 1) The user should be presented with a banner information message stating "Pre-Validation passed". 2) Select the "Apply" dialogue button.	Main Menu: Configuration -> Server Groups [Insert]         Info         Info
13.	Active SDS VIP: The user should be presented with a banner information message stating "Data committed".	Main Menu: Configuration -> Server Groups [Insert]

Proc	edure 9.2 Adding a	a Server to ti	he C	DAM Serve	er Grou	up (SOAN	<b>(</b> )		
14.	Active SDS VIP: Select	Tekelec Subscriber Database Server							
	Main Menu → Configuration → Server Groups	Connected using Connected using Main Menu		to sds-mrsvnc-	a (ACTIVE	NETWORK OAI	nfiguration	-> Server (	Groups
		- Netwo	Network Elements		Filte	Filter -			
	as shown on the	Servic	es Irce Di	omains	Server	r Group Name	Level Parent	Function	Ser
	right.	Server	rs		drsds_	_dallastx_grp	A NONE	SDS	dr_Ş
		Server	r Grou ork		sds_m	nrsvnc_grp	A NONE	SDS	sds
15.	Active SDS VIP:	Main Menu: Co	onfig	uration -> S	erver Gi	oups		Wed Ave	Help 01 10:51:42 2012 UTC
	The Server Group	Filter 🔻						Wed Aug	01 19:51:42 2012 010
	shown on the	Server Group Name	Leve	Parent	Function	Servers			
	"Server Groups"	drsds_dallastx_grp	A	NONE	SDS	NE dr_dallastx	Server drsds-dallastx-a	HA Role Pref	VIPs
	as shown on the right.	sds_mrsvnc_grp	A	NONE	SDS	NE sds_mrsvnc sds_mrsvnc sds_mrsvnc	Server qs-mrsvnc-1 sds-mrsvnc-a sds-mrsvnc-b	HA Role Pref	VIPs 10.250.55.125 10.250.55.125 10.250.55.125
		so_carync_grp	В	sds_mrsvnc_grp	SDS	NE	Server	HA Role Pref	VIPs
16.	SDS Server A:	Main Menu: Co	onfigu	uration -> Se	erver Gro	oups			Help 19:51:42 2012 UTC
	1) Select the Server Group entry applied	Filter 👻							
	in Step 13. The line	Server Group Name	Level	Parent	Function	Servers	Server	HA Role Pref	VIPs
	entry should now be highlighted in	drsds_dallastx_grp	A	NONE	SDS	dr_dallastx	drsds-dallastx-a	UA Dolo Drof	
	GREEN.	sds_mrsvnc_grp	A	NONE	SDS	sds_mrsvnc sds_mrsvnc sds_mrsvnc	qs-mrsvnc-1 sds-mrsvnc-a sds-mrsvnc-b	1 SPARE 1	0.250.55.125 0.250.55.125 0.250.55.125
	2) Select the "Edit"	so_carync_grp	В	sds_mrsvnc_grp	SDS	NE	Server	HA Role Pref	VIPs
	dialogue button from the bottom left corner of the screen. <b>NOTE:</b> The user may need to use the vertical scroll-bar in order to make the <b>"Edit"</b> dialogue button visible.	i i Com SDS Ø Help Z Logo	nmur o out	nication Ag	ent	Insert	Edit Delete	Report	2

Proc	edure 9.2 Adding a	a Server t	o the OAM Ser	ver Group (SOAM)			
17.	Active SDS VIP:	Main Menu: Configuration -> Server Groups [Edit]					
	The user will be				Wed Aug 01 19:55:49 2012		
	"Server Groups	Field V	alue	Description			
	[Edit]" screen as shown on the right.	Server Group Name	so_carync_grp	<ul> <li>Unique identifier used to label a Se</li> <li>string. Valid characters are alphane and must not start with a digit.]</li> </ul>	rver Group. [Default = n/a. Range = A 1-32-character imeric and underscore. Must contain at least one alpha		
		Level	B 🔻 *	Select one of the Levels supported	by the system		
		Parent	sds_mrsvnc_grp 💌 *	Select an existing Server Group or I	NONE		
		Function	SDS 💌 *	Select one of the Functions suppor	ted by the system		
		NTP Server [		The IP Address of a reachable NTF Configurable for level A only. [Rang	server to be used for clock synchronization. e = A valid IP address or blank]		
		NTP Server 2		The IP Address of a backup NTP se Configurable for level A only. [Rang	erver (optional). e = A valid IP address or blank]		
		so_carync					
		Server S	G Inclusion	Preferred HA Role			
		so-carync-a	Include in SG	Preferred Spare			
		so-carync-b	Include in SG	Preferred Spare			
		VIP Assignmen	t				
			VIP Address	Add			
				Ok Apply Cancel			
18.	Active SDS VIP:	so_carync	SC Inclusion	Droforrod UA Dolo			
	Select the "A" server	Server	SG inclusion	Preferred Opera			
	and the " <b>B</b> " server from the list of	so-carync-a	Include in SG	Preferred Spare			
		so-carync-b	Include in SG	Preferred Spare			
	the check box next to						
	their names.						
	SDS Server A:						
19.	SDS Server A.	Main M	enu: Configu	ration -> Server	Groups [Edit]		
	1) The user should be		5				
	presented with a	Info 🗖	•		1		
	message stating	Info					
	"Pre-Validation	r into			<u> </u>		
	passed".		Pre-Validation r	assed - Data NOT commit	used to labe		
			i i o vandatori j		are alphanur		
	2) Select the "Apply"				lgit.]		
	dialogue button.	Network Element	so_carync	✓ * Select	the Network Element f		
			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~		
		3		Ok A			
		Ś					
		<u> </u>			<b>7</b>		
					<u> </u>		

Proc	edure 9.2 Adding	a Server to the OAM Server Group (SOAM)
20.	SDS Server A:	Main Menu: Configuration -> Server Groups [Edit]
	The user should be presented with a	
	banner information message stating	Info Description
	"Data committed".	Data committed!     *     Unique identifier used to label Valid characters are alphanum not start with a digit.1
		Network Element So_carync Select the Network Element for
21.	Active SDS VIP:	
	Click the <b>"Add"</b> dialogue button for the <b>VIP Address</b> .	Add
22	Active SDS VIP:	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
	Input the VIP Address	VIP Address Add 10.240.39.152 Remove
23.	Active SDS VIP:	VIP Address Add
	Click the <b>"Apply"</b> dialogue button.	10.240.39.152 Remove
		Ok Apply Cancel
24.	SDS Server A: 1) The user should be	Main Menu: Configuration -> Server Groups [Edit]
	presented with a banner information	
	message stating "Pre-Validation	Info 🗵
	passed".	Pre-Validation passed - Data NOT committed  used to labe are alphanur git.]
	dialogue button.	Network Element Select the Network Element fr
		VIP Address Add
		10.240.39.152 Remove 2
		Ok Apply Cancel
Proc	edure 9.2 Adding	a Server to the OAM Server Group (SOAM)
------------	-----------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------
25.	SDS Server A: The user should be presented with a banner information message stating "Data committed".	Main Menu: Configuration -> Server Groups [Edit]         Info         Info         • Data committed!         *         Network         So_carync         *         Select the Network Element for
<b>26.</b>	IMPORTANT: Wait at least 5 minutes before proceeding on to the next Step.	<ul> <li>Now that the server(s) have been paired within a Server Group they must establish a master/slave relationship for High Availability (HA). It may take several minutes for this process to be completed.</li> <li>Allow a minimum of <b>5 minutes</b> before continuing to the next Step.</li> </ul>

Proc	edure 9.3 Restarti	ng the OAM Serv	er Application	(SOAM)					
27.	Active SDS VIP:	Tekelec ^{sul}	oscriber Database Serve	r 0 2 2 0	- Care	E.			
$\square$	Select		0-4.0.0_40.4.0						
		Connected using XMI to sds-mrs	svnc-a (ACTIVE NETWORK OAN	1&P)			Welcon	ne <b>guiadm</b>	in [Logout]
	<u>Main Menu</u>	Administration	Main Menu: Sta	tus & Manage -> Ser	ver	v	Ved Aug 0	1 21:06:01	Help 2012 UTC
	→ Status & Manage	Alarms & Events	Filter -				-		
	→ Server	🖬 🚞 Security Log = 😋 Status & Manage	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc
		🔤 Network Elements	dr_dallastx	drsds-dallastx-a	Enabled	Norm	Norm	Norm	Norm
	as shown on the	Server	sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm
	right	Database	sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm
			sds_mrsvnc	qs-mrsvnc-1	Enabled	Norm	Norm	Norm	Norm
	ngna	💽 KPIs							
28.	Active SDS VIP:	Main Menu: Stat	so_carync so_carync tus & Manage -	so-carync-b so-carync-a	Disabled Disabled	Warn Warn	Norm Norm	Norm Norm	Man Man
28.	Active SDS VIP: 1) The "A" and "B" DP-SOAM servers	Main Menu: Stat	so_carync so_carync	so-carync-b so-carync-a > Server	Disabled Disabled	Warn Warn Wed	Norm Norm Aug 01	Norm Norm	Man Man Ø 01 2012
28.	Active SDS VIP: 1) The "A" and "B" DP-SOAM servers should now appear in the right panel. 2) Vorify that the	Main Menu: Stat	so_carync so_carync tus & Manage - Server Hostname	so-carync-b so-carync-a > Server Appl State	Disabled Disabled	Warn Warn Wed	Norm Norm	Norm Norm 21:06: Repor Status	Man Man 01 2012
28.	Active SDS VIP: 1) The "A" and "B" DP-SOAM servers should now appear in the right panel. 2) Verify that the "DB" status shows	Filter Network Element dr_dallastx	so_carync so_carync tus & Manage - Server Hostname drsds-dallastx-a	so-carync-b so-carync-a Server Appl State Enabled	Disabled Disabled	Warn Warn Wed DB	Norm Norm Aug 01	Norm Norm 21:06: Repor Status Norm	Man Man 01 201: ting pro No
28.	Active SDS VIP: 1) The "A" and "B" DP-SOAM servers should now appear in the right panel. 2) Verify that the "DB" status shows "Norm" and the "Proc"	Filter         Network Element         dr_dallastx         sds_mrsvnc	so_carync so_carync tus & Manage - Server Hostname drsds-dallastx-a sds-mrsvnc-a	so-carync-b so-carync-a Server Appl State Enabled Enabled	Disabled Disabled Alm Norm Err	Wam Wam Wed DB No	Norm Norm Aug 01	Norm Norm 21:06: Repor Status Norm Norm	Man Man 01 2012 ting pro No No
28.	Active SDS VIP: 1) The "A" and "B" DP-SOAM servers should now appear in the right panel. 2) Verify that the "DB" status shows "Norm" and the "Proc" status shows "Man" for both servers	Filter         Network Element         dr_dallastx         sds_mrsvnc         sds_mrsvnc	so_carync so_carync tus & Manage - Server Hostname drsds-dallastx-a sds-mrsvnc-a sds-mrsvnc-b	so-carync-b so-carync-a -> Server ->	Disabled Disabled Alm Norm Err Norm	Wam Wam Wed DB No No	Norm Norm Aug 01 rm rm	Norm Norm 21:06: Repor Status Norm Norm Norm	Man Man 01 2012 ting Pro No No No
28.	Active SDS VIP: 1) The "A" and "B" DP-SOAM servers should now appear in the right panel. 2) Verify that the "DB" status shows "Norm" and the "Proc" status shows "Man" for both servers before proceeding to	Main Menu: Stat         Filter         Network Element         dr_dallastx         sds_mrsvnc         sds_mrsvnc         sds_mrsvnc         sds_mrsvnc	so_carync so_carync so_carync tus & Manage - Server Hostname drsds-dallastx-a sds-mrsvnc-a sds-mrsvnc-b qs-mrsvnc-1	so-carync-b so-carync-a -> Server Appl State Enabled Enabled Enabled	Alm Norm Norm Norm	Warn Warn Wed DB No No No	Norm Norm Aug 01 rm rm rm	Norm Norm 21:06: Repor Status Norm Norm Norm Norm	Man Man 01 201: ting Prc No No No No
28.	Active SDS VIP: 1) The "A" and "B" DP-SOAM servers should now appear in the right panel. 2) Verify that the "DB" status shows "Norm" and the "Proc" status shows "Man" for both servers before proceeding to the next Step.	Image: Second system       Image: Second system         Image: Secon	so_carync so_carync tus & Manage - Server Hostname drsds-dallastx-a sds-mrsvnc-a sds-mrsvnc-b qs-mrsvnc-1 so-carync-b	so-carync-b so-carync-a SERVUER State Enabled Enabled Enabled Enabled Disabled	Alm Norm Norm Norm Warn	Warn Warn Wed DB No No No	Norm Norm Aug 01 rm rm rm rm	Norm Norm 21:06: Repor Status Norm Norm Norm Norm Norm	Man Man 01 2012 ting S No No No No



Proc	edure 9.3 Restarti	ng the OAM Serve	r Application(S	OAM)					
30	Active SDS VIP:							Ż	
	Select	🐹 Teke	ec Subscrib	er Databas	se Serv	/er		2 1	
	Main Monu		4.0.0-4.0.0	_40.4.0					
	→ Status & Manage	Connected using X	1I to sds-mrsvnc-a	(ACTIVE NET)	NORK O	M&P)			
	$\rightarrow$ Server	Main Menu		Main Me	nu: St	atus	& Mana	ae ->	
	as shown on the	🕂 🧰 Administrati	on						
	right.	🗖 🚞 Alarms & Ev	ents	Filter 🔻				{	
		🗉 🚞 Security Log 🖃 🚔 Status & Ma	) anage	Network Ele	ment		Server Hostname		
		- 📓 Network	Elements	dr_dallastx			drsds-dalla	stx-a	
		Server		sds_mrsvnc			sds-mrsvnc	≻a Ş	
		🔤 HA	A	sds_mrsvnc			sds-mrsvnc	-b	
		- Martin Kels	5	sds_mrsvnc			qs-mrsvnc-	1 }	
		- Processe	s	so_carync			so-carync-b	<b>`</b>	
31.	Active SDS VIP: Verify that the "Appl State" now shows	Main Menu: Statu	ıs & Manage -> 9	Server	v	Ved Aug (	01 21:09:15	Help 2012 UTC	
	"Enabled" and that the "Alm, DB, Reporting Status &	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc	
	Proc" status columns	dr_dallastx	drsds-dallastx-a	Enabled	Norm	Norm	Norm	Norm	
	all show <b>"Norm</b> " for OAM Server A	sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm	
	before proceeding to	sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm	
	the next Step.	sds_mrsvnc	qs-mrsvnc-1	Enabled	Norm	Norm	Norm	Norm	
	NOTE, If upor	so_carync	so-carync-b	Disabled	Warn	Norm	Norm	Man	
	chooses to refresh	so_carync	so-carync-a	Enabled	Norm	Norm	Norm	Norm	
	the Server status screen in advance of the default setting (15-30 sec.). This may be done by simply reselecting the "Status & Manage → Server" option from the Main menu on the left.								



Proc	edure 9.3 Restarti	ng the OAM Server	Application (S	OAM)				
33.	Active SDS VIP: Select	🚿 Tekel	C Subscrib	er Databas _40.4.0	e Serv	er	0 2	
	Main Menu → Status & Manage → Server as shown on the right.	Connected using XMI Main Menu Administration Configuration Alarms & Ever Security Log Status & Man Network E Server HA Database KPIs Processes	to sds-mrsvnc-a n nts age lements	(ACTIVE NETW Main Mer Filter • Network Eler dr_dallastx sds_mrsvnc sds_mrsvnc sds_mrsvnc so_carync	IORK OA	M&P) atus ( ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	& Manag Server Hostr drsds-dallasi sds-mrsvnc-i sds-mrsvnc-i qs-mrsvnc-1 so-carync-b	JE -
34.	Active SDS VIP: Verify that the "Appl State" now shows	Main Menu: Status	s & Manage -> s	Server [Res	start]	Wed Aug	01 21:14:18	Help 2012 UTC
	the "Alm, DB, Reporting Status &	Network Element	Server Hostname	Appl State	Alm	DB	Reporting Status	Proc
	Proc" status columns	dr_dallastx	drsds-dallastx-a	Enabled	Norm	Norm	Norm	Norm
	OAM Server A and	sds_mrsvnc	sds-mrsvnc-a	Enabled	Err	Norm	Norm	Norm
	OAM Server B	sds_mrsvnc	sds-mrsvnc-b	Enabled	Norm	Norm	Norm	Norm
	the next Step.	sds_mrsvnc	qs-mrsvnc-1	Enabled	Norm	Norm	Norm	Norm
	·	so_carync	so-carync-b	Enabled	Norm	Norm	Norm	Norm
	NOTE: If user	so_carync	so-carync-a	Enabled	Norm	Norm	Norm	Norm
	chooses to refresh the Server status screen in advance of the default setting (15-30 sec.). This may be done by simply reselecting the "Status & Manage → Server" option from the Main menu on the left.							



# 5.9 **DP Installation** (All DP-SOAM sites)

The user should be aware that during the Data Processor (DP) installation procedure, various errors may be seen at different stages of the procedure. During the execution of a step, the user is directed to ignore errors related to values other than the ones referenced by that step.



Step	Procedure	Result
1.	PMAC Server:	Certificate Error: Navigation Blocked - Windows Internet Explorer
	Launch an approved web browser and	
	connect to the XMI IP Address of the PMAC server at the	Eile Edit View Favorites Tools Help
	<b>DP-SOAM site</b> using "https://"	🚖 🕸 🌈 Certificate Error: Navigation Blocked
		Image: Note of the security certificate presented by this website's security certificate.         The security certificate presented by this website was not issued by a trust The security certificate presented by this website was issued for a different.         Security certificate problems may indicate an attempt to fool you or interconserver.
		We recommend that you close this webpage and do not continue to
		Click here to close this webpage.
		Solution to this website (not recommended).
		More information

#### Step Result Procedure **PMAC Server:** 2. The user should be Tekelec presented the login screen shown on the **Tekelec System Login** right. Mon Dec 5 14:55:32 2011 UTC Login to the GUI using the default user Log In and password. Enter your username and password to log in Session was logged out at 2:55:32 pm. Username: pmacadmin Password: •••••••• Change password Log In Unauthorized access is prohibited. This Tekelec system requires the use of Microsoft® Internet Explorer 7.0 or 8.0 with support for JavaScript and cookies. **PMAC Server:** ite 502.18 ] 3. Platform Management & Configuration ekel e 4.0.0 40.11. The user should be presented the PMAC Welcome pmacadmin [Logout] Main Menu as shown 😑 🚊 Main Menu Tekelec Platform Management & Configuration User on the right... Hardware Help Interface 🚞 Software Mon Dec 05 15:01:41 2011 UTC VM Management 💼 Storage Administration 📑 Task Monitoring 🔁 Logout This is the user-defined welcome message. It can be modified using the 'GUI Settings' page under the 'PM&C Administration' menu. BuildingSmartNetworks

#### Step Procedure Result **PMAC Server:** ..:: [ site 502.18 ] ::.. 4. Tekelec Platform Management & Configuration 4.0.0_40.11. Select desired server blade... Main Menu → Hardware 🖃 🚨 Main Menu Enclosure 50101 - Bay 7F 🖻 🚖 Hardware → System Inventory 🖻 🚖 System Inventory → <Enclosure> 🚖 Enclosure 50101 → <Server Blade> 🛓 🚞 Enclosure Info Hardware Software Network 📑 Bay OAR-OA ...as shown on the Bay OBR-OA right. Entity Summary 📑 Bay 1F-Server Blade Entity Type Server Blade Bay 2F-Server Blade Enclosure 50101 Bay 3F-Server Blade Bay 7F 📑 Bay 4F-Server Blade Hot-swap State Active Bay 6F-Server Blade Bay 7F-Server Blade **Board Area** Bay 8F-Server Blade Mfg Date Time N/A Bay 9F-Server Blade Manufacturer Bay 10F-Server Blade Product Name Bay 11F-Server Blade Part Number 643786-B21 Bay 12F-Server Blade Serial Number USE130D8FX Bay 1R-Switch File Id Bay 2R-Switch **PMAC Server:** 5. Enclosure 50101 - Bay 7F Select "Software" tab. Hardware Software etwork ...as shown on the right. **Entity Summary Product Area** Entity Type Server Blade Manufacturer HP Enclosure 50101 Product Name ProLiant BL620c G7 Part Number Bay 7F Product Version 1.20 Mar 14 2011 Hot-swap State Active Serial Number USE130D8FX AssetTag N/A **Board Area** File Id Mfg Date Time N/A Manufacturer Chassis Area Product Name Part Number 643786-B21 Part Number Serial Number USE130D8FX Serial Number USE130D8FX File Id Install OS Cold Reset Warm Reset Upgrade

Step	Procedure		Result			
6.	PMAC Server: Install the operating system by clicking the "Install OS" dialogue button	Enclosure 50101 - Bay Hardware Software Netw Operating System D Operating System CentOS O S Version 5.6 Hostname hostname Platform Software TPD (x86_ Platform Version 5.0.0-72.24	7F work etails 1323359455 64) 8.0			
		Application Details Application Version Function Designation	Upgrade Cold Re	eset	) We	arm Reset
7.	<ul><li>PMAC Server:</li><li>1) Select the desired</li></ul>	oftware Install - Select Image				C Thu Dec 08 15:25:26 201
	2) Click the "Start Install" dialogue button	Targets Entity Status Ent:50101 Bay:7E	Image Name           PD5.0.0_72.28.0x86_84           TPD5.0.0_72.28.0x86_64           TPD5.0.0_72.30.0872-2290-101x86_64           TVOE1.0.0_72.30.0872-2290-101x86_64	SO to Insta Type Bootable Bootable Bootable Bootable	Architecture           x86_64           x86_64           x86_64           x86_64           x86_64	Description official TPD 5.0.0-72.28.0 Release Official TPD 72.20 release ISO for CPA latest TVOE ISO
		edd edd	<u> </u>	Star	t Install	

Step	Procedure	Result
8.	PMAC Server: The user should be presented with an "Are you sure you want to install" message box as shown on the right. Click the "OK" dialogue button	The page at https://10.240.39.4 says:       Image: Constant of the listed entities in the listed entities is the listed entities in the listed entities in the listed entities is the listed entities in the listed entities in the listed entities is the listed entities is the listed entities in the listed entities is the listed entities entities is the listed entities is the listed entities entit entit entities entities entities entities entities
9.	PMAC Server: Note the task number assigned to TPD install. This number will be used to track its progress. This task takes ~25 minutes.	Software Install - Select Image           Targets         Select an I           Entity         Status           Enc:50101 Bay:8E         Task 793           Image Name         TPD5.0.0_72.28.0x86_64           TPD5.0.0_72.20.0x86_64         TPD5.0.0_72.30.0872-2290-101x86_64           TVOE1.0.0_72.30.0872-2290-101x86_64         TVOE1.0.0_72.30.0872-2290-101x86_64
10. 	Repeat this procedure for each additional DP Server. PMAC Server: Select <u>Main Menu</u> → Task Monitoring as shown on the right.	Repeat Steps 3- 9 of this procedure for each additional subtending DPs in the same DP- SOAM enclosure.      SoAM enclosure.      Repeat Steps 3- 9 of this procedure for each additional subtending DPs in the same DP- soAM enclosure.      Repeat Steps 3- 9 of this procedure for each additional subtending DPs in the same DP- soAM enclosure.      Repeat Steps 3- 9 of this procedure for each additional subtending DPs in the same DP- soAM enclosure.      Repeat Steps 3- 9 of this procedure for each additional subtending DPs in the same DP- soAM enclosure.      Repeat Steps 3- 9 of this procedure for each additional subtending DPs in the same DP- soAM enclosure.      Repeat Steps 3- 9 of this procedure for each additional subtending DPs in the same DP- soAM enclosure.      Repeat Steps 3- 9 of this procedure for each additional subtending DPs in the same DP- soAM enclosure.      Repeat Steps 3- 9 of this procedure for each additional subtending DPs in the same DP- soAM enclosure.      Repeat Steps 3- 9 of this procedure for each additional subtending DPs in the same DP- soAM enclosure.      Repeat Steps 3- 9 of this procedure for each additional subtending DPs in the same DP- soAM enclosure.      Repeat 3- 9 of this procedure for each additional subtending DPs in the same DP- soAM enclosure.      Repeat 3- 9 of this procedure for each additional subtending DPs in the same DP- soAM enclosure.      Repeat 3- 9 of this procedure for each additional subtending DPs in the same DP- soAM enclosure.      Repeat 3- 9 of this procedure for each additional subtending DPs in the same DP- soAM enclosure.      Repeat 3- 9 of this procedure for each additional subtending DPs in the same DP- soAM enclosure.      Repeat 3- 9 of this procedure for each additional subtending DPs in the same DP- soAM enclosure.      Repeat 3- 9 of this procedure for each additional subtending DPs in the same DP- soAM enclosure.      Repeat 3- 9 of this procedure for each additional subtending DPs in the same DPs in the same DP- soAM enclosure.

