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Procedures for the Transition of ECS into the Solaris 8 Environment

White Paper

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RESPONSIBLE AUTHOR

Benzell Floyd /s/ 5/23/02
Benzell Floyd, Sustaining Engineering, Release Support Date
EOSDIS Core System Project

RESPONSIBLE OFFICE

Royal J. White Jr. for /s/ 5/29/02
Valecia Maclin, Director, Systems Engineering Date
EOSDIS Core System Project

Raytheon Systems Company
Upper Marlboro, Maryland

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Abstract

This document describes the procedures for upgrading ECS SUN machines' operating system from Solaris 2.5.1 to Solaris 8. Information includes: list of related documentation, the related COTS products upgrades required, description of pre-transition activities and transition activities.

Keywords: OS Upgrade, Solaris, SUN, transition, procedures

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1. Introduction

1.1 Purpose

The purpose of this document is to serve as a guide for the transitioning of ECS SUN machines' operating system from Solaris 2.5.1 to Solaris 8. This document provides an overview of the transition activities, identifies COTS products affected by the transition, and hardware changes that are necessary to implement the operating system transition.

1.2 Organization

This paper is organized as follows:

Section 1 introduces the document, talks about its organization and review and approval requirements.

Section 2 provides a list of related documentation.

Section 3 provides an overview of transition procedures and hardware modifications to be made.

Section 4 provides information about advance preparatory tasks to be completed before transition begins.

Section 5 provides operating system and COTS installation information

Section 6 provides a plan for providing Solaris 8 transition training to DAAC personnel.

Section 7 provides transition details for the DAACs, SMC, and the VATC.

1.3 Review and Approval

This White Paper is an informal document approved at the Office Manager level. It does not require formal Government review or approval.

Questions regarding technical information contained within this Paper should be addressed to the following ECS contacts:

- Benzell Floyd, SE (Transition Document), (301)925-0518, bfloyd@eos.east.hitc.com
- Louis Swentek, SIT (Custom CodeTransition Procedures), (301)925-0437, lswentek@eos.east.hitc.com
- Ronald Best, RTSC (Solaris 8 Upgrade), (301)925-1044, rbest@eos.east.hitc.com
- Robert Cole, SE (Hardware Changes), (301)925-0799, rcole@eos.east.hitc.com
- Deborah Hall, DDM (Sybase), (301)925-0838, dhall@eos.east.hitc.com

– Linwood Moses, Dev (Autosys), (301) 925-1112, lmoses@eos.east.hitc.com

Questions concerning distribution or control of this document should be addressed to:

Data Management Office
The ECS Project Office
Raytheon Systems Company
1616 McCormick Drive
Upper Marlboro, Maryland 20774-5301

2. Related Documentation

This section identifies and tells how the source document, reference documents, baseline documents, PSR documents, and Technical Directives relate to each other.

2.1 Parent Document

The parent document from which this document, “Procedures for the Transition of ECS into the Solaris 8 Environment,” is derived is 223-WP-001, “Operating System Upgrade Plan for Sun Machine in ECS.”

2.2 Reference Documents

The following documents are related to this document and will amplify or clarify the information provided in this document:

223-WP-001	Operating System Upgrade Plan for SGI Machines in ECS
914-TDA-195	Solaris 2.8 Operating System Upgrade Bundle for the ECS Project

2.3 Baseline Documents

The following documents are being updated to reflect the necessary changes in the baseline to accommodate the Solaris 2.5.1 to Solaris 8 upgrade. These documents can be reviewed at the web site: <http://cmdm.east.hitc.com/baseline>.

910-TDA-003	COTS Software Version Baseline
910-TDA-005	Site-Host Map
911-TDA-xxx	SUN Solaris 8 Patch List
920-TDx-001	HW Diagram for each DAAC <i>and</i> SMC
920-TDx-002	HW-SW Map for each DAAC <i>and</i> SMC
920-TDV-002	HW-SW Map for the VATC
920-