Step	Procedure		Result						
12.	PMAC Server:	ID Tack	Target	Status		Running Time	Start Time	Progress	
	Wait until "Install OS"	1 793 Install OS	Enc: <u>50101</u> Bay: <u>8F</u>	Done: TPD5.0.0_72.	28.0x86_64	0:24:45	2011-12-08 10:28:08	100%	
	tasks show 100%	🝸 792 Install OS	Enc: <u>50101</u> Bay: <u>7F</u>	Done: TPD5.0.0_72.	28.0x86_64	0:25:08	2011-12-08 10:26:42	100%	
	column.	791 Backup PM&C		PM&C Backup succe	ssful	0:00:09	2011-12-08 05:00:01	100%	
	then preceded to	790 Upgrade	Host IP::55ff:fe85:3528 Guest: <u>DP_SOAM_B</u>	Success		0:06:24	2011-12-07 12:24:53	100%	
	the next step.	📋 789 Install OS	Host IP::55ff:fe85:3528 Guest: <u>DP_SOAM_B</u>	Done: TPD5.0.0_72.	28.0x86_64	0:12:00	2011-12-07 11:59:27	100%	
		788 VirtAction: Create	Enc: <u>50101</u> Bay: <u>12F</u> Guest: <u>DP_SOAM_B</u>	Guest creation comp (DP_SOAM_B)	leted	0:00:05	2011-12-07 11:57:55	100%	
13.	Main Menu         → Hardware         → System Inventory         → <enclosure>         → Server Blade&gt;</enclosure>	■ Main Menu Main Menu Main Menu Main Menu Main Menu Main Menu Main Menu Main Menu Main Menu Manu Main Menu Manu Manu Main Menu Manu	Platform I 4.0.0_40.11	Management	& Config Ire 5010 Ire 5010 Ire Softw y Summa Entity Type Enclosure Bay ot-swap State d Area Ifg Date Time Manufacturer Product Name Part Number File Id	Juration 1 - Bay 7 vare Netwo ary Server Blad 50101 7 7F Active N/A 643786-B21 USE130D8F	ZF		

Step	Procedure	Result
14.	PMAC Server: Select the "Software" tab.	Enclosure 50101 - Bay 7F
		Entity Summary         Entity Type       Server Blade         Enclosure       50101         Bay       7F         Hot-swap State       Active         Board Area       Mrg Date Time         Mfg Date Time       N/A         Manufacturer       Product Name         Product Name       USE 130D8FX         Asset Tag       N/A         File Id       Chassis Area         Part Number       USE 130D8FX         Serial Number       USE 130D8FX         File Id       Serial Number
15.	PMAC Server:	Install OS Upgrade Cold Reset Warm Reset Enclosure 50101 - Bay 7F
	1) Verify the correct TPD is shown.	Hardware Software Network
	2) Verify "Application Details" are blank.	Operating System Details         Operating System CentOS         O S Version 5.6         Hostname hostname1323359455         Platform Software TPD (x86_64)         Platform Version 5.0.0-72.28.0
		Install OS Upgrade Cold Reset Warm Reset

Step	Procedure	Result
16.	PMAC Server: 1) Select the "Network" tab.	Enclosure 50101 - Bay 7F
	2) Make note of the control IP address for this DP, called "bond0"; it will be referenced later	Hardware     Software     Network       Networking Details for hostname1326745072       Interface     IP Address     Admin     Operational       bond0     192.168.1.226     Up     Up
	<b>3)</b> Select the " <b>Upgrade</b> " button.	Install OS Upgrade Cold Reset Warm Reset 3
17.	PMAC Server: 1) Select the correct SDS version from the "Image Name" list.	Software Upgrade - Select Image Thu Dec 08 16:01:34 Targets Select an ISO to Upgrade on the listed Entities
	The line entry should	Entity Status
	now be highlighted in	Enc:50101 Bay.7F Image Name Type Architecture Description
	GREEN.	USDS-3.0.0_10.4.0872-2358-102x86_64 Upgrade x86_64 Upgrade x86
		NWPCC7_5.0.0_50.10.0_972-2232.101_v06_Lingradev06_6.4CC7.textF0.
	2) Select the "Start	TPD5.0.0.72.280-x86.64 Pontable V86.64 official TPD 6.0.0.72.29.0. Polacea
	Upgrade ["] dialogue	TPD-5.0.0_72.20.0*X00_04 Dottable X00_04 Unitial TPD 3.0.0*72.28.0 Release
	button	TPD5.0.0_72.80-x86.64 Bootable x86.64 ISO for OPA
		DSR-3.0.0_30.14.1872-2329-103x86_64 Upgrade x86_64 Iso for ComAgent/CPA performance testing
		DSR30.0_30.13.0872-2329-102x86_64 Upgrade x86_64 official DSR 30.13.0 Release
		DSR3.0.0_30.14.0872-2329-103x86_64 Upgrade x86_64 Official DSR 30.14 release
		DSR3.0.0 30.11.0872-2329-101x86 64 Upgrade x86 64 Official DSR 30.11 build.
		TVOE-1.0.0 72.30.0-872-2290-101-x86 64 Bootable x86 64 latest TVOE ISO
		Start Upgrade

Step	Procedure	Result								
18.	PMAC Server:	The page at https://10.240.39.4 says:		×						
	The user should be presented with an " <b>Are you sure you</b> want to upgrade" message box	Are you sure you want to upgrade to SDS3.0.0_10.4.0872-2358-102x86_64 on the listed entities?								
	as shown on the right.									
	Click the " <b>OK</b> " dialogue button.									
19.	PMAC Server:	Software Upgrade - Select Image		5						
	Note the task number assigned to TPD install. This number will be used to track its progress.	Targets Select an ISC	D to Upgra	ide or						
	-	Enc:50101 Bay:8F Task 795 Image Name	Туре	Arc						
	This task takes ~21	SDS3.0.0_10.4.0872-2358-102x86_64	Upgrade	x86						
	minutes.	DSR3.0.0_30.13.1872-2329-102x86_64	Upgrade	x86,						
		AWPSS75.0.0_50.10.0872-2332-101x86_	Upgrade	x86\$						
		TPD5.0.0_72.28.0x86_64	Bootable	x86						
		TPD5.0.0_72.20.0x86_64	Bootable	x86,>						
		TPD5.0.0_72.8.0x86_64	Bootable							
		DSR3.0.0_30.14.1872-2329-103x86_64	Upgrade	×86						
		DSR3.0.0_30.13.0872-2329-102x86_64	Upgrade	x86						
		DSR3.0.0_30.14.0872-2329-103x86_64	Upgrade	x86,						
20.	Repeat <b>Steps 11 - 19</b> c	f this procedure for each subtending <b>DP</b> servers installed in the same DP-SOAM en	closure.	>						

Step	Procedure			Result				
21.	PMAC Server: Select	.::: [site 502.18] :: <b>Tekelec</b> Platform 4.0.0_40.11	Management & Configuration 1.	n			Welcome pm	acadmin (Logout)
	<u>Main Menu</u>	<ul> <li>Main Menu</li> <li>Hardware</li> <li>Software</li> </ul>	Background Task Mo	nitoring			Tue Dec 20 1	.Help δ:37:52 2011 UTC
	Task Monitoring	🧰 📑 Software Inventory 🗽 📑 Manage Software Images	Filter -	T	Charles	Durania a Tim	Charles Times	0
		📔 VM Management	B 836 Upgrade	Enc:50101 Bay:8F	In Progress	0:00:59	2011-12-20	60%
		Administration	835 Upgrade	Enc: <u>50101</u> Bay: <u>7F</u>	In Progress	0:01:00	2011-12-20	60%
		Ecological Contents	834 Backup PM&C		PM&C Backup successfu	ıl 0:00:09	2011-12-20	100%
	as shown on the		833 Upgrade	Host IP::55ff:fe85:3528	Success	0:06:13	2011-12-19	100%
	right.		832 Upgrade	Host IP::85ff:feda:22f0	Success	0:06:12	2011-12-19	100%
			831 Install OS	Host IP::55ff:fe85:3528 Guest: DP_SOAM_B	Done: TPD5.0.0_72.28.0	x86_64 0:11:48	2011-12-19	100%
			830 Install OS	Host IP::85ff:feda:22f0 Guest: DP SOAM A	Done: TPD5.0.0_72.28.0	x86_64 0:11:45	2011-12-19 11:24:08	100%
			Backup PM&C		PM&C Backup successfu	ıl 0:00:09	2011-12-19 05:00:01	100%
			828 Backup PM&C		PM&C Backup successfu	ıl 0:00:09	2011-12-18 05:00:01	100%
				Delete Comple	eted Delete Failed D	Delete Selected		
	PMAC Server	ID Task	Target	Status		Running Time	Start Time	Progress
22.		795 Upgrade	Enc: <u>50101</u> Bay: <u>8F</u>	Success		0:12:11	2011-12-08 11:02:33	100%
	Wait until " <b>Upgrade</b> " tasks show 100%	🗂 794 Upgrade	Enc: <u>50101</u> Bay: <u>7F</u>	Success		0:12:08	2011-12-08 11:01:56	100%
	under the <b>Progress</b> column.	📋 793 Install OS	Enc: <u>50101</u> Bay: <u>8F</u>	Done: TPD5.0.0_72	2.28.0x86_64	0:24:45	2011-12-08 10:28:08	100%
	then preceded to	792 Install OS	Enc: <u>50101</u> Bay: <u>7F</u>	Done: TPD5.0.0_72	2.28.0x86_64	0:25:08	2011-12-08 10:26:42	100%
	the next step.	791 Backup PM&C		PM&C Backup succ	cessful	0:00:09	2011-12-08 05:00:01	100%
		790 Upgrade	Host IP::55ff:fe85:3528 Guest: <u>DP_SOAM_B</u>	Success		0:06:24	2011-12-07 12:24:53	100%
		ma,	Host IP::55ff:fe85:3528				2011-12-07	
23	PMAC Server::							
	Click the "Logout"		Welcome <b>pma</b>	c <mark>idmin</mark> <u>[Log</u>	out]			
	link on the PMAC	5						
	server GUI.			🤣_H	elp			
		Ş	Tue Dec 20 15:	37:52 2011 U	тс			
		}						
		Running Time	Start Time	Progress				
				rigicaa	•			
		0:02:57	2011-12-20					

Proc	edure 10.1 Configu	uring the Database Processor Server (DP)						
24	Active SDS VIP:							
	Launch an approved	Certificate Error: Navigation Blocked - Windows Internet Explorer						
	web browser and connect to the XMI	Image: State of the state of t						
	Virtual IP address	Share Browser WebEx -						
	Active SDS site using "https://"	2 Certificate Error: Navigation Blocked						
		There is a problem with this website's security certificate.						
		The security certificate presented by this website was not issued by a trusted certificate authority. The security certificate presented by this website was issued for a different website's address.						
		Security certificate problems may indicate an attempt to fool you or intercept any data you send to the server.						
		We recommend that you close this webpage and do not continue to this website.						
		Ø Click here to close this webpage.						
		Solution continue to this website (not recommended).						
		More information						
25	Active SDS VIP:							
<b>2</b> 5.	The user should be presented the login screen shown on the right.	Tekelec System Login						
	Login to the GUI							
	using the default user and password.	Log In Enter your username and password to log in						
		Username: quiadmin						
		Password						
		Log In						
		Welcome to the Tekelec System Login.						
		Unauthorized access is prohibited. This Tekelec system requires the use of Microsoft Internet Explorer 7.0 or 8.0 with support for JavaScript and cookies.						

Proc	edure 10.1 Config	uring the l	Database P	rocesso	r Server (D	P)	
26.	Active SDS VIP: The user should be presented the SDS Main Menu as shown on the right.	Connected using Main Mentu Main Mentu Main Mentu Main Mentu Main Mentu Main Mentu Masure Measure Measure Commun Status & Commun Measure	elec Subscrib 4.0.0-4.0.0 g XMI to hostname1345 gration k Events Log k Manage ements hication Agent	per Database _40.4.0 5124587 (ACTIV Main Men	Server () E NETWORK OAM&P) U: [Main]		Welcome guiadmin [Logout] @ Help — Thu Aug 16 17:50:29 2012 UTC
		e ■ Maint e ■ Maint e ♥ Help E Logout	garaton			Inis is the user-defined wercome message. It can be modified using the 'Options' tab under the 'Administration' menu.	
27.	Active SDS VIP: Select	😹 Te	kelec	Subscrib	er Database	Server	
	Main Menu → Configuration → Servers	Connected	using VIP to sds enu iinistration figuration	3.0.0-3.0.0	0_10.7.1 (ACTIVE NETWO ain Menu: Co Filter ▼	rk oam&p) onfiguration -> Ser	vers
	right.	 	Services Services	Ho	stname	Role	Server Group
		Server Groups Server Groups Alarms & Events		sd sd	s-mrsvnc-a s-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp
28.	Active SDS VIP: Select the "Insert" dialogue button.	I I SI	DS elp ogout		Insert	Delete Export R	eport
29.	Active SDS VIP:	Adding a	new server				
	presented with the	Attribute	Value		Description		
	"Adding a new server" configuration	Host Name		*	Unique name for the Valid characters are alphanumeric and	ne server. [Default = n/a. Range = e alphanumeric and minus sign end with an alphanumeric.]	= A 20-character string. . Must start with an
	Scieen.	Role	- Select Role -	*	Select the function	of the server	
		Hardware Profile	TVOE Guest	*	Hardware profile of	f the server	
		Network Element Name	- Unassigned - 💉	*	Select the network	element	
		Location			Location description is any text string.]	on [Default =  . Range = A 15-cha	aracter string. Valid value
					Ok Apply Ca	ancel	

Proc	edure 10.1 Config	uring the Database Processor Server (DP)
30.	Active SDS VIP: Input the assigned "hostname" for the Database Processor (DP).	Adding a new server         Attribute       Value       Description         Host Name       dp-carync-1       *       Unique name for the server. [Default = n/a. Range = A 20 character string. Valid characters are alphanumeric and minus sign. Must start with an alphanumeric and end wit an alphanumeric.]
31.	Active SDS VIP: Select "MP" for the server Role from the pull-down menu.	Role       MP       *       Select the function of the server         Hardware       - Select Role -       +       Hardware profile of the server         Profile       NETWORK OAM&P       V1        Hardware profile of the server         Network       MP       QUERY SERVER       Select the network element
32.	Active SDS VIP: Select "SDS HP c- Class Blade V2" for the Hardware Profile for the DP-SOAM from the pull-down menu.	Hardware Profile       SDS TVOE Guest       ✓         Network Element Name       SDS HP c-Class Blade V2 SDS HP c-Class Blade V0 SDS HP c-Class Blade V1 SDS HP c-Class Blade V1 SDS HP Rack Mount       Select the network element         Location       SDS HP c-Class Blade V1 SDS HP Rack Mount       Location description [Default = "". Range string.]
33.	Active SDS VIP: Select the Network Element Name of the DP-SOAM site where the DP is physically located from the list of available NEs in the pull-down menu NOTE: After the Network Element Name is selected, the Interfaces fields will be displayed, as seen in Step 35.	Network       - Unassigned - *       Select the network element         Name       - Unassigned -       Select the network element         Location       - sds_mrsvnc       Location description [Default = character string. Valid value is so carync         Ok       Apply       Cancel
34.	Active SDS VIP: Enter the site location. NOTE: Location is an optional field.	Location description [Default = character string. Valid value is

Active SDS VIP:	Interfaces:	Interfaces:					
1) Enter the YMLIB	Network	IP Address	Interface				
address and IMI IP	XMI (10.240.39.128/25)	10.240.39.154	bond1 💌 🗌 VLAN (3)				
address for the DP-	IMI (10.240.38.64/26)	10.240.38.82	bond0 🛩 🗹 VLAN (4)				
SOAM Server.		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~!			
2) Set the XMI Interface to "bond1" and do NOT check the VLAN box.							
3) Set the IMI Interface to "bond0" and check the VLAN box.							
Active SDS VIP:	NTP Servers:		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~			
1) Click the "NTP Servers:" "Add"	NTP Server IP Address	Prefer	Add				
dialogue button.			Ok Apply Cancel				
2) Enter the NTP Server IP Address		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~			
for an NTP Server.	NTP Servers:		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~			
3) If you have another	NTP Server IP Address	Prefer	Add				
NTP Server IP	10.250.32.10		Remove				
<b>address</b> , repeat (1) and (2) to enter it.	\$	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~			
1) Optionally aliak		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		~~~~~			
	S NIP Servers.						
the " <b>Prefer</b> " checkbox to prefer one NTP	NTP Server IP Address	Prefer	Add				
the " <b>Prefer</b> " checkbox to prefer one NTP Server over the other.	NTP Server IP Address	Prefer	Remove				
the " <b>Prefer</b> " checkbox to prefer one NTP Server over the other.	NTP Server IP Address 10.250.32.51 10.250.32.10	Preter	Remove				

Proc	edure 10.1 Config	uring the Database Pro	cessor Server (DP)	
37.	Active SDS VIP: 1) The user should be	Main Menu: Config	juration -> Servers [In	isert]
	presented with a banner information message stating <b>"Pre-Validation</b> <b>passed"</b> . <b>2)</b> Click the <b>"Apply"</b> dialogue button	Info  Info Info Info Info Info Info Info Info	n passed - Data NOT committed Unique name 20-character s and minus sig IP Address 10.240.39.154 10.240.38.82 Okl Apply Cancel	1 solutions for the server tring. Valid ch in. Must start v interface 2 bond1 ♥ □ VLAN (3) bond0 ♥ ♥ VLAN (4)
38.	Active SDS VIP: If the values provided match the network ranges assigned to the NE, the user will receive a banner information message showing that the data has been validated and committed to the DB.	Main Menu: Configurati	on -> Servers [Insert] Description Unique name for the server. [DV Valid characters are alphanum alphanumeric and end with an	<u></u>

Proce	edure 10.2 Applyir	ng the Databas	e Processo	r Configurat	ion file(DI	<b>P</b> )		
39.	Active SDS VIP:		_					
	Select	😹 Teke	lec Subso	criber Databas	se Server		Ş	
	Main Menu → Configuration → Servers as shown on the right.	Connected using V Main Menu Administrat Configurati Network Services	onnected using VIP to sds-mrsvnc-a         Image: Services		work oam&p) Configurati Role	on -> Servo	E <b>rs</b> Server Group	
		Servers Server Groups Network Alarms & Events		sds-mrsvnc-a Netw sds-mrsvnc-b Netw		vork OAM&P vork OAM&P	sds_mrsvnc_grp sds_mrsvnc_grp	
<b>40.</b>	Active SDS VIP: On the "Configuration	Main Menu: Configuration -> Servers						
	→Servers [™] screen, find the newly added	Hostname	Role	Server Group	Network Element	Location	Details	
	DP server in the list.	sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc		XMI: 10.250.55.124 IMI: 169.254.100.11	
	Note: The DP server	sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.128 IMI: 169.254.100.12	
	will have a <b>MP</b> ²⁷ role.	qs-mrsvnc-1	Query Server	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.127 IMI: 169.254.100.13	
		drsds-dallastx-a	Network OAM&P	drsds_dallastx_grp	sds_mrsvnc	Dallas_TX	XMI: 10.250.55.161 IMI: 169.254.100.14	
		so-carync-a	System OAM	so_carync_grp	so_carync	Cary_NC	XMI: 10.240.39.150 IMI: 10.240.38.78	
		so-carync-b	System OAM	so_carync_grp	so_carync	Cary_NC	XMI: 10.240.39.151 IMI: 10.240.38.79	
		dp-carync-1	MP		so_carync	Cary_NC	XMI: 10.240.39.154 IMI: 10.240.38.82	

Proc	edure 10.2 Applyir	ng the Databas	e Process	or Configur	ation file(	DP)		
41	Active SDS VIP:	Hostname	Role	Server Group	Network Element	Location	Details	
	1) Using the mouse,	sds-mrsvnc-a	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc		XMI: 10.250.55.124 IMI: 169.254.100.11	
	added DP server	sds-mrsvnc-b	Network OAM&P	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.128 IMI: 169.254.100.12	
	containing the server with a " <b>MP</b> " role	qs-mrsvnc-1	Query Server	sds_mrsvnc_grp	sds_mrsvnc	Morrisville_NC	XMI: 10.250.55.127 IMI: 169.254.100.13	1
	should now be	drsds-dallastx-a	Network OAM&P	drsds_dallastx_grp	sds_mrsvnc	Dallas_TX	XMI: 10.250.55.161 IMI: 169.254.100.14	1
	GREEN.	so-carync-a	System OAM	so_carync_grp	so_carync	Cary_NC	XMI: 10.240.39.150 IMI: 10.240.38.78	
	2) Select the	so-carync-b	System OAM	so_carync_grp	so_carync	Cary_NC	XMI: 10.240.39.151 IMI: 10.240.38.79	
	"Export" dialogue button from the	dp-carync-1	MP		so_carync	Cary_NC	XMI: 10.240.39.154 IMI: 10.240.38.82	
		Insert Del	lete Export	Validate				
42.	Active SDS VIP:	Main Menu: C	Configurati	on -> Serve	ers [Expor	t]		
	The user will receive a banner information	Filter - Info	0 🔻				Wed Dec 1	4 19:3
	message showing a download link for the	Hostname					$\frown$	
	data.	sde-mrevne-a	Exported	d server data in TI	<pre>KLCConfigData.d</pre>	p-carync-1.sh m	na) be <u>downloaded</u>	
	Click on the word	Sus-misvic-a		<i>(</i>				
	"download and save	sds-mrsvnc-b	OAM&P	10.250.5	5.1: 169.254.100	sds_mrsvnc_g	rp sds_mrsvnc	Me
	the file.	drsds-dallastx-a	OAM&P	10.250.5	5.1 169.254.100	drsds_dallastx_	_grt dr_dallastx	Day
1								

Procedure 10.2 Apply	ving the Database Processor Configuration file (DP)
Active SDS VIP:	File Download
1) Click the "Save" dialogue button.	Do you want to open or save this file?
<ul> <li>2) Save the DP server configuration file to a USB flash drive.</li> <li>3) Click the "Close"</li> </ul>	Name: TKLCConfigData.dp-carync-1.sh Type: sh_auto_file, 1.71KB From: 10.250.55.125
dialogue button	While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not open or save this file. <u>What's the risk?</u>
	Save As       Image: Comparison of the compa
	Download Complete       3        CConfigData.dp-carync-1.sh from 10.250.55.125         Downloaded:       1.71KB in 1 sec         Download to:       E:\TKLCConfigData.dp-carync-1.sh         Transfer rate:       1.71KB/Sec         Close this dialog box when download completes         Open       Open Folder
44.     Repeat this procedure for each additional DP Server.	<ul> <li>Repeat Steps 27 - 43 of this procedure for each additional DP server installed in the DP- SOAM cabinet.</li> </ul>

Proc	edure 10.2 Applyi	ng the Database Processor Configuration file (DP)
45.	Active SDS VIP: Click the "Logout" link on the SDS server GUI.	Welcome guiad nin [Logout] Fri Nov 18 14:43:32 2011 UTC ge = A 1-32-character string. at least one alpha and must
46.	Active SDS Server: Access the server console.	<ul> <li>Connect to the Active SDS VIP console using one of the access methods described in Section 2.3.</li> </ul>
47.	<ul> <li>Active SDS Server:</li> <li>1) Access the command prompt.</li> <li>2) Log into the OAM server as the "root" user.</li> </ul>	CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.22.0 on an x86_64 hostname1260476035 login: root Password: <root_password></root_password>
48.	Active SDS Server: Output similar to that shown on the right will appear as the server access the command prompt.	<pre>*** TRUNCATED OUTPUT *** VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/c omagent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@sds-mrsvnc-a ~]#</pre>
49.	Active SDS Server: Change directory to filemgmt	[root@sds-mrsvnc-a ~]# cd /var/TKLC/db/filemgmt
50.	Active SDS Server: Attain directory listing. Look for the configuration file(s) that have just been generated for the DP(s). This should appear toward the bottom of the output.	<pre>[root@sds-mrsvnc-a filemgmt]# ls -ltr TKLCConfigData*.sh *** TRUNCATED OUTPUT *** -rw-rw-rw- 1 root root 2042 Dec 20 10:54 TKLCConfigData.dp-carync-1.sh -rw-rw-rw- 1 root root 2042 Dec 20 10:57 TKLCConfigData.dp-carync-2.sh</pre>

Proc	edure 10.2 Applyi	ng the Database Processor Configuration file (DP)
51.	Active SDS Server: Use scp to copy the file(s) to the PMAC server.	<pre>[root@sds-mrsvnc-a filemgmt]# scp -p <configuration_file-1> <configuration_file- 2&gt; root@<pmac_ip>:/tmp root@10.240.39.4's password: TKLCConfigData.dp-carync-1.sh 100% 1757 1.7KB/s 00:00 TKLCConfigData.dp-carync-2.sh 100% 1757 1.7KB/s 00:00[root@sds-mrsvnc-a filemgmt]#</pmac_ip></configuration_file- </configuration_file-1></pre>
<b>52.</b>	PMAC Server: Access the server console.	<ul> <li>Connect to the PMAC Server console using one of the access methods described in Section 2.3.</li> </ul>
53.	PMAC Server: Copy the server configuration file to the Control IP for the DP. Note: The Control IP for each DP is obtained in Step 16 of this procedure.	<pre>[root@hostname1260476035 ~]# scp -p /tmp/<configuration_file> root@<dp_control_ip>:/var/TKLC/db/filemgmt root@192.168.1.226's password: TKLCConfigData.dp-carync-1.sh 100% 1757 1.7KB/s 00:00 [root@pmac ~]#</dp_control_ip></configuration_file></pre>
54.	PMAC Server: Connect to the DP server console from the PMAC Server Console.	<pre>[root@pmac ~]# ssh <dp_control_ip> root@192.168.1.226's password: <root_password></root_password></dp_control_ip></pre>
55.	<b>DP Server:</b> Output similar to that shown on the right will appear as the server access the command prompt	<pre>*** TRUNCATED OUTPUT *** VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/c omagent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@hostname1260476035 ~]#</pre>

Proc	edure 10.2 Applyi	ng the Database Processor Configuration file (DP)
56	DP Server:	Example:
	Copy the <b>SDS DP</b> configuration file to the "/var/tmp" directory on the server, making sure to rename the file by omitting the server hostname (shown in red) from the file name.	<pre>TKLCConfigData&lt;.server_hostname&gt;.sh → will translate to →TKLCConfigData.sh [root@hostname1260476035 ~]# cp -p /var/TKLC/db/filemgmt/TKLCConfigData.dp- carync-1.sh /var/tmp/TKLCConfigData.sh</pre>
	<b>NOTE:</b> The server will poll the / <b>var/tmp</b> directory for the presence of the configuration file and automatically execute it when found.	
57.	DP Server:	*** NO OUTPUT FOR $\approx$ 3-20 MINUTES ***
	After the script completes, a broadcast message	Broadcast message from root (Mon Dec 14 15:47:33 2009):
	will be sent to the	Server configuration completed successfully!
	terminal.	See /var/TKLC/appw/logs/Process/install.log for details.
	<b>NOTE:</b> The user should be aware that the time to complete this step varies by server and may take from 3-20 minutes to complete.	Please remove the USB flash drive if connected and reboot the server.

Proc	Procedure 10.2 Applying the Database Processor Configuration file (DP)				
58.	Accept upgrade to the Application Software.	<pre>[root@hostname1260476035 ~]# /var/TKLC/backout/accept Called with options:accept Loading Upgrade::Backout::RPM Accepting Upgrade Setting POST_UPGRADE_ACTION to ACCEPT in upgrade info. Cleaning backout directory. Clearing Upgrade Accept/Reject alarm. Cleaning up RPM config backup files Checking / Checking / Checking / Checking / koot Checking / Checking / var Checking / var Checking / var Checking / var Checking / var Checking / var Checking / var/TKLC Checking / var/TKLC Checking / var/TKLC Checking / var/TKLC/appw/logs/Process Checking / var/TKLC/appw/logs/Security Checking / var/TKLC/dpfilemgmt Checking / var/TKLC/db/filemgmt Checking / var/TKLC/undb Starting Cleanup of RCS repository. INFO: Removing '/var/lib/prelink/force' from RCS repository INFO: Removing '/etc/my.cnf' from RCS repository INFO: Removing '/etc/my.cnf' from RCS repository [root@hostname1260476035 ~]# set_ini_tz.pl <time zone=""> Note: The following command example uses Etc/UTC time zone. Replace, as appropriate, with the time zone you have selected for this installation.</time></pre>			
		[root@hostname1260476035 ~]# set_ini_tz.pl "Etc/UTC"			
<b>60.</b>	<b>DP Server:</b> Initiate a reboot of the DP.	[root@hostname1260476035 ~]# init 6			
61.	<b>DP Server:</b> Output similar to that shown on the right may be observed as the server initiates a reboot.	<pre>[root@hostname1260476035 ~]# Connection to 192.168.1.226 closed by remote host. Connection to 192.168.1.226 closed. [root@pmac ~]#</pre>			
62.	PMAC Server: After the DP server has completed reboot Re-connect to the DP server console from the PMAC Server Console	<pre>[root@pmac ~]# ssh <dp_control_ip> root@192.168.1.226's password: <root_password></root_password></dp_control_ip></pre>			

Procedure 10.2 Applying the Database Processor Configuration file (DP)										
63	DP Server:	*** TRUNCATED OUTPUT ***								
	After the server has completed reboot Verify that the server console returns to a login prompt.	<pre>VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpss7:/usr/TKLC/exhr PRODPATH=/opt/TKLCcomcol/cm5.13/prod RUNID=00 WARNING: There are not any servers to send notifications to. The subsys lock will be createdcompleteTasks started: Sun Dec 13 17:21:03 2009 LOG FILE: /var/TKLC/log/TaskMgr/completeTasks.log SysmgmtDB database tables exist</pre>								
		CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.20.0 on an x86_64 dp-carync-1 login: <b>root</b>								
		Password: <root_password></root_password>								
<b>64.</b>	<ul> <li>DP Server:</li> <li>1) Verify that the XMI IP address input in Step 35 has been applied to "bond1".</li> <li>2) Verify that the IMI IP address input in Step 35 has been applied to "bond0.4".</li> <li>NOTE: Exact bond configuration may vary for custom network implementations.</li> </ul>	<pre>[root@dp-carync-1 ~]# ifconfig  grep in  grep -v inet6 bond0 Link encap:Ethernet HWaddr B4:99:BA:AC:BD:64 inet addr:192.168.1.226 Bcast:192.168.1.255 Mask:255.255.255.0 bond0.4 Link encap:Ethernet HWaddr B4:99:BA:AC:BD:64 inet addr:10.240.38.82 Bcast:10.240.38.127 Mask:255.255.255.192 bond1 Link encap:Ethernet HWaddr B4:99:BA:AC:BD:64 inet addr:10.240.39.154 Bcast:10.240.39.255 Mask:255.255.255.128 eth01 Link encap:Ethernet HWaddr B4:99:BA:AC:BD:64 eth02 Link encap:Ethernet HWaddr B4:99:BA:AC:BD:64 lo Link encap:Ethernet HWaddr B4:99:BA:AC:BD:64 lo Link encap:Local Loopback inet addr:127.0.0.1 Mask:255.0.0.0 [root@dp-carync-1 ~]#</pre>								
<b>65.</b>	DP Server: Use "ping" to verify that the "bond1" device now has connectivity to the XMI Gateway address associated with the NE. NOTE: Use the <ctrl-c> key combination to</ctrl-c>	<pre>[root@dp-carync-1 ~]# ping 10.240.39.154 PING 10.240.39.154 (10.240.39.154) 56(84) bytes of data. 64 bytes from 10.240.39.154: icmp_seq=1 ttl=64 time=0.034 ms 64 bytes from 10.240.39.154: icmp_seq=2 ttl=64 time=0.018 ms 64 bytes from 10.240.39.154: icmp_seq=3 ttl=64 time=0.019 ms 64 bytes from 10.240.39.154: icmp_seq=4 ttl=64 time=0.018 ms 64 bytes from 10.240.39.154: icmp_seq=5 ttl=64 time=0.021 ms 64 bytes from 10.240.39.154: icmp_seq=6 ttl=64 time=0.019 ms</pre>								
	terminate the "ping" process after a few seconds.	<pre>6 packets transmitted, 6 received, 0% packet loss, time 5000ms rtt min/avg/max/mdev = 0.018/0.021/0.034/0.007 ms [root@dp-carync-1 ~]#</pre>								

Procedure 10.2 Applying the Database Processor Configuration file (DP)									
66.	DP Server:	[root@dp-carync-1 ~]# <b>ping 10.240.38.82</b>							
	Use <b>"ping"</b> to verify that the <b>"bond0.4"</b> device now has connectivity to the <b>IMI</b> <b>Gateway address</b> associated with the NE.	PING 10.240.38.82 (10.240.38.82) 56(84) bytes of data. 64 bytes from 10.240.38.82: icmp_seq=1 ttl=64 time=0.038 ms 64 bytes from 10.240.38.82: icmp_seq=2 ttl=64 time=0.020 ms 64 bytes from 10.240.38.82: icmp_seq=3 ttl=64 time=0.019 ms 64 bytes from 10.240.38.82: icmp_seq=4 ttl=64 time=0.021 ms 64 bytes from 10.240.38.82: icmp_seq=5 ttl=64 time=0.018 ms 64 bytes from 10.240.38.82: icmp_seq=6 ttl=64 time=0.024 ms							
	<b>NOTE:</b> Use the <b><ctrl-c> key</ctrl-c></b> combination to terminate the "ping" process after a few seconds.	10.240.38.82 ping statistics 6 packets transmitted, 6 received, 0% packet loss, time 5000ms rtt min/avg/max/mdev = 0.018/0.023/0.038/0.007 ms [root@dp-carync-1 ~]#							
67.	<b>DP Server:</b> Use the " <b>ntpq</b> "	<pre>[root@dp-carync-1 ~]# ntpq -np     remote refid st t when poll reach delay offset jitter</pre>							
	command to verify that the server has connectivity to the assigned Primary and Secondary NTP server(s).	*10.250.32.10 192.5.41.209 2 u 15 64 377 0.238 4.384 1.405 +10.250.32.51 192.5.41.209 2 u 21 64 377 0.263 3.749 1.358 [root@dp-carync-1 ~]#							



IF CONNECTIVITY TO THE NTP SERVER(S) CANNOT BE ESTABLISHED, STOP AND EXECUTE THE FOLLOWING STEPS:

- 1) Contact the customer to verify that the IP addresses for the NTP server(s) are correct.
- 2) Have the customer IT group provide a network path from the OAM server IP to the assigned NTP IP addresses.

ONCE NETWORK CONNECTIVITY IS ESTABLISHED TO THE ASSIGNED NTP IP ADDRESSES, THEN RESTART THIS PROCEDURE BEGINNING WITH STEP 67.

Procedure 10.2 Applying the Database Processor Configuration file (DP)								
68.	DP Server: Execute a "syscheck" to verify the current health of the server.	[root@dp-carync-1 ~]# <b>syscheck</b> Running modules in class hardware						
		Running modules in class disk OK						
		Running modules in class net OK						
		Running modules in class system OK						
		Running modules in class proc OK						
		LOG LOCATION: /var/TKLC/log/syscheck/fail_log [root@dp-carync-1 ~]#						
69.	DP Server::	[root@dp-carync-1 ~]# exit						
	Exit from the command line to return the server console to the login prompt.	Connection to 192.168.1.199 closed. [root@pmac ~]#						
<b>70.</b>	Repeat Steps 53 - 69 of this procedure for each subtending DP server installed in the same DP-SOAM enclosure.							
71.	PMAC Server:	[root@pmac ~]# exit						
	Exit from the PMAC server.							

Proc	edure 10.3 Configu	uring the Databa	se Proce	ssor Se	rver Group (DP)					
70	Active SDS VIP:									
	Select	Tekelec Subscriber Database Server								
	<u>Main Menu</u>	Connected using XMI to sds-mrsvnc-a (ACTIVE NETWORK OAM&P)								
	→ Configuration	Main Menu: Configuration -> Server Groups								
	→ Server Groups	Configuration Network Eler	ments	Filter -						
	as shown on the right.		mains DS	ns           Server Group Name         Level         Parent         Function         Ser           drsds_dallastx_grp         A         NONE         SDS         dr_						
		i i Network	~~~~~~	sds_mrs	sync_grp A NONE SDS sds					
73	Active SDS VIP:									
	1) The user will be	Main Menu: Configu	iration -> S	erver Gro	Ups 🔗 Help Wed Aug 01 21:35:45 2012 UTC					
	"Server Groups"	Server Group Name Level	Parent	Function	Servers					
	as shown on the	drsds_dallastx_grp A	NONE	SDS	NE Server HA Role Pref VIPs					
	right. 2) Select the "Insert" dialogue button from the bottom left corner of the sources	sds_mrsvnc_grp A	NONE	SDS	NE         Server         HA Role Pref         VIPs           sds_mrsvnc         qs-mrsvnc-1         10.250.55.125           sds_mrsvnc         sds-mrsvnc-a         10.250.55.125           sds_mrsvnc         sds-mrsvnc-b         SPARE					
		so_carync_grp B	sds_mrsvnc_grp	SDS	NE         Server         HA Role Pref         VIPs           so_carync         so-carync-a         10.240.39.152         10.240.39.152           so_carync         so-carync-b         10.240.39.152         10.240.39.152					
	NOTE: The user may need to use the vertical scroll-bar in order to make the "Insert" dialogue button visible.									
74.	Active SDS VIP:	Main Menu: Conf	iguration ·	-> Serve	r Groups [Insert] 🛛 🔌					
	The user will be	Mon Oct 21 20:08:38 201								
	resented with the "Server Groups	Field	Value		Description					
	[Insert]" screen as shown on the right.	Server Group Name	sds_mrsvi	nc_grp	Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]					
	NOTE: Leave the	Level	A	•	Select one of the Levels supported by the system. [Level A groups contain NOAMP and Query servers. Level B groups are optional and contain SOAM servers. Level C groups contain MP servers.]					
	"WAN Replication Connection Count"	Parent	NONE	-	Select an existing Server Group or NONE					
	blank (it will default to	efault to		-	Select one of the Functions supported by the system					
	1).	WAN Replication Connection C	Count	-	any WAN connection associated with this Server Group. [Default = 1. Range = An Integer between 1 and 8.]					
		OK Apply Cancel								

Proc	edure 10.3 Config	uring the Dat	tabase Proces	ssor Server (	Group (DP)					
75.	Active SDS VIP:	Field		~~~~~~	Description	~~~~>				
	Input the <b>Server</b> Group Name.	Server Group Name	dp_carync_1_gr	р *	Unique identifier used to label a Server G character string. Valid characters are alp contain at least one alpha and must not	Group hanu				
	Note: Each DP will have its own server group. Group names may be differentiated by assigning each a unique name.			~~~~~						
76.	Active SDS VIP:									
	Select " <b>C</b> " on the " <b>Level"</b> pull-down	Level - S	Select Level - 💙 * Select Level -	Select one o NOAMP and servers. Lev	f the Levels supported by the system. [Level A groups co Query servers. Level B groups are optional and contain el C groups contain MP servers.]	SOAM				
	menu.	Parent B	• *	Select an exi	isting Server Group or NONE	Ş				
			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~		~~~~				
77.	Select System OAM	Parent	- Select Parent	- 🔽 *	Select an existing Server Group or NON	IE }				
	group on the " Parent " pull-down menu.	Function	- Select Parent sds mrsvnc gr	*	Select one of the Functions supported t	by the				
			so carync grp		Ok Apply Cancel	Ş				
78.	Active SDS VIP: Select "SDS" on the "Function" pull- down menu.	Function	SDS - Select Function NONE SDS	✓ * S	celect one of the Functions supported by the sy Ok Apply Cancel	/stem				
79.	Active SDS VIP:	Main Menu	: Configuratio	on -> Server	Groups [Insert]					
	1) The user should be presented with a	Info 🔻								
	banner information	Info								
	message stating "Pre-Validation passed".		re-Validation passed	- Data NOT commit	i to label a Serve s are alphanume art with a digit 1					
	2) Select the "Apply"	Level	of the Levels supported by rs. Level B groups are option							
	dialogue button.		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					
			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					
		Parent		so_carync_grp	Select an existing Server Grou					
		Function		SDS	Select one of the Functions su	2				
		WAN Replicatio	n Connection Count		Specify the number of TCP cor associated with this Server Gr					
					Ok Apply Cancel					

Procedure 10.3 Configuring the Database Processor Server Group (DP)								
<b>80.</b>	Active SDS VIP: The user should be presented with a	Main Menu: Configuration -> Server Groups [Insert]						
	presented with a banner information message stating <b>"Data committed"</b> .	Info       Oescription         Info       Output         Info       Info         Info       Output         Info       Info         Info       Output         Info       Info         Info       Info         Info       Info         Info       Info         Info       Info         Info						

Proc	edure 10.4 Adding	the Databa	se P	rocessor	into th	e DP Serv	ver G	roup (DP	)			
81.	Active SDS VIP: Select	Tekelec Subscriber Database Server										
	Main Menu → Configuration → Server Groups	Connected using XMI to sds-mrsvnc-a Gamma Administration Gamma Configuration				a (ACTIVE NETWORK OAM&P) Main Menu: Configuration -> Server Groups						
		- Netw	ork El	ements	Filt	Filter						
	as shown on the	Services Resource Domains Servers Server Groups			Serve	er Group Name	Level	Parent	Functi	on Servers		
	right.				dp_ca	arync_1_grp _dallastx_grp	C A	so_carync_grp	SDS SDS	dr dalla		
		🛓 🧰 Netw	ork									
82.	Active SDS VIP: The user will be	Main Menu: Configuration -> Server Groups										
	Presented with the "Configuration →	Server Group Name	Leve	el Parent	Function	Servers				<		
	Server Groups"	dp_carync_1_grp	С	so_carync_grp	SDS	NE		Server H	A Role Pref	VIPs		
	screen as shown on	drsds_dallastx_grp	Α	NONE	SDS	NE dr_dallastx	drsd	Server H Is-dallastx-a	A Role Pref	VIPs		
	the light	sds_mrsvnc_grp	A	NONE	SDS	NE sds_mrsvnc sds_mrsvnc sds_mrsvnc	qs-n sds- sds-	Server H nrsvnc-1 mrsvnc-a mrsvnc-b SPA	A Role Pref RE	VIPs 10.250.55.125 10.250.55.125 10.250.55.125		
		so_carync_grp	в	sds_mrsvnc_grp	SDS	NE so_carync so_carync	S0-0 S0-0	Server H arync-a arync-b	A Role Pref	VIPs 10.240.39.152 10.240.39.152		
			~~~	~~~~~~	~~~~~	~~~~~~	~~~~	~~~~~~	~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
02	Active SDS VIP:	Server Group Name	Level	Parent	Function	Servers						
65.	1) Using the mouse	dp_carync_1_grp	С	so_carync_grp	SDS	NE	Se	rver HA Rol	e Pref	VIPs		
	select the MP Server Group associated with the DP being installed.	drsds_dallastx_grp	A	NONE	SDS	NE dr_dallastx	Se drsds-da	rver HA Rol Illastx-a	e Pref	VIPs		
		sds_mrsvnc_grp	A	NONE	SDS	NE sds_mrsvnc sds_mrsvnc sds_mrsvnc	Se qs-mrsv sds-mrs sds-mrs	rver HA Rol nc-1 vnc-a vnc-b SPARE	e Pref 10.1 10.1 10.1	VIPs 250.55.125 250.55.125 250.55.125		
	2) Select the "Edit"	so_carync_grp	в	sds_mrsvnc_grp	SDS	NE so_carync so_carync	Se so-caryn so-caryn	rver HA Rol c-a c-b	le Pref 10.: 10.:	VIPs 240.39.152 240.39.152		
	of the screen.	Con Con SD9 Ø Help E Log	nmur ; ; out	nication Ag	ent	Insert	Edit	Delete R	eport	2		
Proc	edure 10.4 Adding	the Data	abase Processo	r into the DP Server Group (DP)								
-------------	---	-------------------------	---------------------	--								
84.	Active SDS VIP: The user will be	Main Mer	u: Configuration -	> Server Groups [Edit]								
	presented with the											
	Server Groups	Field	Value	Description								
	[Edit]" screen as shown on the right	Server Group Name	dp_carync_1_grp	Unique identifier used to label a Server Group. [Default = n/a. Range = A 1-32-character * string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]								
		Level	C 💌 *	Select one of the Levels supported by the system								
		Parent	so_carync_grp 💌 *	Select an existing Server Group or NONE								
		Function	SDS 💌 *	Select one of the Functions supported by the system								
		NTP Server 1		The IP Address of a reachable NTP server to be used for clock synchronization. Configurable for level A only. [Range = A valid IP address or blank]								
		NTP Server 2		The IP Address of a backup NTP server (optional). Configurable for level A only. [Range = A valid IP address or blank]								
		so_carync										
		Server	SG Inclusion	Preferred HA Role								
		dp-carync-1	Include in SG	Preferred Spare								
		VIP Assignme	ent									
			VIP Address	Add								
				Ok Apply Cancel								
95	Active SDS VIP:	so_carynd	:									
0 5.	Select the "DP"	Server	SG Inclusion	Preferred HA Role								
	server from the list of	dp-carync-	-1 🗹 Include in SG	Preferred Spare								
	"Servers" by clicking											
	name.											
	Active SDS VIP:	Main M	lonui Configura	tion -> Server Croups [Edit] \langle								
86.			ienu. connyura									
	1) The user should be	Info	•									
	presented with a	Info										
	message stating											
	"Pre-Validation		Pre-Validation pass	sed - Data NOT committed to label a Ser								
	passed".			art with a digit								
		Laval	0									
	 Select the "Apply" dialogue button. 											
		VIP Assignme	ent									
			VIP Address	Add 2								
				Ok Apply Cancel								

Proc	edure 10.4 Adding	the Database Processor into the DP Server Group (DP)
87.	Active SDS VIP: The user should be presented with a banner information message stating "Data committed".	Main Menu: Configuration -> Server Groups [Edit]
88.	Repeat Steps 72 - 87 c unique group for each l	f this procedure for each subtending DP server installed in the same DP-SOAM enclosure, <i>using a</i> DP .
89.	IMPORTANT: Wait at least 5 minutes before proceeding on to the next Step.	 Now that the Database Processor(s) have been placed within their respective Server Groups, each must establish DB replication with the Active DP-SOAM server at the NE. It may take several minutes for this process to be completed. Allow a minimum of 5 minutes before continuing to the next Step.

Proc	edure 10.5 Restar	ting the Database P	rocessor Ap	plicati	on (DP)			
00	Active SDS VIP:								
90.	Select	🚿 Tekele	C Subscribe 4.0.0-4.0.0_4	r Datab 40.4.0	ase Ser	ver	0	2 3	
	Main Menu	Connected using XMI to	sds-mrsvnc-a (ACTIVE N	FTWORK O	AM&P)			
	→ Status & Manage	 Main Menu 							
	→ Server	🗖 🚊 🚞 Administration		Main M	lenu: St	tatus	& Manag	je -> (
		🖬 🚞 Configuration		Filtor	_				
	as shown on the	🖬 💼 Alarms & Events		Filler	<u> </u>				
	right.	🔄 🧰 Security Log 🔄 📥 Status & Manage	2	Network	Element		Server Host	name	
		- 🔤 Network Elem	ients	dr_dallas	tx		drsds-dallas	stx-a	
		- Server		sds_mrs	vnc		sds-mrsvnc-	-a	
		HA		sds_mrs	vnc		sds-mrsvno	-b	
				sds_mrs	vnc		qs-mrsvnc-1	I	
91.	Active SDS VIP: Verify that the "DB & Reporting" status columns all show	Main Menu: Status	& Manage -	> Serve	er	_	=Wed Aug 01	L 21:47:30	Help 2012 UTC
	"Norm" for the DP at this point. The "Proc" column	Network Element	Server Hostname		Appl State	Alm	DB	Reporting Status	Proc
	should show "Man".	dr_dallastx	drsds-dallastx-a		Enabled	Norm	Norm	Norm	Norm
		sds_mrsvnc	sds-mrsvnc-a		Enabled	Err	Norm	Norm	Norm
		sds_mrsvnc	sds-mrsvnc-b		Enabled	Norm	Norm	Norm	Norm
		sds_mrsvnc	qs-mrsvnc-1		Enabled	Norm	Norm	Norm	Norm
		so_carync	so-carync-b		Enabled	Norm	Norm	Norm	Norm
		so_carync	so-carync-a		Enabled	Norm	Norm	Norm	Norm
		so_carync	dp-carync-1		Disabled	Warn	Norm	Norm	Man

Procedure 10.5 Restarting the Database Processor Application (DP)



Proc	edure 10.5 Restar	ting the Database P	rocessor A	pplicati	on (Di	P)			
93.	Active SDS VIP: Select	🚿 Tekele	C Subscribe 4.0.0-4.0.0	er Datab 40.4.0	ase Se	rver	0	2 0	
	Main Menu → Status & Manage → Server as shown on the right.	Connected using XMI to Connected using XMI to Administration Administration Alarms & Events Configuration Alarms & Events Security Log Security Log Network Elem Server	sds-mrsvnc-a (ACTIVE N Main M Filter Network dr_dallas sds_mrs	ETWORK (Ienu: S T Element tx vnc	DAM&P) Status	& Mana Server Hos drsds-dalla sds-mrsvn	ge -> S stname astx-a c-a	Ser
		💽 HA 💽 Database		sds_mrs	/nc		sds-mrsvn	c-b	Ę
94.	Active SDS VIP: Verify that the "Appl State" now shows "Enabled" and that	SDS VIP: that the "Appl now shows Filter •							
	the "Alm, DB, Reporting Status &	Network Element	Server Hostname	9	Appl State	Alm	DB	Reporting Status	Proc
	Proc" status columns	dr_dallastx	drsds-dallastx-a		Enabled	Norm	Norm	Norm	Norm
	all show "Norm" for	sds_mrsvnc	sds-mrsvnc-a		Enabled	Err	Norm	Norm	Norm
		sds_mrsvnc	sds-mrsvnc-b		Enabled	Norm	Norm	Norm	Norm
		sds_mrsvnc	qs-mrsvnc-1		Enabled	Norm	Norm	Norm	Norm
		so_carync	so-carync-b		Enabled	Norm	Norm	Norm	Norm
		so_carync	so-carync-a		Enabled	Norm	Norm	Norm	Norm
		so_carync	dp-carync-1		Enabled	Norm	Norm	Norm	Norm
95.	Repeat this procedure for each additional DP Server.	Repeat Steps 90 SOAM cabinet.) - 94 of this pro	ocedure fo	r each ac	ditional	DP server	⁻ installed	in the DP-
		THIS PROCEDU	RE HAS BEE	N COMP	LETED				

Note: After all DP servers have been installed, the user can configure the ComAgent by following steps in Appendix F.

5.10 Configuring ComAgent

This procedure configures the ComAgent that allows the SDS Data Processor servers and the DSR Message Processor servers to communicate with each other. These steps cannot be executed until all SDS DP servers are configured.

Step	Procedure	Result
1.	Active SDS VIP:	Certificate Error: Navigation Blocked - Windows Internet Explorer
	Launch an approved	
	connect to the XMI	Elle Edit View Favorites Iools Help
	(VIP) of the Active	
	SDS site using "https://"	There is a problem with this website's security certificate.
		The security certificate presented by this website was not issued by a trusted certificate authority. The security certificate presented by this website was issued for a different website's address.
		Security certificate problems may indicate an attempt to fool you or intercept any data you send to the server.
		We recommend that you close this webpage and do not continue to this website.
		Click here to close this webpage.
		Source continue to this website (not recommended).
		More information
2	Active SDS VIP:	
	The user should be	
	presented the login screen shown on the	Tekelec
	right.	Tekelec System Login Thu Nov 17 16:03:36 2011 UTC
	Login to the GUI	
	using the default user and password.	Log In Enter your username and password to log in
		Username: guiadmin
		Password:
		Change password
		Log In
		Welcome to the Tekelec System Login.
		Unauthorized access is prohibited. This Tekelec system requires the use of Microsoft Internet Explorer 7.0 or 8.0 with support for JavaScript and cookies.

Procedure 11: Configuring comAgent (All DP-SOAM sites)

Procedure 11: Configuring comAgent (All DP-SOAM sites)

3.	Active SDS VIP: The user should be presented the SDS Main Menu as shown on the right.	Connected using XMI to sds-r Connected using XMI to sds-r Configuration Communication Agent Communication	Subscriber Database Server	Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q
4.	Active SDS VIP: Select	🚿 Tekelec	Subscriber Database Serve	
	Main Menu →Communication Agent →Configuration →Remote Servers as shown on the right.	Connected using XMI to set Main Menu Configuration Configuration Security Log Security Log Communication Age Communication Age Communication Age Configuration Remote Server Connection G Connection G Remote Server	s-mrsvnc-a (ACTIVE NETWORK OAM Main Menu: Con Servers Filter • Remote Server Name	Name Welcome guiadmir Inmunication Agent -> Configuration -> Remote Wed Aug 01 21:56:36 2012 Remote Server IP Address Remote Server IP Address
5.	Active SDS VIP: Select the "Insert" dialogue button	🖬 🦳 SDS 🛷 Help 🚰 Logout	Insert Edi	t Delete
6 .	Active SDS VIP: Enter the "Remote Server Name" for the DSR Message Processer server	Field Value Remote Server F Name F	alue RDU08MP1 *	Description Unique identifier used to label a Remote Server. [Default: n/a; Range: A 32-character string. Valid underscore. Must contain at least one alpha and

7.	Active SDS VIP: Enter the "Remote Server IMI IP Address".	Remote Server IP Address 169.254.2.6 * This is the IP address of the Remote Server. Default: n/a; Range: A valid IPv4 address.
		NOTE: This should be the IMI IP address of the MP blade.
8.	Active SDS VIP: Select "Client" for the Remote Server Mode from the pull- down menu.	Remote Server Mode Client * Identifies the mode in which the Remote Server operates can be Client, Server Client Server Client Server Server Server Server Server DP_righnc_1_grp < DP_drhmnc_1_grp <
9	Active SDS VIP:	<u> </u>
	Select the Local Server Group for the SDS Data Processer server group	DP_righnc_1_grp DP_drhmnc_1_grp OK Add selected Local Server Groups:
40	Active SDS VIP:	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
	Click the " Apply " dialogue button	Image: Server Groups image: Server

Procedure 11: Configuring comAgent (All DP-SOAM sites)

Procedure 11:	Configuring comAgent	(All DP-SOAM sites)
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11.	Active SDS VIP: Under the "Info" banner option, the user should be presented with a message stating "Data committed"	Main Menu: Communication Agent -> Configuration -> Remote Servers [Insert] Info Info Obscription Unique identifier used to label a Remote Server. [Default: n/a; Range: A 32-character string. Valid characters are alphanum alpha and must not start with a digit] Remote Server IP Address 169.254.2.6 * Default: n/a; Range: A valid IPv4 address. Remote Server Mode Client * Identifies the mode in which the Remote Server operates can be Client, \$ *** DP_righnc_1_grp DP_drhmnc_1_grp DP_drhmnc_1_grp Ok Apply Cance
12.	Repeat steps	5 - 11 of this procedure for each remote MP in the same SOAM NE.
		THIS PROCEDURE HAS BEEN COMPLETED

Appendix A. Accessing the iLO VGA Redirection Window

Step	Procedure	Result
1.	Launch an approved web browser and connect to the iLO interface NOTE: <i>Always use https://</i> <i>for iLO GUI access.</i>	Home - Windows Internet Explorer
2.	The web browser will display a warning message regarding the Security Certificate.	 Certificate Error: Navigation Blocked There is a problem with this website's security certificate. The security certificate presented by this website was not issued by a trusted of The security certificate presented by this website has expired or is not yet valid The security certificate presented by this website was issued for a different well Security certificate problems may indicate an attempt to fool you or intercept server. We recommend that you close this webpage and do not continue to this Click here to close this webpage. Continue to this website (not recommended). More information
3.	Select the option to "Continue to the website (not recommended)	 We recommend that you close this webpage and do not continue to this website. Click here to close this webpage. Continue to this website (not recommended). More information

Appendix A: Accessing the iLO VGA Redirection Window

Appendix A: Accessing the iLO VGA Redirection Window

4.	Login to the iLO console as "admin"	Integrated Lights-Out 2 HP Proliant Login name: edmin Passwort: Log In
5.	The admin GUI is displayed.	Integrated Lights-Out 2 HP Prolont System Status Remote Console Artual Media Power Management Administration Status Summary 2
	Select the " Remote Console " tab in the upper left corner of the GUI.	Summary Server Name: sds-mrsvnc-a; ProLiant DL360 G6 System Server Name: sds-mrsvnc-a; ProLiant DL360 G6 System System ROM: DSE137N1LP / 484184-B21 UUID: 31343834-3438-5355-4531-33374E314C50 IkO 2 Log System ROM: P64 05/05/2011; backup system ROM: 05/05/2011 System Health: © 0k Diagnostics Server Power: Momentary Press ILO 2 User UD Light: Turn UD 0n © 0FF Last Used Remote Console: Launch Integrated Remote Console Latest IML Entry: [Repaired] System Power Supplies Not Redundant ILO 2 Name: ILO 2 PGDN: ILOUSE137N1LP. Iabs.nc.tekelec.com nc.tekelec.com tekelec.com License Type: iLO 2 Advanced ILO 2 Firmware Version: 2.06 05/31/2011 IP address: 10.250.36.247 Active Sessions: iLO 2 Sure: tekelec Latest ILO 2 Event Log Entry: Browser logout: tekelec - 10.25.80.123(DNS name not found). iLO 2 Date/Time: 02/17/2012 14:34:47
6.	The Remote Console Information GUI is	Integrated Lights-Out 2 HP ProLiant
	Click on the "Integrated Remote Console" option	Information Settings Integrated Remote Console Access the system KVM and control Virtual Power & Media from a single console under Microsoft Internet Explorer. Integrated Remote Console Fullscreen Re-size the Integrated Remote Console to the same display resolution as the remote host. Exit the console to return to your client desitop. Remote Console Access the system KVM from a Java applet-based console requiring the availability of a JVM. Remote Serial Console Access a VT320 serial console from a Java applet-based console connected to the iLO 2 Virtual Serial Port. This console requires the availability of a JVM.

Appendix A: Accessing the iLO VGA Redirection Window



Appendix B. HP DL360 BIOS Settings

Appendix B: HP DL360 BIOS Settings

Step	In this procedure you	will configure BIOS settings and IPM each HP DL360 G6 server under test.
1.	Insert TPD Media into the server under test.	Open the CD/DVD media drive in the server to be tested. Insert the TPD media into the optical drive. The KVM should be connected and the screen for the server to be tested ready.
2.	Access the Server BIOS	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. As soon as you see F9=Setup in the lower left corner of the screen, press [F9] 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.
		Expected Result: ROM-Based Setup Utility is accessed and the ROM-Based Setup Utility menu will be displayed.

Appendix B: HP DL360 BIOS Settings

3.	Set DL360 Server	Scroll to Date and Time and press [ENTER]
		Set the date and time and press [ENTER].
		ROM-Based Setup Utility, Version 3.00 Copyright 1982, 2010 Hewlett-Packard Development Company, L.P.
		System Options Power Management Op PCI IRQ Settings PCI Device Enable/D Standard Boot Order Boot Controller Ord Date and Time Server Availability Server Availability BIOS Serial Console & EMS System Default Options Utility Language HMM Modify Date and Time Kenter And Time System Default Options Utility Language HMM Modify Date and Time Kenter And Time Kenter And Time System Default Options Utility Language HMM Modify Date and Time Kenter And Time
		Expected Result: Correct Time & Date is set.
4.	Configure iLO serial port settings	The serial ports on HP DL360 G6 rack mount servers need to be configured so the serial port used by the BIOS and TPD are connected to the "VSP" on the iLO. This will allow the remote administration of the servers without the need for external terminal servers. If this configuration has not been completed correctly and the server rebooted, the syscheck "syscheck -v hardware serial" test will fail.
		Select System Options option and press [ENTER].
		Select Serial Port Options option and press [ENTER].
		Change Embedded Serial Port to COM2 and press [ENTER].
		Change Virtual Serial Port to COM1 and press [ENTER].
		Press <esc> two times</esc>

Appendix B: HP DL360 BIOS Settings

5.	Configure Power Management Options settings	The Power Management Options on HP DL360 G6 rack mount servers used in SDM need to be configured for optimum SDM software performance.	
		Select Power Management Options option and press [ENTER].	
		Select HP Power Profile option and press [ENTER].	
		Change it to Maximum Performance and press [ENTER].	
		Press <esc> two times</esc>	
6.	Save Configuration and Exit	Press [F10] to save the configuration and exit. The server will reboot	
		ROM-Based Setup Utility, Version 3.00 Copyright 1982, 2010 Hewlett-Packard Development Company, L.P. System Options Power Management Options PCI IRQ Settings PCI Dev Standar (F10) to Confirm Exit Utility Boot Co Pate and Time Server Availability Server Security BIOS Serial Console & EMS S Current Boot Controller	
		A PCI Embedded HP Snart Array P410i Controller Itility Language Press < TAB> for More Information Expected Result: Settings are saved and server reboots.	
	THIS PROCEDURE HAS BEEN COMPLETED		

NOTE: These settings are current as of ORACLE Communications Document 820-6641-01, Revision B. (Manufacturing Acceptance Test Plan, Subscriber Data Management Rack Mount Servers) [4]. Please refer to the latest revision for current values.

Appendix C. Creating Temporary External IP Address for Accessing SDS GUI

This procedure creates a temporary external IP address that will be used for accessing the SDS GUI prior to configuring the first SDS server. This procedure assumes that the user has access to the ILO and can access an external (XMI) network at the customer site.

Step	In this procedure you will configure a temporary external IP Address for SDS Server A for the 1 st SDS site. The user will use this IP Address in a web browser to access the GUI to configure the first SDS server.		
1.	Log onto the SDS Server A ILO as indicated in Appendix A	CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.22.0 on an x86_64 hostname1260476221 login: root	
	NOTE: Output similar to that shown on the right will appear.	Password: <root_password></root_password>	
2.	Delete bond0	<pre>[root@hostname1260476221 ~]# netAdm deletedevice=bond0 Interface eth01 was updated. Interface eth02 was updated. Interface bond0 was removed [root@hostname1260476221 ~]#</pre>	
3.	Add XMI IP address to the first SDS server (SDS-A) and have it use interface eth02	<pre>[root@hostname1260476221 ~]# netAdm setdevice=eth02 onboot=yesnetmask=255.255.255.0 address=<xmi_ip_address_for_sds_a> Interface eth02 was updated. Interface eth02 updated [root@hostname1260476221 ~]#</xmi_ip_address_for_sds_a></pre>	
4.	Add route to the default gateway for the first SDS site	<pre>[root@hostname1260476221 ~]# netAdm adddevice=eth02 route=defaultgateway=<xmi_ip_address_for_default_gateway> Route to eth02 added [root@hostname1260476221 ~]#</xmi_ip_address_for_default_gateway></pre>	
5.	Wait a few minutes and then ping the default gateway to ensure connectivity.	<pre>[root@hostname1260476221 ~]# ping <xmi_ip_address_for_default_gateway> [root@hostname1260476221 ~]#</xmi_ip_address_for_default_gateway></pre>	
6.	Log off the ILO	<pre>[root@hostname1260476221 ~]# exit CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.22.0 on an x86_64 [root@hostname1260476221 ~] login:</pre>	
7.	Important NOTE: This interface must be un-configured	NOTE: If this method is used, then the eth02 interface must be un-configured in Step 41 of Procedure 2 in Section 5.1, " <i>Configuring SDS Servers A and B</i> (<i>1st SDS site only</i>)":	
		THIS PROCEDURE HAS BEEN COMPLETED	

Appendix C: Creating Temporary External IP Address for Accessing SDS GUI

Appendix D. Establishing a Local Connection for Accessing the SDS GUI

This procedure contains steps to connect a laptop to the SDS-A server via a directly cabled Ethernet connection and setting the IP address of the laptop. This procedure enables the user to use the laptop for accessing the SDS GUI prior to configuring the first SDS server.

Step	In this procedure you will configure a temporary external IP Address for SDS Server A for the 1 st SDS site. The user will use this IP Address in a web browser to access the GUI to configure the first SDS server.		
1.	Access the SDS-A server's console.	Connect to the SDS-A server's console using one of the access methods described in Section 2.3 .	
2 .	 Access the command prompt. Log into the SDS-A server as the "root" user. 	CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.22.0 on an x86_64 hostname1260476221 login: root Password: <root_password></root_password>	
3.	Configure static IP 192.168.100.11 on the eth14 port of the SDS-A server.	<pre>[root@hostname1260476221 ~]# netAdm setdevice=eth14 address=192.168.100.11netmask=255.255.255.0onboot=yes [root@hostname1260476221 ~]#</pre>	
4.	 Plug in one end of the Ethernet cable (straight-thru) into the back of SDS-A server ETH14 (top left port). Plug the other end of the Ethernet cable into the laptop's Ethernet jack. 	HP DL360, DC (Rear Panel) HP DL360, DC (Rear Panel) H4 13 12 11 H0 UID H0 UID H0 UID H0 UID	

Appendix D: Establishing a Local Connection for Accessing SDS GUI

Appendix D: Establishing a Local Connection for Accessing SDS GUI

5. Access the laptop network interface card's TCP/IP "Properties" screen. NOTE: For this step follow the instruction specific to the laptop's OS (XP, Vista or Win 7).	 Windows XP Go to Control Panel Double-click on Network Connections Right-click the wired Ethernet Interface icon and select "Properties" Select "Internet Protocol (TCP/IP)" and select "Properties" 	 Windows Vista / Win 7 Go to Control Panel. Double-click on Network and Sharing Center Select Manage Network Connections (left menu) Right-click the wired Ethernet Interface icon and select "Properties" Select "Internet Protocol Version 4 (TCP/IPv4)"
	Local Area Connection Properties General Advanced Connect using: Configure Broadcom NetXneme Gigabit Etheme Configure This connection uses the following items: Configure This connection trees when this connector Connectivity	Local Area Connection Properties General Advanced Connect using: Properties Properties Pite and Printer Sharing for Microsoft Networks Pile and Printer Sharing for Microsoft Networks Pile and Printer Sharing for Microsoft Networks Pile and Printer Sharing for Microsoft Networks Pile and Printer Sharing for Microsoft Networks Pile and Printer Sharing for Microsoft Networks Pile and Printer Sharing for Microsoft Networks Pile and Printer Sharing for Microsoft Networks Pile and Printer Sharing for Microsoft Networks Poperties Properties Install Uninstall Properties Show icon in notification area when connected Notify me when this connection has limited or no connectivity
 6. 1) Set the IP address and netmask of the laptop's network interface card to an IP address within the same network subnet as the statically assigned IP address used in Step 3 of this procedure (192.168.100.100 is suggested) and click "OK". 2) Click "Close" from the network interface card's main "Properties" screen. 	Internet Protocol (TCP/IP) Properties General You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings. Obtain an IP address: IP address: IP address: Subnet mask: Obtain DNS server address automatically Ottain DNS server address automatically Ottain DNS server address automatically Ottain DNS server: Attemate DNS server: Advanced OK Cancel	Local Area Connection Properties General Advanced Connect using: Broadcom NetXtreme Gigabit Etheme Configure This connection uses the following items: This connection uses the following items: Image: Configure items Image: Content for Microsoft Networks Image: Configure items Image: Configure items Image: Configure items

• The user can now launch an approved web browser on this laptop and connect to <u>https://192.168.100.11</u> to access the SDS GUI using a temporary IP address.

Appendix E. Configure Cisco 4948E-F Aggregation Switches

These switch configuration procedures require that the SDS hardware (servers and switches) are installed in a frame as indicated in the below picture:

U	SDS - DC- Seismic	
44		~
43	PDP-A	×.
42		₽.
41	OPEN	
40	FILLER PANEL	
39	FILLER PANEL	
38	FILLER PANEL	
37	FILLER PANEL	
36	FILLER PANEL	
35	FILLER PANEL	
34	FILLER PANEL	
33	FILLER PANEL	
32	FILLER PANEL	
31	SWITCH B (Cisco 4948E-F)	
30	FILLER PANEL	S N
29	SWITCH A (Cisco 4948E-F)	
28	FILLER PANEL	
27	FILLER PANEL	
26	FILLER PANEL	
25	FILLER PANEL	
24	FILLER PANEL	
23	FILLER PANEL	
22	FILLER PANEL	
21	FILLER PANEL	
20	FILLER PANEL	
19	FILLER PANEL	
18	FILLER PANEL	
17	FILLER PANEL	
16	FILLER PANEL	
15	FILLER PANEL	
14	FILLER PANEL	
13	FILLER PANEL	
12	FILLER PANEL	
11	FILLER PANEL	
10	FILLER PANEL	
9	FILLER PANEL	
8	FILLER PANEL	
1	FILLER PANEL	
6	SERVER C - QUERY (HP DL360 G6)	ERS
5	SERVER B - SDS NOAM (HP DL360 G6)	RV
4	SERVER A - SDS NOAM (HP DL360 G6)	S
3		
2		
1	FILLER PANEL	

Figure 7 – SDS Frame Layout

E.1 Verifying Cisco Switch Wiring (SDS sites)

Step Procedure Result Set/Verify the Port 1 Port 47 Port 49 Console Port 1. following cable configuration at the Cisco 4948E-F switches: Port switch1B 52 1) Verify that the Port 2 Port 48 Management (Top) Port ISL from ... switch1A, Port 1 to switch1B, Port 1 is Port 1 Port 47 Port 49 Console Port CONNECTED. 2) Verify that the ISL from... switch1A, Port 2 Port 52 switch1A Port 2 to Port 48 Management Port (Bottom) switch1B, Port 2 is Figure 8 - Cisco 4948E-F Switches CONNECTED. 3) Verify that the ISL from... switch1A, Port 3 to switch1B, Port 3 is CONNECTED. 4) Verify that the ISL from ... switch1A, Port 4 to switch1B, Port 4 is CONNECTED.

Appendix E.1: Verifying Cisco Switch Wiring (SDS sites)



Appendix E.1: Verifying Cisco Switch Wiring (SDS sites)



E.2 Configure Cisco 4948E-F Aggregation Switches

Steps within this procedure may refer to variable data indicated by text within "<>". Refer to this table for the proper value to insert depending on your system type.

CAUTION!! All netConfig commands must be typed *exactly* as they are shown here! Input is case sensitive, there is no input validation, and some terminal clients will inject bad characters if you backspace! Use Ctrl-C to exit netConfig if you make a mistake on any field and re-run that command.

Variable	management server	Seri	al Port (DL360)
<switch1a_serial_port></switch1a_serial_port>	server1A	ttyS	4
<switch1b_serial_port></switch1b_serial_port>	server1A	ttyS	5
Variable	Cisco WS-C4948E-F		
<ios_image_file></ios_image_file>	Fill in the appropriate val	ue fro	om [6]:
Variable			Value
<switch_platform_userna< td=""><td>ame></td><td></td><td>Contact Oracle's Tekelec Customer Support.</td></switch_platform_userna<>	ame>		Contact Oracle's Tekelec Customer Support.
<switch_platform_passw< td=""><td>ord></td><td></td><td>Contact Oracle's Tekelec Customer Support.</td></switch_platform_passw<>	ord>		Contact Oracle's Tekelec Customer Support.
<switch_console_passwo< td=""><td>ord></td><td></td><td>Contact Oracle's Tekelec Customer Support.</td></switch_console_passwo<>	ord>		Contact Oracle's Tekelec Customer Support.
<switch_enable_passwor< td=""><td>d></td><td></td><td>Contact Oracle's Tekelec Customer Support.</td></switch_enable_passwor<>	d>		Contact Oracle's Tekelec Customer Support.
<server1a_mgmtvlan_< td=""><td>_ip_address ></td><td></td><td>Primary SDS: 169.254.1.11 DR SDS: 169.254.1.14</td></server1a_mgmtvlan_<>	_ip_address >		Primary SDS: 169.254.1.11 DR SDS: 169.254.1.14
<management_server1b_mgmtvlan_ip_address></management_server1b_mgmtvlan_ip_address>		•	Primary SDS: 169.254.1.12 DR SDS: 169.254.1.15
<switch_mgmtvlan_id></switch_mgmtvlan_id>			2
<switch1a_mgmtvlan< td=""><td>_ip_address></td><td></td><td>169.254.1.1</td></switch1a_mgmtvlan<>	_ip_address>		169.254.1.1
<netmask></netmask>			255.255.255.0
<switch1b_mgmtvlan_ip_address></switch1b_mgmtvlan_ip_address>			169.254.1.2
<management_server_mgmtinterface></management_server_mgmtinterface>			bond0.2
<server1a_ilo_ip></server1a_ilo_ip>			
(See Site Survey)[2][3]			
<management_server1b_ilo_ip></management_server1b_ilo_ip>			
Ethernet Interface	DL360		
<ethernet_interface_1> bond0.2 (eth01, eth11)</ethernet_interface_1>			
<ethernet_interface_2> bond0.4 (eth01, eth11)</ethernet_interface_2>			

Variable	Value
<platcfg_password></platcfg_password>	Contact Oracle's Tekelec Customer Support
<management_server_mgmtinterface></management_server_mgmtinterface>	bond0.2
<switch_backup_user></switch_backup_user>	Contact Oracle's Tekelec Customer Support.
<switch_backup_user_password></switch_backup_user_password>	Contact Oracle's Tekelec Customer Support.

Note: The onboard administrators are not available during the configuration of Cisco 4948E-F switches.

Note: Uplinks, if present, must be disconnected from the customer network prior to executing this procedure. One of the steps in this procedure will instruct when to reconnect these uplink cables. Refer to Section E.1for determining which cables are used for customer uplink.

Needed Material:

- HP Misc. Firmware DVD
- HP Solutions Firmware Upgrade Pack Release Notes [6]
- Application specific documentation (documentation that referred to this procedure)
- Switch A and B initialization xml files and SDS switch configuration xml file in an application ISO on an application CD.
- Application ISO's with netConfig and its required RPMs.

Note: If a procedural STEP fails to execute successfully, STOP and contact the Customer Care Center by referring to the <u>Customer Care Center</u> section of this document.

Step	Procedure	Result
1.	server1A: Access the server1A console.	 Connect to the server1A console using one of the access methods described in Section 2.3.
2.	 server1A: 1) Access the command prompt. 2) Log into the HP DL360 server as the "root" user. 	CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.20.0 on an x86_64 hostname1260476221 login: root Password: <root_password></root_password>
3.	server1A: Output similar to that shown on the right will appear as the server access the command prompt.	<pre>*** TRUNCATED OUTPUT *** VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/com agent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@hostname1260476221 ~]#</pre>
4.	server1A: Verify the switch1A initialization file exists Verify the switch1B initialization file exists Verify the switch configuration file exists	<pre># ls -1 /usr/TKLC/plat/etc/switch/xml/switch1A_SDS_4948E_E-F_init.xml # ls -1 /usr/TKLC/plat/etc/switch/xml/switch1B_SDS_4948E_E-F_init.xml # ls -1 /usr/TKLC/plat/etc/switch/xml/switch_SDS_4948E_E-F_configure.xml If any file does not exist, contact Customer Care Center for assistance.</pre>

Step	Procedure	Result		
5	server1A:	<pre># setserial -g /dev/ttyS{112}</pre>		
5.	Verify quad-serial port mappings (quad-dongle S1 = ttyS4, quad-dongle S2 = ttyS5)	<pre>/dev/ttyS1, UART: 16550A, Port: 0x02f8, IRQ: 3 /dev/ttyS2, UART: unknown, Port: 0x03e8, IRQ: 4 /dev/ttyS3, UART: unknown, Port: 0x02e8, IRQ: 3 /dev/ttyS4, UART: 16950/954, Port: 0x0000, IRQ: 24 /dev/ttyS5, UART: 16950/954, Port: 0x0000, IRQ: 24 /dev/ttyS6, UART: 16950/954, Port: 0x0000, IRQ: 24 /dev/ttyS8, UART: 16950/954, Port: 0x0000, IRQ: 0 /dev/ttyS9, UART: unknown, Port: 0x0000, IRQ: 0 /dev/ttyS10, UART: unknown, Port: 0x0000, IRQ: 0 /dev/ttyS11, UART: unknown, Port: 0x0000, IRQ: 0 /dev/ttyS12, UART: unknown, Port: 0x0000, IRQ: 0</pre>		
6.	server1A: Setup conserver serial access for switch1A	<pre># conserverAdmaddConsolename=switch1A_consoledevice=/dev/ttyS4 You should be returned to the command line prompt. If so continue to the next step; if not, contact Customer Care Center for assistance.</pre>		
7	server1A:	<pre># netConfigrepo addService name=switch1A_consvc</pre>		
	Add repository for console information	<pre>Service type? (tftp, ssh, conserver, oa) conserver Service host? 169.254.1.11 Enter an option name (q to cancel): user Enter a value for user: platcfg Enter an option name(q to cancel): password Enter a value for password: <platcfg_password> Verify password: <platcfg_password> Enter an option name(q to cancel): q Add service for switchlA_consvc successful</platcfg_password></platcfg_password></pre>		
8.	server1A:	<pre># netConfigrepo showService name=switch1A_consvc</pre>		
5.	Verify you have entered the information correctly	Service Name: switch1A_consvc Type: conserver Host: 169.254.1.11 Options: password: D8396824B3B2B9EE user: platcfg		

Step	Procedure	Result
9.	server1A: Setup conserver serial access for switch1B	<pre># conserverAdmaddConsolename=switch1B_consoledevice=/dev/ttyS5</pre>
10.	server1A: Add repository for switch1B console service	<pre># netConfigrepo addService name=switch1B_consvc Service type? (tftp, ssh, conserver, oa) conserver Service host? 169.254.1.11 Enter an option name (q to cancel): user Enter a value for user: platcfg Enter an option name(q to cancel): password Enter a value for password: <platcfg_password> Verify password: <platcfg_password> Enter an option name(q to cancel): q Add service for console_service successful</platcfg_password></platcfg_password></pre>
11.	server1A: Verify you have entered the information correctly	<pre># netConfigrepo showService name=switch1B_consvc Service Name: switch1B_consvc Type: conserver Host: 169.254.1.11 Options: password: D8396824B3B2B9EE user: platcfg</pre>
12.	server1A: Add repository for TFTP service	<pre># netConfigrepo addService name=tftp_service Service type? (tftp, ssh, conserver, oa) tftp Service host? 169.254.1.11 Enter an option name (q to cancel): dir Enter a value for user: /var/lib/tftpboot/ Enter an option name(q to cancel): q Add service for tftp_service successful</pre>
13.	server1A: Verify you have entered the information correctly	<pre># netConfigrepo showService name=tftp_service Service Name: tftp_service Type: tftp Host: 169.254.1.11 Options: dir: /var/lib/tftpboot/</pre>

Step	Procedure	Result
14.	server1A: Add repository for SSH service	<pre># netConfigrepo addService name=ssh_service Service type? (tftp, ssh, conserver, oa) ssh Service host? 169.254.1.11 Enter an option name <q cancel="" to="">: user Enter the value for user: root Enter an option name <q cancel="" to="">: password Enter the value for password: <switch_backup_user_password> Verify password: <switch_backup_user_password> Enter an option name <q cancel="" to="">: q Add service for ssh_service successful</q></switch_backup_user_password></switch_backup_user_password></q></q></pre>
15.	server1A: Verify you have entered the information correctly	<pre># netConfigrepo showService name=ssh_service Service Name: ssh_service Type: ssh Host: 169.254.1.11 Options: password: C20F7D639AE7E7 user: root #</pre>
16.	server1A: Add repository for switch1A	<pre># netConfigrepo addDevice name=switchlAreuseCredentials Device Vendor? Cisco Device Model? 4948E-F Should the init oob adapter be added (y/n)? y Adding consoleInit protocol for switchlA using oob What is the name of the service used for OOB access? switchlA_consvc What is the name of the console for OOB access? switchlA_console What is the device console password? <switch_console_password> What is the platform access username? platcfg What is the platform user password? <platofg_password> Verify password: <platcfg_password> What is the device privileged mode password? <switch_enable_password> Verify password: <switch_enable_password> Should the live network adapter be added (y/n)? y Adding cli protocol for switchlA using network What is the address used for network device access? 169.254.1.1 Should the live oob adapter be added (y/n)? y Adding cli protocol for switchlA using ob OOB device access already set: console_service Device named switchlA successfully added.</switch_enable_password></switch_enable_password></platcfg_password></platofg_password></switch_console_password></pre>

Step	Procedure	Result
17	server1A:	<pre># netConfigrepo listDevices</pre>
	Verify you have	Devices:
	entered the	Device: switch1A
	information	Vendor: Cisco
	correctly	Model: 4948E-F
		Access: Network: 169.254.1.1
		Access: OOB:
		Service: switch1A_consvc
		Console: switch1A_console
		Init Protocol Configured
		Live Protocol Configured
		Device: switch1B
		Vendor: Cisco
		Model: 4948E-F
		Access: Network: 169.254.1.2
		Access: OOB:
		Service: switch1B_consvc
		Console: switchlB_console
		Live Protocol Configured
		#
	server1A:	<pre># netConfigrepo addDevice name=switch1BreuseCredentials</pre>
18.	A dd yn y acitar y far	Device Vendor? Cisco
	switch1B	Device Model? 4948E-F
		Should the init oob adapter be added (y/n)? ${f y}$
		Adding consoleInit protocol for switch1B using oob
		What is the name of the service used for OOB access? switch1B_consvc
		What is the name of the console for OOB access? switch1B_console
		What is the device console password? <switch_console_password></switch_console_password>
		What is the platform user password? <platcfg password=""></platcfg>
		Verify password: <platofg password=""></platofg>
		What is the device privileged mode password? <switch enable="" password=""></switch>
		Verify password: <switch_enable_password></switch_enable_password>
		Should the live network adapter be added (y/n)? ${f y}$
		Adding cli protocol for switch1A using network
		What is the address used for network device access? 169.254.1.2
		Should the live oob adapter be added (y/n)? ${f y}$
		Adding cli protocol for switch1B using oob
		OOB device access already set: <pre>switch1B_consvc</pre>

Step	Procedure	Result
10	server1A:	<pre># netConfigrepo listDevices</pre>
	Verify you have entered the information correctly	<pre>Device: switch1A Vendor: Cisco Model: 4948E-F Access: Network: 169.254.1.1 Access: OOB: Init Protocol Configured Live Protocol Configured Device: switch1B Vendor: Cisco Model: 4948E-F Access: Network: 169.254.1.2 Access: OOB: Service: switch1B_consvc Console: switch1A_console Init Protocol Configured Live Protocol Configured Live Protocol Configured #</pre>
20.	server1A:	Example: console -M <server1a_mgmtvlan_ip_address> -1 platcfg switch1A_console</server1a_mgmtvlan_ip_address>
	Log in to switch1A	<pre># /usr/bin/console -M 169.254.1.11 -l platcfg switch1A_console</pre>
		<pre>Enter platcfg@pmac5000101's password: <platcfg_password> [Enter `^Ec?' for help] Press <enter></enter></platcfg_password></pre>
21.	switch1A:	Switch> show version include image System image file is "bootflash:cat4500-ipbasek9-mz.122-54.WO.bin"
	Note the image version for comparison in a following step.	Note the image version for comparison in a following step.



IF THE SWITCH1A (4948E-F) IOS DOES NOT DISPLAY THE CORRECT VERSION IN THE ABOVE STEP, THEN STOP AND EXECUTE THE FOLLOWING STEPS:

- 1) Appendix E.3 Cisco 4948E-F IOS Upgrade (SDS sites)
- 2) Return to this Procedure and continue with the following Step. **Beginning with Step 40.**
- NOTE:

For each switch, compare the IOS version from previous steps with the IOS version specified in the Firmware Upgrade Pack Release Notes [5] for the switch model being used.

If the version from previous steps is equal or greater than the version from the release notes and has "k9" in the name, denoting support for crypto, then continue with the next step, there is no upgrade necessary for this switch.

Step	Procedure	Result
22.	Switch1A: Execute "show bootflash" to verify that only the correct bootflash is present.	Switch> show bootflash -#lengthdate/time path 1 25771102 Nov 29 2011 08:53:46 cat4500e-entservicesk9-mz.122- 54.XO.bin 95072256 bytes available (33210368 bytes used) Note the image version for comparison in a following step
23.	Switch1A: Reset switch back to factory defaults by deleting the VLANs.	<pre>Switch>en Password: Switch#write erase Erasing the nvram filesystem will remove all configuration files! Continue? [confirm] <enter> [OK] Erase of nvram: complete Switch# *Jan 26 12:53:06.547: %SYS-7-NV_BLOCK_INIT: Initialized the geometry of nvram <enter> Switch#config t Enter configuration commands, one per line. End with CNTL/Z. Switch(config)#no vlan 2-1024 %Default VLAN 1002 may not be deleted. %Default VLAN 1003 may not be deleted. %Default VLAN 1004 may not be deleted. %Default VLAN 1005 may not be deleted. %Witch(config)#end Switch# *Jan 26 12:53:31.675: %SYS-5-CONFIG_I: Configured from console by console Switch#</enter></enter></pre>
24.	Switch1A:	Switch#reload
	Reload the switch.	System configuration has been modified. Save? [yes/no]: no Proceed with reload? [confirm] <enter></enter>

Step	Procedure	Result
25 .	Switch1A: Monitor the switch	cisco WS-C4948E-F (MPC8548) processor (revision 5) with 1048576K bytes of memory. Processor board ID CAT1529S91B MPC8548 CPU at 1GHz, Cisco Catalyst 4948E-F
	reboot until it returns to a login prompt.	<pre>Last reset from Reload 1 Virtual Ethernet interface 48 Gigabit Ethernet interfaces 4 Ten Gigabit Ethernet interfaces 511K bytes of non-volatile configuration memory.</pre>
		Press RETURN to get started! <enter></enter>
26.	Switch1A:	Switch> Switch#enable Switch#
	Enter "enable" mode.	
27.	Switch1A:	Switch# dir bootflash: Directory of bootflash:/
	Verify that you see the correct IOS version listed in the bootflash.	7 -rw- 25771102 Jan 31 2012 07:45:56 +00:00 cat4500e-entservicesk9- mz.122-54.X0.bin
		128282624 bytes total (72122368 bytes free) Switch#
28.	Switch1A:	Switch#quit
	Close connection to switch.	Switch con0 is now available
	switch1A:	Press RETURN to get started.
29.	Note the image version for comparison in a following step.	Exit from console by typing CTRL+E+c+. (combination control character and 'e' character, followed by sequence 'c' character, then 'period' character) and you will be returned to the server prompt.
30.	server1A:	<pre>Example: console -M <server1a_mgmtvlan_ip_address> -l platcfg switch1B_console</server1a_mgmtvlan_ip_address></pre>
	Log in to switch1B	<pre># /usr/bin/console -M 169.254.1.11 -1 platcfg switch1B_console</pre>
		Enter platcfg@pmac5000101's password: <platcfg_password></platcfg_password> [Enter `^Ec?' for help] Press <enter></enter>
31.	Switch1B:	Switch> show version include image System image file is "bootflash:cat4500e-entservicesk9-mz.122-54.XO.bin"
	Note the image version for comparison in a following step.	Note the image version for comparison in a following step.



IF THE SWITCH1B IOS DOES NOT DISPLAY THE CORRECT VERSION IN THE ABOVE STEP, THEN STOP AND EXECUTE THE FOLLOWING STEPS:

- 1) Appendix E.3 Cisco 4948E-F IOS Upgrade (SDS sites); Beginning with Step 25.
- 2) Return to this Procedure and continue with the following Step.
- **NOTE:** For each switch, compare the IOS version from previous steps with the IOS version specified in the Firmware Upgrade Pack Release Notes [5] for the switch model being used.

If the version from previous steps is equal or greater than the version from the release notes and has "k9" in the name, denoting support for crypto, then continue with the next step, there is no upgrade necessary for this switch.

Step	Procedure	Result
32.	Switch1B: Execute "show bootflash" to verify that only the correct bootflash is present	Switch> show bootflash -#lengthdate/time path 1 25771102 Nov 29 2011 09:04:04 cat4500e-entservicesk9-mz.122- 54.XO.bin 95072256 bytes available (33210368 bytes used)
33.	Switch1B: Reset switch back to factory defaults by deleting the VLANs.	<pre>Switch >en Password: Switch#write erase Erasing the nvram filesystem will remove all configuration files! Continue? [confirm] <enter> [OK] Erase of nvram: complete Switch# *Jan 26 12:53:06.547: %SYS-7-NV_BLOCK_INIT: Initialized the geometry of nvram <enter> Switch#config t Enter configuration commands, one per line. End with CNTL/Z. Switch(config)#no vlan 2-1024 %Default VLAN 1002 may not be deleted. %Default VLAN 1003 may not be deleted. %Default VLAN 1004 may not be deleted. %Default VLAN 1005 may not be deleted. %Witch(config)#end Switch(config)#end Switch# *Jan 26 12:53:31.675: %SYS-5-CONFIG_I: Configured from console by console Switch#</enter></enter></pre>
34.	Switch1B:	Switch# reload
	Reload the switch.	System configuration has been modified. Save? [yes/no]: no Proceed with reload? [confirm] <enter></enter>

Step	Procedure	Result
35.	Switch1B: Monitor the switch reboot until it returns to a login prompt.	cisco WS-C4948E-F (MPC8548) processor (revision 5) with 1048576K bytes of memory. Processor board ID CAT1529S91B MPC8548 CPU at 1GHz, Cisco Catalyst 4948E-F Last reset from Reload 1 Virtual Ethernet interface 48 Gigabit Ethernet interfaces 4 Ten Gigabit Ethernet interfaces 511K bytes of non-volatile configuration memory.
		Press RETURN to get started! <enter></enter>
36.	Switch1B: Enter "enable" mode.	Switch# enable Switch#
37.	Switch1B: Verify that you see the correct IOS version listed in the bootflash.	<pre>Switch#dir bootflash: Directory of bootflash:/ 7 -rw- 25771102 Jan 31 2012 07:45:56 +00:00 cat4500e-entservicesk9- mz.122-54.XO.bin 128282624 bytes total (72122368 bytes free) Switch#</pre>
38.	Switch1B: Close connection to switch.	Switch#quit Switch con0 is now available Press RETURN to get started.
39.	Switch1B: Note the image version for comparison in a following step.	Exit from console by typing CTRL+E+c+. (combination control character and 'e' character, followed by sequence 'c' character, then 'period' character) and you will be returned to the server prompt.
40	server1A:	<pre># netConfigfile=/usr/TKLC/plat/etc/switch/xml/switch1A SDS 4948E E-F init.xml</pre>
	Initialize switch 1A	<pre>Processing file: /usr/TKLC/plat/etc/switch/xml/switch1A_SDS_4948E-F_init.xml # Note: This step takes about 2-3 minutes to complete Check the output of this command for any errors. If this fails for any reason, stop this procedure and contact Customer Care Center.</pre>
		A successful completion of netConfig will return the user to the prompt.

Step	Procedure	Result
41.	server1A:	<pre># netConfigfile=/usr/TKLC/plat/etc/switch/xml/switch1B_SDS_4948E_E-F_init.xml</pre>
	Initialize switch 1B	Processing file: /usr/TKLC/plat/etc/switch/xml/switch1B_SDS_4948E-F_init.xml
		#
		Note: This step takes about 2-3 minutes to complete
		Check the output of this command for any errors. If this fails for any reason, stop
		this procedure and contact Customer Care Center.
		A successful completion of netConfig will return the user to the prompt.
42.	server1A:	# ping -c 15 169.254.1.1
	Ping switch 1A's	PING 169.254.1.1 (169.254.1.1) 56(84) bytes of data.
	interface)	64 bytes from 169.254.1.1: icmp_seq=1 ttl=255 time=3.09 ms
	switch initialization.	64 bytes from 169.254.1.1: icmp_seq=2 ttl=255 time=0.409 ms
	Note: VIP	64 bytes from 169.254.1.1: icmp_seq=3 ttl=255 time=0.417 ms
	addresses are not	64 bytes from 169.254.1.1: icmp_seq=4 ttl=255 time=0.418 ms
	yet available.	64 bytes from 169.254.1.1: icmp_seq=5 ttl=255 time=0.419 ms
		64 bytes from 169.254.1.1: icmp_seq=6 ttl=255 time=0.419 ms
		64 bytes from 169.254.1.1: icmp_seq=7 ttl=255 time=0.429 ms
		64 bytes from 169.254.1.1: icmp_seq=8 ttl=255 time=0.423 ms
		64 bytes from 169.254.1.1: icmp_seq=9 ttl=255 time=0.381 ms
		64 bytes from 169.254.1.1: icmp_seq=10 ttl=255 time=0.416 ms
		64 bytes from 169.254.1.1: icmp_seq=11 ttl=255 time=0.381 ms
		64 bytes from 169.254.1.1: icmp_seq=12 ttl=255 time=0.426 ms
		64 bytes from 169.254.1.1: icmp_seq=13 ttl=255 time=0.420 ms
		64 bytes from 169.254.1.1: icmp_seq=14 ttl=255 time=0.415 ms
		64 bytes from 169.254.1.1: icmp_seq=15 ttl=255 time=0.419 ms
		169.254.1.1 ping statistics
		15 packets transmitted, 15 received, 0% packet loss, time 14006ms
		rtt min/avg/max/mdev = 0.381/0.592/3.097/0.669 ms #

Step	Procedure	Result
43.	server1A:	# ping -c 15 169.254.1.2
	Ping switch 1B's SVI (router interface) addresses to verify switch initialization.	PING 169.254.1.2 (169.254.1.2) 56(84) bytes of data.
		From 169.254.1.11 icmp_seq=2 Destination Host Unreachable
		From 169.254.1.11 icmp_seq=3 Destination Host Unreachable
		From 169.254.1.11 icmp_seq=4 Destination Host Unreachable
	addresses are not	From 169.254.1.11 icmp_seq=6 Destination Host Unreachable
	yet available.	From 169.254.1.11 icmp_seq=7 Destination Host Unreachable
		From 169.254.1.11 icmp_seq=8 Destination Host Unreachable
		64 bytes from 169.254.1.2: icmp_seq=9 ttl=255 time=2.76 ms
		64 bytes from 169.254.1.2: icmp_seq=10 ttl=255 time=0.397 ms
		64 bytes from 169.254.1.2: icmp_seq=11 ttl=255 time=0.448 ms
		64 bytes from 169.254.1.2: icmp_seq=12 ttl=255 time=0.382 ms
		64 bytes from 169.254.1.2: icmp_seq=13 ttl=255 time=0.426 ms
		64 bytes from 169.254.1.2: icmp_seq=14 ttl=255 time=0.378 ms
		64 bytes from 169.254.1.2: icmp_seq=15 ttl=255 time=0.431 ms
		169.254.1.2 ping statistics
		15 packets transmitted, 7 received, +6 errors, 53% packet loss, time 14003ms
		rtt min/avg/max/mdev = 0.378/0.747/2.769/0.825 ms, pipe 3
		! WARNING !: The user needs to verify that the above ping is successful before continuing on to the next step. If the ping continues to receive "Destination Host Unreachable", then stop this procedure and contact the Customer Care Center.
44	server1A:	<pre># netConfigfile=/usr/TKLC/plat/etc/switch/xml/switch_SDS_4948E_E-F_configure.xml</pre>
	Configure both	Processing file: /usr/TKLC/plat/etc/switch/xml/switch SDS 4948E-F configure.xml
	switches	#
		Note: This step takes about 2-3 minutes to complete
		Note. This step takes about 2-5 minutes to complete.
		• Check the output of this command for any errors. If this fails for any reason, stop this procedure and contact Customer Care Center.
		• A successful completion of netConfig will return the user to the prompt.
Step	Procedure	Result
------	---	--
45.	server1A:	<pre># tpdProvdclientnoxmlns=Xinetd stopXinetdService service tftp</pre>
	Undo the temporary	Login on Remote: platofg
	changes.	Password of platcfg: <platcfg_password></platcfg_password>
		1
46	server1A:	<pre># netConfigdevice=switch1A listFirmware</pre>
	Verify the switch is	Image: cat4500e-entservicesk9-mz.122-54.XO.bin
	IOS image per	<pre># netConfigdevice=switch1B listFirmware</pre>
	plation version.	Image: cat4500e-entservicesk9-mz.122-54.XO.bin
47	server1A:	# sorvice petwork restart
47.	Execute the	* Service Network restart
	"service network restart" to restore	I OK 1
	server1A networking to	Shutting down interface bond(4. Removed WIAN bond(4
	original state.	
	Output similar to	Shutting down interface bond0: [OK]
	right may be	Shutting down interface bond1: [OK]
	observed.	Shutting down loopback interface: [OK]
		Bringing up loopback interface: [OK]
		Setting 802.10 VLAN parameters: Set name-type for VLAN subsystem. Should be visible in /proc/net/vlan/config
		[OK]
		Bringing up interface bond0: RTNETLINK answers: No such device
		[OK]
		Bringing up interface bondl: [OK]
		Bringing up interface bond0.2: Added VLAN with VID == 2 to IF $-:$ bond0:-
		[OK]
		Bringing up interface bond0.4: Added VLAN with VID == 4 to IF -: bond0:-
		[OK]
		#

Step	Procedure	Result
48.	server1A:	# ping -c 5 169.254.1.1
	Ping switch 1A's SVI (router interface) addresses to verify switch configuration.	PING 169.254.1.1 (169.254.1.1) 56(84) bytes of data.
		64 bytes from 169.254.1.1: icmp_seq=1 ttl=255 time=0.430 ms
		64 bytes from 169.254.1.1: icmp_seq=2 ttl=255 time=0.426 ms
		64 bytes from 169.254.1.1: icmp_seq=3 ttl=255 time=0.427 ms
		64 bytes from 169.254.1.1: icmp_seq=4 ttl=255 time=0.426 ms
	yet available.	64 bytes from 169.254.1.1: icmp_seq=5 ttl=255 time=0.431 ms
		169.254.1.1 ping statistics
		5 packets transmitted, 5 received, 0% packet loss, time 4003ms
		rtt min/avg/max/mdev = 0.426/0.428/0.431/0.002 ms
		#
49.	server1A:	# ping -c 5 169.254.1.2
	Ping switch 1B's	PING 169.254.1.2 (169.254.1.2) 56(84) bytes of data.
	interface)	64 bytes from 169.254.1.2: icmp_seq=1 ttl=255 time=0.401 ms
	addresses to verity switch configuration.	64 bytes from 169.254.1.2: icmp_seq=2 ttl=255 time=0.394 ms
		64 bytes from 169.254.1.2: icmp_seq=3 ttl=255 time=0.407 ms
		64 bytes from 169.254.1.2: icmp_seq=4 ttl=255 time=0.393 ms
	yet available	64 bytes from 169.254.1.2: icmp_seq=5 ttl=255 time=0.401 ms
		169.254.1.2 ping statistics
		5 packets transmitted, 5 received, 0% packet loss, time 3999ms
		rtt min/avg/max/mdev = 0.393/0.399/0.407/0.013 ms
		#
50.	server1A:	# ssh platcfg@169.154.1.1
	Verify SSH capability from	The authenticity of host '169.254.1.1 (169.254.1.1)' can't be established.
	server 1Å to	RSA key fingerprint is fd:83:32:34:3f:06:2f:12:e0:ea:e2:73:e2:c1:1e:6e.
	SWIICH TA.	Are you sure you want to continue connecting (yes/no)? yes
		Warning: Permanently added '169.254.1.1' (RSA) to the list of known hosts.
		Password: <switch_platform_password></switch_platform_password>

Step	Procedure	Result
51.	server1A: Close SSH connection to switch 1A.	# quit Connection to 169.254.1.1 closed.
52.	server1A: Verify SSH capability from server 1A to switch 1B	<pre># ssh platcfg@169.154.1.2 The authenticity of host '169.254.1.2 (169.254.1.2)' can't be established. RSA key fingerprint is 3a:1b:e0:92:99:73:9d:04:92:3f:72:37:c0:1c:a6:95. Are you sure you want to continue connecting (yes/no)? yes Warning: Permanently added '169.254.1.2' (RSA) to the list of known hosts. Password: <switch_platform_password></switch_platform_password></pre>
53.	server1A: Close SSH connection to switch 1A.	# quit Connection to 169.254.1.2 closed.
54.	server1B: Execute the "service network restart" to restore server1B networking to original state. Output similar to that shown on the right may be observed.	<pre># service network restart Shutting down interface bond0.2: Removed VLAN -:bond0.2:- [OK] Shutting down interface bond0.4: Removed VLAN -:bond0.4:- [OK] Shutting down interface bond0: [OK] Shutting down interface bond1: [OK] Shutting down loopback interface: [OK] Bringing up loopback interface: [OK] Setting 802.1Q VLAN parameters: Set name-type for VLAN subsystem. Should be visible in /proc/net/vlan/config [OK] Bringing up interface bond0: [OK] Bringing up interface bond0: RTNETLINK answers: No such device [OK] Bringing up interface bond0: [OK] Bringing up interface bond0.2: Added VLAN with VID == 2 to IF -:bond0:- [OK] Bringing up interface bond0.4: Added VLAN with VID == 4 to IF -:bond0:- [OK] #</pre>

Step	Procedure	Result
55.	server1B:	# ping -c 5 169.254.1.1
	Ping switch 1A's	PING 169.254.1.1 (169.254.1.1) 56(84) bytes of data.
	interface) addresses to verify switch	64 bytes from 169.254.1.1: icmp_seq=1 ttl=255 time=0.430 ms
		64 bytes from 169.254.1.1: icmp_seq=2 ttl=255 time=0.426 ms
	configuration.	64 bytes from 169.254.1.1: icmp_seq=3 ttl=255 time=0.427 ms
	<u>Note</u> : VIP	64 bytes from 169.254.1.1: icmp_seq=4 ttl=255 time=0.426 ms
	yet available.	64 bytes from 169.254.1.1: icmp_seq=5 ttl=255 time=0.431 ms
		169.254.1.1 ping statistics
		5 packets transmitted, 5 received, 0% packet loss, time 4003ms
		rtt min/avg/max/mdev = 0.426/0.428/0.431/0.002 ms
		#
56.	server1B:	# ping -c 5 169.254.1.2
	Ping switch 1B's	PING 169.254.1.2 (169.254.1.2) 56(84) bytes of data.
	SVI (router interface) addresses to verify switch configuration.	64 bytes from 169.254.1.2: icmp_seq=1 ttl=255 time=0.401 ms
		64 bytes from 169.254.1.2: icmp_seq=2 ttl=255 time=0.394 ms
		64 bytes from 169.254.1.2: icmp_seq=3 ttl=255 time=0.407 ms
		64 bytes from 169.254.1.2: icmp_seq=4 ttl=255 time=0.393 ms
	yet available	64 bytes from 169.254.1.2: icmp_seq=5 ttl=255 time=0.401 ms
		169.254.1.2 ping statistics
		5 packets transmitted, 5 received, 0% packet loss, time 3999ms
		rtt min/avg/max/mdev = 0.393/0.399/0.407/0.013 ms
		#
57.	server1B:	# ssh platcfg@169.154.1.1
	Verify SSH capability from	The authenticity of host '169.254.1.1 (169.254.1.1)' can't be established.
	server 1B to	RSA key fingerprint is fd:83:32:34:3f:06:2f:12:e0:ea:e2:73:e2:c1:1e:6e.
	switch 1A.	Are you sure you want to continue connecting (yes/no)? yes
		Warning: Permanently added '169.254.1.1' (RSA) to the list of known hosts.
		Password: <switch password="" platform=""></switch>

Step	Procedure	Result	
58.	server1B: Close SSH	# quit	
	connection to switch 1A.	connection to 169.254.1.1 closed.	
59.	server1B:	# ssh platcfg@169.154.1.2	
	Verify SSH capability from	The authenticity of host '169.254.1.2 (169.254.1.2)' can't be established.	
	server 1B to switch 1B	RSA key fingerprint is 3a:1b:e0:92:99:73:9d:04:92:3f:72:37:c0:1c:a6:95.	
		Are you sure you want to continue connecting (yes/no)? yes	
		Warning: Permanently added '169.254.1.2' (RSA) to the list of known hosts.	
		Password: <switch_platform_password></switch_platform_password>	
60.	server1B:	# quit	
	Close SSH connection to switch 1B.	Connection to 169.254.1.2 closed.	
61.	server1A:		
	Run Appendix E.4	to backup switch configuration.	
62	server1A:	# exit	
02.		logout	
	Exit from the command line to	ContoG velecce 5 ((Tincl)	
	return the server console to the login prompt.	Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.22.0 on an x86_64	
	L	hostname1260476221 login:	
	THIS PROCEDURE HAS BEEN COMPLETED		

E.3 Cisco 4948E-F IOS Upgrade (SDS sites)

Step Procedure Result server1A: 1. Connect to the server1A console using one of the access methods described in Access the Section 2.3. server1A console. server1A: CentOS release 5.6 (Final) 2. Kernel 2.6.18-238.19.1.el5prerel5.0.0 72.20.0 on an x86 64 1) Access the command prompt. hostname1260476221 login: root Password: <root password> 2) Log into the HP DL360 server as the "root" user. server1A: 3. *** TRUNCATED OUTPUT *** Output similar to that shown on the VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 right will appear as PRODPATH= the server access RELEASE=5.16 the command RUNID=00 prompt. VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/com agent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@hostname1260476221 ~]# # ls /var/lib/tftpboot/ server1A: 4. <IOS image file> Verify IOS images on the system If the correct IOS version is displayed, skip forward to Step 7. server1A: 5. Place the **HP Misc** Firmware DVD C 0 containing the 0 0 correct version of : 8 0 e 0 0 0 the 4948E-F IOS into server1A's Figure 12 - HP DL360 Front Panel: Optical Drive optical drive. server1A: # mount /dev/scd0 /media/cdrom 6. # cp /media/cdrom/files/<New_IOS_image_file> /var/lib/tftpboot/ Copy IOS image # chmod 644 /var/lib/tftpboot/<New IOS image file>

Appendix E.3: Cisco 4948E-F IOS Upgrade (SDS sites)

umount /media/cdrom

onto the system

Step	Procedure	Result
7.	server1A: Prepare the system for IOS transfer.	<pre># tpdProvdclientnoxmlns=Xinetd startXinetdService service tftp Login on Remote: platcfg Password of platcfg: <platcfg_password> 1 #</platcfg_password></pre>
8.	server1A: Verify the current bonded interface configuration.	<pre># ifconfig grep bond bond0 Link encap:Ethernet HWaddr 98:4B:E1:6E:87:6C bond0.2 Link encap:Ethernet HWaddr 98:4B:E1:6E:87:6C bond0.4 Link encap:Ethernet HWaddr 98:4B:E1:6E:87:6C bond1 Link encap:Ethernet HWaddr 98:4B:E1:6E:87:6E # Execute one of the following options:</pre>
9.	server1A: Create the bond0.2 and add interfaces eth01 & eth11 to it.	<pre># netAdm deletedevice=bond0 # netAdm adddevice=bond0onboot=yestype=Bondingmode=active- backupmiimon=100bootproto=none # netAdm setdevice=eth01bootproto=nonetype=Ethernet master=bond0slave=yesonboot=yes # netAdm setdevice=eth11bootproto=nonetype=Ethernet master=bond0slave=yesonboot=yes Add the <server1a_mgmtvlan_ip_address> to bond0.2 # netAdm adddevice=bond0.2address=169.254.1.11 netmask=255.255.255.0onboot=yes</server1a_mgmtvlan_ip_address></pre>
10.	server1A: Disable the bond0.2 interface to switch1B and verify the bond0.2 IP address.	<pre>On server1A ensure that the interface connected to switch1A is the only interface available and obtain the IP address of <server1a_mgmtvlan_interface> by performing the following commands: # ifdown eth11 # ifup eth01 # ifconfig bond0.2 bond0.2 Link encap:Ethernet HWaddr 98:4B:E1:6E:87:6C inet addr:169.254.1.11 Bcast:169.254.1.255Mask:255.255.0 inet6 addr: fe80::9a4b:e1ff:fe6e:876c/64 Scope:Link UP BROADCAST RUNNING MASTER MULTICAST MTU:1500 Metric:1 RX packets:99384 errors:0 dropped:0 overruns:0 frame:0 TX packets:105440 errors:0 dropped:0 overruns:0 carrier:0 collisions:0 txqueuelen:0 RX bytes:4603240 (4.3 MiB) TX bytes:55536818 (52.9 MiB) The command output should contain the IP address of the <server1a_mgmtvlan_ip_address>.</server1a_mgmtvlan_ip_address></server1a_mgmtvlan_interface></pre>

Step	Procedure	Result
11.	server1A:	<pre>console -M <server1a_mgmtvlan_ip_address> -1 platcfg switch1A_console</server1a_mgmtvlan_ip_address></pre>
	Connect to switch1A console	<pre># /usr/bin/console -M 169.254.1.11 -1 platcfg switch1A_console</pre>
		<pre>Enter platcfg@pmac5000101's password: <platcfg_password> [Enter `^Ec?' for help] Press <enter></enter></platcfg_password></pre>
12.	switch1A:	Switch> enable Switch#
	Enter enable mode	
13.	switch1A: Configure switch port with this sequence of commands	<pre>Switch# conf t Switch(config)# vlan 2 Switch(config)# int vlan 2 Switch(config-if)# ip address 169.254.1.1 255.255.255.0 Switch(config-if)# no shut Switch(config-if)# int gil/5 Switch(config-if)# switchport mode trunk Switch(config-if)# spanning-tree portfast trunk Switch(config-if)# end</pre>
14.	switch1A:	<pre>ping <server1a_mgmtvlan_ip_address></server1a_mgmtvlan_ip_address></pre>
	Test connectivity	<pre>Switch# ping 169.254.1.11 Type escape sequence to abort. Sending 5, 100-byte ICMP Echos to <server1a_mgmtvlan_ip_address>, timeout is 2 seconds: !!!!! Success rate is 100 percent (5/5), round trip min/avg/max = 1/1/4 ms If ping is not 100% successful the first time, repeat the ping. If unsuccessful again, double check that the procedure was completed correctly by repeating all steps up to this point If after procedure there are a ping is still unsuccessful again, double check that the procedure was completed correctly by repeating all steps up</server1a_mgmtvlan_ip_address></pre>
		Customer Care Center.
15.	switch1A: Upload IOS image to switch	Switch# copy tftp: bootflash: Address or name of remote host []? <server1a_mgmtvlan_ip_address> Source filename []? <new_ios_image_file> Destination filename [<new_ios_image_file>]? <enter> Press <enter> here, you do NOT want to change the filename Accessing tftp://<server1a_mgmtvlan_ip_address>/<ios_image_file> Loading <ios_image_file> from <server1a_mgmtvlan_ip_address> (via Vlan2): !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!</server1a_mgmtvlan_ip_address></ios_image_file></ios_image_file></server1a_mgmtvlan_ip_address></enter></enter></new_ios_image_file></new_ios_image_file></server1a_mgmtvlan_ip_address>
		10000 27000 Copied in 0.210 0000 (110/09 Dyees/ 500)

Step	Procedure	Result
16.	switch1A: Locate old IOS image to be removed	<pre>Switch# dir bootflash: Directory of bootflash:/ 1 -rwx 17779888 May 11 2011 02:25:23 -05:00 cat4500-entservicesk9- mz.122-54.W0.bin 2 -rwx 17779888 May 11 2011 02:25:23 -05:00 cat4500-ipbasek9-mz.122- 54.W0.bin 60817408 bytes total (43037392 bytes free) Here, you should note which IOS you uploaded, and the one which was already on the switch. Note the one that was already on the switch, this will be the one to delete, as notated by the variable <old_ios_image></old_ios_image></pre>
17.	switch1A: Remove old IOS image	Switch# delete /force /recursive bootflash:<old_ios_image></old_ios_image> Switch#
18.	switch1A: Locate old IOS image to be removed	Switch# dir bootflash: Directory of bootflash:/ 1 -rwx 17779888 May 11 2011 02:25:23 -05:00 cat4500-entservicesk9- mz.122-54.WO.bin 60817408 bytes total (43037392 bytes free) Here, you should see only the IOS version you uploaded.
40	Switch1A:	Switch#write erase
	Reset switch back to factory defaults by deleting the VLANs.	Erasing the nvram filesystem will remove all configuration files! Continue? [confirm] <enter> [OK] Erase of nvram: complete Switch# *Jan 26 12:53:06.547: %SYS-7-NV_BLOCK_INIT: Initialized the geometry of nvram Switch#config t Enter configuration commands, one per line. End with CNTL/Z. Switch(config)#no vlan 2-1024 %Default VLAN 1002 may not be deleted. %Default VLAN 1003 may not be deleted. %Default VLAN 1004 may not be deleted. %Default VLAN 1005 may not be deleted. %Default VLAN 1005 may not be deleted. Switch(config)#config-register 0x2101 Switch(config)#end Switch# *Jan 26 12:53:31.675: %SYS-5-CONFIG_I: Configured from console by console Switch#</enter>
20.	switch1A:	Switch# reload
	Reload the switch	System configuration has been modified. Save? [yes/no]: no Proceed with reload? [confirm] <enter></enter> ! WARNING !: It is extremely important to answer "no" to the above "Save?" option.

Step	Procedure	Result
21.	switch1A: After the reload, enter <i>enable</i> mode.	Switch> enable Switch#
22.	switch1A: Wait until the switch is reloaded, then confirm the correct IOS image.	Switch> show version include image System image file is "bootflash:cat4500-entservicesk9-mz.122-54.WO.bin" Switch> Here, you should see only the IOS version you uploaded. If the IOS version is not at the correct version, stop here and contact Customer Care Center.
23.	switch1A: Locate old IOS image to be removed.	Switch# dir bootflash: Directory of bootflash:/ 1 -rwx 17779888 May 11 2011 02:25:23 -05:00 cat4500-entservicesk9- mz.122-54.WO.bin 60817408 bytes total (43037392 bytes free) Here, you should see only the IOS version you uploaded.
24.	switch1A: Exit the switch1A console session.	Switch# <ctrl-e><c><.> Hot Key sequence: Ctrl-E, C, period</c></ctrl-e>
25.	server1A: Disable the bond0.2 interface to switch1A.	On server1A ensure that the interface of the server connected to switch1B is the only interface up and obtain the IP address of <i><server1a_mgmtinterface></server1a_mgmtinterface></i> by performing the following commands:
		<pre># ifup eth11 # ifdown eth01</pre>
		The command output should contain the IP address of the variable <server1a_mgmtvlan_ip_address>.</server1a_mgmtvlan_ip_address>
26.	server1A: Connect to switch1B console	<pre>console -M <server1a_mgmtvlan_ip_address> -l platcfg switch1B_console # /usr/bin/console -M 169.254.1.11 -l platcfg switch1B_console Enter platcfg@pmac5000101's password: <platcfg_password> [Enter `^Ec?' for help] Press <enter></enter></platcfg_password></server1a_mgmtvlan_ip_address></pre>
27.	switch1B: Enter enable mode	Switch> enable Switch#

Step	Procedure	Result
28.	switch1B: Configure switch port with this sequence of commands	<pre>Switch# conf t Switch(config)# vlan 2 Switch(config)# int vlan 2 Switch(config-if)# ip address 169.254.1.2 255.255.255.0 Switch(config-if)# no shut Switch(config-if)# int gil/5 Switch(config-if)# switchport mode trunk Switch(config-if)# spanning-tree portfast trunk Switch(config-if)# end</pre>
29.	switch1B: Test connectivity	<pre>ping <management_server1a_mgmtvlan_ip_address> Switch# ping 169.254.1.11 Type escape sequence to abort. Sending 5, 100-byte ICMP Echos to <server1a_mgmtvlan_ip_address>, timeout is 2 seconds: !!!!! Success rate is 100 percent (5/5), round trip min/avg/max = 1/1/4 ms If ping is not 100% successful the first time, repeat the ping. If unsuccessful again, double check that the procedure was completed correctly by repeating all steps up to this point. If after repeating those steps, ping is still unsuccessful, contact</server1a_mgmtvlan_ip_address></management_server1a_mgmtvlan_ip_address></pre>
30.	switch1B: Upload IOS image to switch	Customer Care Center. Switch# copy tftp: bootflash: Address or name of remote host []? <management_server1a_mgmtvlan_ip_address> Source filename []? <new_ios_image_file> Destination filename [<new_ios_image_file>]? <enter> Press <enter> here, you do NOT want to change the filename Accessing tftp://<management_server1b_mgmtvlan_ip address>/<ios_image_file> Loading <ios_image_file> from <server1a_mgmtvlan_ip_address> (via Vlan2): !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!</server1a_mgmtvlan_ip_address></ios_image_file></ios_image_file></management_server1b_mgmtvlan_ip </enter></enter></new_ios_image_file></new_ios_image_file></management_server1a_mgmtvlan_ip_address>

Step	Procedure	Result
31.	switch1B: Locate old IOS image to be removed	<pre>Switch# dir bootflash: Directory of bootflash:/ 1 -rwx 17779888 May 11 2011 02:25:23 -05:00 cat4500-entservicesk9- mz.122-54.W0.bin 2 -rwx 17779888 May 11 2011 02:25:23 -05:00 cat4500-ipbasek9-mz.122- 54.W0.bin 60817408 bytes total (43037392 bytes free) Here, you should note which IOS you uploaded, and the one which was already on the switch. Note the one that was already on the switch, this will be the one to delete, as notated by the variable <old_ios_image></old_ios_image></pre>
32.	switch1B: Remove old IOS image	Switch# delete /force /recursive bootflash:<old_ios_image></old_ios_image> Switch#
33.	switch1B: Locate old IOS image to be removed	<pre>Switch# dir bootflash: Directory of bootflash:/ 1 -rwx 17779888 May 11 2011 02:25:23 -05:00 cat4500-entservicesk9- mz.122-54.WO.bin 60817408 bytes total (43037392 bytes free) Here, you should see only the IOS version you uploaded.</pre>
34.	Switch1B: Reset switch back to factory defaults by deleting the VLANS.	<pre>Switch#write erase Erasing the nvram filesystem will remove all configuration files! Continue? [confirm] <enter> [OK] Erase of nvram: complete Switch# *Jan 26 12:53:06.547: %SYS-7-NV_BLOCK_INIT: Initialized the geometry of nvram Switch#config t Enter configuration commands, one per line. End with CNTL/Z. Switch(config)#no vlan 2-1024 %Default VLAN 1002 may not be deleted. %Default VLAN 1003 may not be deleted. %Default VLAN 1004 may not be deleted. %Default VLAN 1005 may not be deleted. %Default VLAN 1005 may not be deleted. %Default VLAN 1005 may not be deleted. %Witch(config)#config-register 0x2101 Switch(config)#end Switch# *Jan 26 12:53:31.675: %SYS-5-CONFIG_I: Configured from console by console Switch#</enter></pre>
35.	switch1B: Reload the switch	Switch# reload Proceed with reload? [confirm] <enter></enter> System config modified. save? <y></y>
36.	switch1B: Wait until the switch is reloaded, then confirm the correct IOS image	Switch> show version include image System image file is "bootflash:cat4500-entservicesk9-mz.122-54.WO.bin" Switch>

Appendix E.3: CISCO 4948E-F IOS Updrade (SDS sites	3: Cisco 4948E-F IOS Upgrade (SDS sites	;)
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Step	Procedure	Result				
37.	switch1B: Enter enable mode	Switch> enable Switch#				
38.	switch1B: Locate old IOS image to be removed	<pre>Switch# dir bootflash: Directory of bootflash:/ 1 -rwx 17779888 May 11 2011 02:25:23 -05:00 cat4500-entservicesk9- mz.122-54.W0.bin 60817408 bytes total (43037392 bytes free) Here, you should see only the IOS version you uploaded.</pre>				
39.	switch1A: Exit the switch1A console session.	Switch# <ctrl-e><c>.></c></ctrl-e> Hot Key sequence: Ctrl-E, C, period				
40.	server1A: Re-enable the bond0.2 interface to switch1A.	On server1A ensure that the both bond0.2 interfaces are up: # ifup eth11 # ifup eth01				
41.	server1A: Stop the "tftp" service.	<pre># tpdProvdclientnoxmlns=Xinetd stopXinetdService service tftp Login on Remote: platcfg Password of platcfg: <platcfg_password> 1</platcfg_password></pre>				
THIS PROCEDURE HAS BEEN COMPLETED						

E.4 Cisco 4948E-F Configuration Backup (SDS sites)

Variable	Value
<switch_backup_user> (also needed in switch configuration procedure)</switch_backup_user>	
<switch_backup_user_password> (also needed in switch configuration procedure)</switch_backup_user_password>	
<switch_name></switch_name>	hostname of the switch
<switch_backup_directory></switch_backup_directory>	/usr/TKLC/plat/etc/switch/backup

Appendix E.4: Cisco 4948E-F Backup (SDS sites)

Step	Procedure	Result				
1.	server1A: Access the server1A console.	 Connect to the server1A console using one of the access methods described in Section 2.3. 				
2.	 server1A: 1) Access the command prompt. 2) Log into the HP DL360 server as the "root" user. 	CentOS release 5.6 (Final) Kernel 2.6.18-238.19.1.el5prerel5.0.0_72.20.0 on an x86_64 hostname1260476221 login: root Password: <root_password></root_password>				
3.	server1A: Output similar to that shown on the right will appear as the server access the command prompt.	<pre>*** TRUNCATED OUTPUT *** VPATH=/opt/TKLCcomcol/runcm5.16:/opt/TKLCcomcol/cm5.16 PRODPATH= RELEASE=5.16 RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/com agent-gui:/usr/TKLC/comagent:/usr/TKLC/sds PRODPATH=/opt/comcol/prod RUNID=00 [root@hostname1260476221 ~]#</pre>				
4.	server1A: Verify connectivity	<pre># netConfigdevice=<switch_name> getHostname Hostname: switch1A # Note: The value beside "Hostname:" should be the same as the <switch_name> variable</switch_name></switch_name></pre>				

Step	Procedure	Result				
5.	server1A: Verify SSH service	<pre># netConfigrepo showService name=ssh_service Service Name: ssh_service Type: ssh Host: 10.250.62.85 Options: password: C20F7D639AE7E7 user: root #</pre>				
6.	server1A: Change directory to root user	# cd				
7.	server1A: Run backup command	<pre># netConfigdevice=<switch_name> backupConfiguration service=ssh_service filename=<switch_name>-backup</switch_name></switch_name></pre>				
8.	server1A: Verify backup and inspect its contents to ensure they reflect the configured values	<pre># ls <switch_name>-backup* # # cat <switch_name>-backup</switch_name></switch_name></pre>				
9.	Repeat steps 4 - 8 fo	or switch1B.				
10.	server1A: Copy the switch1A backup files to the permanent backup storage directory	<pre># scp -p <switch1a_name>-backup* 169.254.1.12:/<switch_backup_directory>/</switch_backup_directory></switch1a_name></pre>				
11.	server1A: Copy the switch1B backup files to the permanent backup storage directory	<pre># scp -p <switch1b_name>-backup* 169.254.1.12:/<switch_backup_directory>/</switch_backup_directory></switch1b_name></pre>				
12.	server1A: Move the switch1A backup files to the permanent backup storage directory	<pre># mv *<switch1a_name>-backup* <switch_backup_directory>/</switch_backup_directory></switch1a_name></pre>				
13.	server1A: Move the switch1B backup files to the permanent backup storage directory	<pre># mv *<switch1b_name>-backup* <switch_backup_directory>/</switch_backup_directory></switch1b_name></pre>				
	THIS PROCEDURE HAS BEEN COMPLETED					

Appendix E.4: Cisco 4948E-F Backup (SDS sites)

Appendix F. Creating an XML file for Installing SDS Network Elements

SDS Network Elements can be created by using an XML configuration file. The SDS software image (*.iso) contains two examples of XML configuration files for "NO" (Network OAM&P) and "SO" (System OAM) networks. These files are named **SDS_NO_NE.xml** and **SDS_SO_NE.xml** and are stored on the /usr/TKLC/sds/vlan directory. The customer is required to create individual XML files for each of their SDS Network Elements. The format for each of these XML files is identical.

Below is an example of the SDS_NO_NE.xml file. The highlighted values are values that the user must update.

NOTE: The **Description** column in this example includes comments for this document only. **Do not include** the Description column in the actual XML file used during installation.

XML File Text	Description
xml version="1.0"?	
<networkelement></networkelement>	
<name><mark>sds_mrsvnc</mark></name>	Unique identifier used to label a Network Element. [Range = 1-32 character string. Valid characters are alphanumeric and underscore. Must contain at least one alpha and must not start with a digit.]
<ntpservers></ntpservers>	
<ntpserver><mark>10.250.32.10</mark></ntpserver>	IP Address of the first NTP server. There must be at least one NTP server IP address defined.
<ntpserver><mark>10.250.32.51</mark></ntpserver>	IP Address of second NTP server, if it exists; otherwise, this line must be deleted.
<networks></networks>	
<network></network>	
<name>XMI</name>	Name of customer external network. Note : Do NOT change this name.
<vlanid><mark>3</mark></vlanid>	The VLAN ID to use for this VLAN. [Range = 2-4094.]
<ip><mark>10.250.55.0</mark></ip>	The network address of this VLAN [Range = A valid IP address]
<mask><mark>255.255.255.0</mark></mask>	Subnetting to apply to servers within this VLAN
<gateway><mark>10.250.55.1</mark></gateway>	The gateway router interface address associated with this network [Range = A valid IP address]
<isdefault>true</isdefault>	Indicates whether this is the network with a default gateway. [Range = true/false]
<network></network>	
<name>IMI</name>	Name of customer internal network. Note : Do NOT change this name.
<vlanid><mark>4</mark></vlanid>	The VLAN ID to use for this VLAN. [Range = 2-4094.]
<ip><mark>169.254.100.0</mark></ip>	The network address of this VLAN [Range = A valid IP address]
<mask><mark>255.255.0</mark></mask>	Subnetting to apply to servers within this VLAN
<gateway><mark>169.254.100.3</mark></gateway>	The gateway router interface address associated with this network [Range = A valid IP address]
	-

Table 4 - SDS XML SDS Network Element Configuration File

Appendix G. Optional Configuring Procedures

This section contains procedures for configuration of additional services to Appworks-based application servers.

Appendix G: NetBackup Client Installation

	This procedure will	l download and install NetBackup Client software on the server.				
Step	Location of the bpstart_notify and bpend_notify scripts is required for the execution of this procedure. For Appworks based applications the scripts are located as follows: /usr/TKLC/appworks/sbin/bpstart_notify /usr/TKLC/appworks/sbin/bpend_notify					
	Check off (\checkmark) each step as it is completed. Boxes have been provided for this purpose under each step number.					
	IF THIS PROCEDURE FAILS, CONTACT ORACLE'S TEKELEC CUSTOMER SUPPORT AND ASK FOR ASSISTANCE.					
1.	InstallExecute Section 3.11.5 Application NetBackup Client Procedures of reference complete this step.Client SoftwareExecute Section 3.11.5 Application NetBackup Client Procedures of reference complete this step.					
	NOTE : If installing Netbackup client software, it must be installed and configured on all SDS servers (NOAM and DR servers only).					

Appendix H. List of Frequently Used Time Zones

This table lists several valid timezone strings that can be used for the time zone setting in a CSV file, or as the time zone parameter when manually setting a DSR blade timezone. For an exhaustive list of **ALL** timezones, log onto the PMAC server console and view the text file: /usr/share/zoneinfo/zone.tab

Time Zone Value	Description	Universal Time Code (UTC) Offset	
Etc/UTC	Coordinated Universal Time	UTC-00	
America/New_York	Eastern Time	UTC-05	
America/Chicago	Central Time	UTC-06	
America/Denver	Mountain Time	UTC-07	
America/Phoenix	Mountain Standard Time - Arizona	UTC-07	
America/Los_Angeles	Pacific Time	UTC-08	
America/Anchorage	Alaska Time	UTC-09	
Pacific/Honolulu	Hawaii	UTC-10	
Africa/Johannesburg		UTC+02	
America/Mexico_City	Central Time - most locations	UTC-06	
Africa/Monrovia		UTC+00	
Asia/Tokyo		UTC+09	
America/Jamaica		UTC-05	
Europe/Rome		UTC+01	

 Table 5 - List of Selected Time Zone Values

Asia/Hong_Kong		UTC+08
Pacific/Guam		UTC+10
Europe/Athens		UTC+02
Europe/London		UTC+00
Europe/Paris		UTC+01
Europe/Madrid	mainland	UTC+01
Africa/Cairo		UTC+02
Europe/Copenhagen		UTC+01
Europe/Berlin		UTC+01
Europe/Prague		UTC+01
America/Vancouver	Pacific Time - west British Columbia	UTC-08
America/Edmonton	Mountain Time - Alberta, east British Columbia & westSaskatchewan	UTC-07
America/Toronto	Eastern Time - Ontario - most locations	UTC-05
America/Montreal	Eastern Time - Quebec - most locations	UTC-05
America/Sao_Paulo	South & Southeast Brazil	UTC-03
Europe/Brussels		UTC+01
Australia/Perth	Western Australia - most locations	UTC+08

Australia/Sydney	New South Wales - most locations	UTC+10
Asia/Seoul		UTC+09
Africa/Lagos		UTC+01
Europe/Warsaw		UTC+01
America/Puerto_Rico		UTC-04
Europe/Moscow	Moscow+00 - west Russia	UTC+04
Asia/Manila		UTC+08
Atlantic/Reykjavik		UTC+00
Asia/Jerusalem		UTC+02

Appendix I. Accepting Installation through SDS NOAM GUI

This section will accept an application installation through SDS NOAM GUI.

Appendix I: Accepting Installation through SDS NOAM GUI

Step	Procedure	Result						
1.	Active SDS VIP:	Certificate Error: Navigation Blocked - Windows Internet Explorer						
	Launch an approved	A State of the second						
	web browser and connect to the XMI Virtual IP Address	Eile Edit Yiew Favorites Tools Help Share Browser WebEx						
	(VIP) of the Active SDS site using "https://"	2 Certificate Error: Navigation Blocked						
		There is a problem with this website's security certificate.						
		The security certificate presented by this website was not issued by a trusted certificate authority. The security certificate presented by this website was issued for a different website's address.						
		Security certificate problems may indicate an attempt to fool you or intercept any data you send to the server.						
		We recommend that you close this webpage and do not continue to this website.						
	Click here to close this webpage.							
		Solution Continue to this website (not recommended).						
		Set More information						
2	Active SDS VIP:	DS VIP:						
<u>-</u> .	The user should be							
screen shown on the								
	right.	Tekelec System Login Thu Nov 17 16:03:36 2011 UTC						
	Login to the GUI							
	using the default user and password.	Log In						
		Enter your username and password to log in						
		Username: guiadmin						
		Password:						
		Change password						
		Log In						
		Welcome to the Tekelec System Login.						
		Unauthorized access is prohibited. This Tekelec system requires the use of Microsoft Internet Explorer 7.0 or 8.0 with support for JavaScript and cookies.						



Appendix I: Accepting Installation through SDS NOAM GUI

Step Procedure Result EXECUTE THIS 000 6. STEP FOR SDS 4.x SYSTEMS ONLY!!! Prepare Upgrade Initiate Upgrade Monitor Upgrade Complete Upgrade Accept Upgrade Active SDS VIP: Using the cursor left-click, select the "Accept Upgrade" dialogue button. EXECUTE THIS 7. × STEP FOR SDS 4.x The page at https://10.250.80.38 says: SYSTEMS ONLY!!! Active SDS VIP: Selecting Ok will result in the selected server being set to ACCEPT for its upgrade mode. Once accepted, the server The user is will NOT be able to revert back to the previous image state. presented with a Accept the upgrade for sds-chltnc-b with ip address dialogue box stating 169.254.100.12? that the "Accept Upgrade" action is ŋ irreversible and Cancel OK locks the Server on the current software release (i.e. Backout to the previous release is no longer allowed). If the user wishes to continue, use the cursor left-click to select the "OK" dialogue button. EXECUTE THIS Connected using VIP to sds-mrsvnc-b (ACTI 8. STEP FOR SDS 5.x SYSTEMS ONLY!!! 🖃 🚨 Main Menu Maiı 🔄 Administration Ξ. Active SDS VIP: General Options Select... Filte Access Control + Main Menu 🚔 Software Management →Administration Versions ISO Deployment → Software Hostn Upgrade Management Remote Servers + → Upgrade Configuration ÷ ...as shown on the right.

Appendix I: Accepting Installation through SDS NOAM GUI

Step	Procedure			Result			
9.	EXECUTE THIS STEP FOR SDS 5.x SYSTEMS ONLY!!!	Main Menu: Administration -> Software Management -> Upgrade					
	Active SDS VIP: Using the cursor left-click, select the row containing the Server(s) for which you would like to "Accept" upgrade. NOTE: Multi-select is available by holding down the "CTRL" key while using the cursor to	Hostname sds-mrsvnc-a sds-mrsvnc-b	Server Status OAM Max HA Role Max Allowed HA Role Norm Standby Active Norm Active Commonstant Commonst	Server Role Network Element Application Versio Network OAM&P NO_MRSVNC 5.0.0-50.19.0 Network OAM&P NO_MRSVNC 5.0.0-50.19.0 Query Server NO_MRSVNC	Function	Upgrade State Start Time Upgrade ISO Not Ready Not Ready Not Ready	Stati Finis
10.	Ieft-click multiple rows. EXECUTE THIS STEP FOR SDS 5.x SYSTEMS ONLY!!!	Backup ISO Clea	Obsrvr nup Prepare	5.0.0-50.19.0 Initiate Comple	ete Acc	ept Report Accept upgrade on the	e selected server(s).
	Active SDS VIP: Using the cursor left-click, select the "Accept" dialogue button.						
11.	EXECUTE THIS STEP FOR SDS 5.x SYSTEMS ONLY!!! Active SDS VIP: The user is presented with a dialogue box stating that the "Accept Upgrade" action is irreversible and locks the Server on the current software release (<i>i.e. Backout</i> to the previous release is no longer allowed). If the user wishes to continue, use the cursor left-click to select the "OK" dialogue button.	The page at https://10.240.241.62 says: WARNING: Selecting OK will result in the selected server being set to ACCEPT for its upgrade mode. Once accepted, the server will NOT be able to revert back to its previous image state. Accept the upgrade for the following server? sds-mrsvnc-b (169.254.100.12) OK Cancel					
	select the "OK" dialogue button.	THIS PROC	EDURE HAS BE		ED		

Appendix I: Accepting Installation through SDS NOAM GUI

Appendix J. Disable Hyperthreading (DP Only)

Ste p	Procedure	Result
1.	DP Server XMI IP (SSH):	CentOS release 4.6 (Final) Kernel 2.6.18-128.4.1.e15prerel4.0.0_70.32.0 on an x86_64
	1) Using an SSH client such as putty, access the command prompt via the server's XMI IP address.	dp-carync-2 login: root Password: <root_password></root_password>
	 Log into the server as the "root" user. 	
	NOTE: The XMI IP address may be viewed by locating the server hostname in the SDS GUI under	
	Main Menu → Configuration → Servers	
2.	DP Server XMI IP (SSH):	*** TRUNCATED OUTPUT ***
	Output similar to that shown on the right will appear as the server access the command prompt.	<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/exhr PRODPATH=/opt/TKLC/comcol/cm5_13/prod</pre>
		RUNID=0 [root@dp-carync-2 ~]#

Ste Procedure Result р [root@dp-carync-2 ~] # hpasmcli -s "show ht" **DP Server XMI IP** 3. (SSH): Processor hyper-threading is currently enabled. Execute the "hpasmcli" command [root@dp-carync-2 ~]# shown to determine the hyperthreading status for the DP blade. **NOTE:** Output returned may state "enabled" or "disabled". 4. If output from Step 3 shows that hyperthreading is currently "enabled", then proceed to Step . Error! Reference source not found. and continue. If output from Step 3 shows that hyperthreading is currently "disabled", then STOP and restart Appendix J for the next installed DP blade. 5. Launch the Internet Home - Windows Internet Explorer Explorer web browser and connect to the DP-iLO GUI interface. https://10.240.247.38 Tools File Edit Help View Favorites NOTE: Always use https:// for iLO GUI Favorites 🗑 Home access. **!!! WARNING !!!** Verify the DP-iLO IP address before proceeding. The user must login using the **DP-iLO** IP address only.

Ste Procedure Result р The web browser will 6. 4 * 🖉 Certificate Error: Navigation Blocked display a warning message regarding the Security Certificate. There is a problem with this website's security certificate. The security certificate presented by this website was not issued by a trusted of The security certificate presented by this website has expired or is not yet valid The security certificate presented by this website was issued for a different we Security certificate problems may indicate an attempt to fool you or intercept server. We recommend that you close this webpage and do not continue to thi 🔮 Click here to close this webpage. 😵 Continue to this website (not recommended). More information Select the option to 7. We recommend that you close this webpage and do not continue to this website. "Continue to the website (not 🕑 Click here to close this webpage. recommended) Continue to this website (not recommended). More information 8. Login to the iLO (DD) console as "root" and enter the configured password. Integrated Lights-Out 3 **HP** ProLiant Local user name Pass Log In

Ste Procedure Result р 9. The admin GUI is Integrated Lights-Out 3 Ø displayed. iL0 Overview Expand All Information Overview Information Status System Information Server Name dp-vzwCore2-1 System Health 🛛 🚫 OK Select the "Remote iLO Event Log Product Name ProLiant BL620c G7 Server Power ON Integrated Management Log Console" tab in the UUID 37333436-3638-5355-4531-3338464E564C Diagnostics UID Indicator Server Serial Number USE138FNVL upper left corner of the Insight Agent TPM Status Not Present Product ID 643786-B21 + Remote Console GUI. iLO Date/Time Mon Oct 29 19 System ROM 125 05/23/2011 + Virtual Media Backup System ROM 05/23/2011 + Power Management Last Used Remote Console None + Administration License Type iLO 3 Standard Blade Edition + BL c-Class iLO Firmware Version 1.20 Mar 14 2011 IP Address 10.240.247.38 il O Hostname ILOUSE138ENVL Active Sessions User: ▼ IP Local User: root 10.25.110.196 Local User: root 10.25.110.198 Virtual Buttons Note: when the UID indicator is flashing, a critical operation is being performed on the server and should not be interrupted. Server Power UID Indicator Momentary Press Press and Hold Toggle On/Off 10. The Remote Console Integrated Lights-Out 3 ProLiant BL620c G7 伆 Information GUI is displayed Click on the "Remote Remote Console Expand All Console" menu option - Information Java Launch Overview System Information iLO Event Log Integrated Re Integrated Management Log Diagnostics Access the system KVI Insight Agent Microsoft .NET Frame Remote Console Remote Console This machine reports Virtual Med + Power Management + .NET Versior Administration + Version + BL c-Class 3.5.30729

Ste p	Procedure	Result
11.	Under the "Integrated Remote Console" section in the top of the right panel, click on the "Launch" dialogue button. NOTE: Answer "Yes/OK" to any pop- up windows that might appear.	iLO Event Log Integrated Management Log Diagnostics Insight Agent Remote Console Access the system KVM and control Virtual Power & Media from a single of Microsoft .NET Framework 3.5. (available through Windows Update) is red Yirtual Media Power Management Administration • BL c-Class NET Version Detected Version Status 3.5.30729 ⊙ Note for Firefox users: Firefox also requires an Add-on to allow it to laund to find the latest version of the Microsoft .NET Framework Assistant. Launce Java Integrated Remote Console
12.	The iLO Console window is displayed. NOTE : The console window resembles an MS-DOS window but DOES NOT have a scroll-back buffer.	Poliant - 10.240.247.38 Power Switch Virtual Drives Keyboard CentUS release 6.3 (Pinel) Merrin 1.4.0.32 273.5.2.elipproreite.0.0.000.23.0.x06_64 on an x06_64 Ap-xexCore2-1 login:

Ste p	Procedure	Result
13.	Reboot the server.	ProLiant - 10.240.247.38
	This can be achieved by logging in as the " root " user and executing…	Power Switch Virtual Drives Keyboard CentOS release 6.3 (Final) Kernel 2.6.32-279.5.2.el6prerel6.0.0_80.23.0.x86_64 on an x86_64
	# init 6 <enter></enter>	dp-vzwCore2-1 login: root Password:
	at the command prompt.	Last legin: Mon Oct 29 13:28:03 from sds-vzwcore-a VPATH=/opt/TKLCcomcol/runcm6.1:/opt/TKLCcomcol/cm6.1 PRODPATH= RELEASE=6.1
	NOTE: It is normal for the Remote Console window to stay blank for up to 3 minutes	RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks PRODPATH=/opt/comcol/prod RUNID=00 UPATH=/opt/TKLCcomcol/runcm6_1:/opt/TKLCcomcol/cm6_1
	before initial output appears.	PRODPATH= RELEASE=6.1 RUNID=00 UPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon PRODPATH=/opt/comcol/prod
		RUNID=00 VPATH=/opt/TKLCcomcol/runcm6.1:/opt/TKLCcomcol/cm6.1 PRODPATH= RELEASE=6.1 RUNID=00
		VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TF PRODPATH=/opt/comcol/prod PUNID=00
		KUN 1D=88 VPATH=/opt/TKLCcomcol/runcm6.1:/opt/TKLCcomcol/cm6.1 PRODPATH= RELEASE=6.1
		RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TJ PRODPATH=/opt/comcol/prod RUNID=00
		VPATH=/opt/TKLCcomcol/runcm6.1:/opt/TKLCcomcol/cm6.1 PRODPATH= RELEASE=6.1 RUNID=00
		UPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TH PRODPATH=/opt/comcol/prod RUNID=00 [rootRdn=vzwCore2-1]]#_init_6

Appendix J:	Disable	Hyperthrea	nding (D	P Only)
				- 0

Ste p	Procedure	Result
Ste p 14.	Procedure Access the Server BIOS NOTE: It is normal for a period of 2 minutes or more to occur between pressing the F9 key and entering the Blade BIOS screen.	Result 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. As soon as you see F9=Setup in the lower left corner of the screen, press [F9] to access the BlOS setup screen. You may be required to press [F9] 2-3 times. The F9=Setup will change to F9 ressed once it is accepted. See example below. Protiant System BlOS - F64 (03/01/2010) Copyright 1982, 2010 Hewlett-Packard Development Company, LP. Processor(s) detected, 8 total cores enabled, Hyperthreading is enabled. Protiant System BlOS - F64 (03/01/2010) Copyright 1982, 2010 Hewlett-Packard Development Company, LP. Processor(s) detected, 8 total cores enabled, Hyperthreading is enabled. Processor(s) detected is clanced Power and Performance Processor(s) detected - 8 total cores enabled, Hyperthreading is enabled. Processor(s) detected - 8 total cores enabled, Hyperthreading is enabled. Processor(s) detected - 1 this system contains a volid backup system ROM. Intel (M) Koon(R) CPU ES540 @ 2.53GHz Processor Forbite Mode: Edvanced ECC Support Redundant ROM Detected - This system contains a volid backup system ROM. Intel Ambient Temperature: 19C/66F Press F9 Web noise Proces F9 Processor(s) CPU ES40 (%) ES40 (
		Expected Result: ROM-Based Setup Utility is accessed and the ROM-Based Setup Utility menu will be displayed.

Appendix J: Disable Hyperthreading (DP O)nly)
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Ste p	Procedure	Result
15.	Procedure Select System Options	Result Scroll to System Options and press [ENTER] NOM-Based Setup Colspanses [ENTER] Now Colspanses [ENTER] Now Colspanses [ENTER] System Options Power Management Options ProLiant BL4680c G6 System Options ProLiant BL4680c G6 System Options Product ID: 597864-B21 Product ID: 597864-B21 Power Management Controller - 3.4 Server Availability Server Availability Server Asset Text Advanced Options System Default Options Utility Language Press <iab> for More Information</iab>
		<1/4> for Different Selection; <tab> for More Info; <esc> to Exit Utility</esc></tab>

Appendix J: Disable Hyperthreading (DP Or	ıly)
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Ste p	Procedure	Result
16.	Select Processor Options	Select Processor Options option and press [ENTER]

Appendix J:	Disable Hyperthreading (DP Only)
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Ste p	Procedure	Result
p	Select Hyperthreading	Select Intel® Hyperthreading Options option and press [ENTER].
17.	Options	ROM-Based Setup Correction Intel(R) Virtualization Technology Intel(R) Virtualization Technology Intel(R) Virtualization Technology Intel(R) Virtualization Second Correction Intel(R) Virtualization Technology Intel(R) VIrtualization

Appendix J:	Disable Hyperthreading (DP Only)
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Ste p	Procedure	Result
18.	Set hyperthreading to Disabled .	Select Disabled option and press [ENTER]. ROM-Based Setup & Margine and Press [ENTER]. Sepurity 1982, 2011 Hewlett-Packard Development Company, L.P. Set Intel(R) Uirtualization Technology Intel(R) Hyperthreading Options Processor Core Disable Intel(R) Turbo Boost Technology Bo I Fnabled Intel(R) Turbo Boost Technology Bo I Fnabled I

Ste Procedure Result р Save Configuration Press [F10] to save the configuration and exit. The server will reboot 19. and Exit. ROM-Based Setup Utility, Version 3.00 **NOTE:** It is normal for Copyright 1982, 2010 Hewlett-Packard Development Company, L.P. the Remote Console window to stay blank for up to 3 minutes System Options Power Management Options IP ProLiant DL360 G6 before initial output S/N: USE013N1C7 appears. PCI IRQ Settings Product ID: 484184-B21 PCI Dev P BIOS P64 03/01/2010 Standar (F10) to Confirm Exit Utility Boot Co Pow<mark>er Management Controller - 2.9</mark> Date and Time Server Availability Server Security BIOS Serial Console & EMS 24576MB Memory Configured **⊨**Current Boot Controller PCI Embedded HP Smart Array P410i Controller Utility Language Press <TAB> for More Information **Expected Result:** Settings are saved and server reboots. Continue to monitor 20. ProLiant - 10.240.247.38 the server boot Power Switch Virtual Drives Keyboard process until the screen returns to the entOS release 6.3 (Final) Kernel 2.6.32-279.5.2.el6prerel6.0.0_B0.23.0.x06_64 on an x06_64 login prompt. lp-vzwCoreZ-1 login∶ 1024 x 768 🔒 RC4
Ste p	Procedure	Result
21.	Close the Remote Console window.	
22.	DP Server XMI IP (SSH):	CentOS release 4.6 (Final) Kernel 2.6.18-128.4.1.e15prerel4.0.0_70.32.0 on an x86_64
	1) Access the command prompt via the server's <i>XMI IP</i>	dp-carync-1 login: root Password: <root_password></root_password>
	2) Log into the server as the " root " user.	
	NOTE: The <i>XMI IP</i> address may be viewed by locating the server hostname under	
	Main Menu → Configuration → Servers	
23.	DP Server XMI IP (SSH):	*** TRUNCATED OUTPUT ***
	Output similar to that shown on the right will appear as the server access the command prompt.	<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/exhr PRODPATH=/opt/TKLCcomcol/cm5.13/prod</pre>
		RUNID=0 [root@dp-carync-1 ~]#

Ste p	Procedure	Result
24.	DP Server XMI IP (SSH):	<pre>[root@dp-carync-1 ~]# syscheck</pre>
	1) Execute " syscheck" .	Running modules in class disk OK Running modules in class hardware OK
	2) Record the number of " found " CPU(s) below.	Running modules in class net OK Running modules in class proc
	"found" CPU(s):	OK Running modules in class system * cpu: FAILURE:: MINOR::5000000000004 Server Hardware Configuration Error * cpu: FAILURE:: 40 CPU(s) on the system found "20" instead
		One or more module in class "system" FAILED LOG LOCATION: /var/TKLC/log/syscheck/fail_log [root@dp-carync-1 ~]#
25.	DP Server XMI IP (SSH):	<pre># syscheckAdm system cpusetvar='EXPECTED_CPUS'val='20'</pre>
	Modify the "EXPECTED_CPUS" value to the number of "found" CPU(s) in the previous Step 24 of this Procedure.	
26.	DP Server XMI IP (SSH):	<pre># syscheckAdm system cpu -get -var='EXPECTED_CPUS'</pre>
	Verify that the "EXPECTED_CPUS" value has been updated to the number of "found" CPU(s) in the previous Step 9 of this Procedure.	20

Ste p	Procedure	Result
27.	EXECUTE THIS STEP FOR SDS 5.x SYSTEMS ONLY!!!	[root@dp-carync-2 ~]# restart syscheck syscheck start/running, process 41789 [root@dp-carync-2 ~]#
	DP Server XMI IP (SSH):	
	Restart the "syscheck" service.	
	NOTE: Output to the right may differ depending on the OS version.	
28.	EXECUTE THIS STEP FOR SDS 4.x SYSTEMS ONLY!!!	<pre>[root@dp-carync-2 ~]# service syscheck restart *** TRUNCATED OUTPUT ***</pre>
	DP Server XMI IP (SSH):	RUNID=00 VPATH=/var/TKLC/rundb:/usr/TKLC/appworks:/usr/TKLC/awpcommon:/usr/TKLC/c
	Restart the "syscheck" service.	PRODPATH=/opt/comcol/prod RUNID=00
	NOTE: Output to the right may differ depending on the OS version.	Starting syscheck: [OK] [root@dp-carync-2 ~]#
29.	DP Server XMI IP (SSH):	<pre># echo 20 > /usr/TKLC/awpcommon/prod/bin/NumOriginalCpus</pre>
	Modify the number of CPUs recorded at OS installation to the number of " found " CPU(s) in the previous Step 9 of this Procedure.	
30.	DP Server XMI IP (SSH):	<pre># cat /usr/TKLC/awpcommon/prod/bin/NumOriginalCpus</pre>
	Verify the number of CPUs has been updated to the number of "found" CPU(s) in the previous Step 9 of this Procedure.	20

Ste p	Procedure	Result	
31.	DP Server XMI IP (SSH):	[root@dp-carync-1 ~]# syscheck Running modules in class disk	
	Execute " syscheck" to verify that the previous CPU alarms have been cleared.	OK Running modules in class hardware OK	
		Running modules in class net OK	
		Running modules in class proc OK	
		Running modules in class system OK	
		LOG LOCATION: /var/TKLC/log/syscheck/fail_log [root@dp-carync-1 ~]#	
32.	DP Server XMI IP (SSH):	[root@dp-carync-1 ~]# exit logout	
	Exit from the server command line.		
33.	• Repeat this procedure until hyperthreading has been "disabled" for all installed DP blades.		
	THIS PROCEDURE HAS BEEN COMPLETED		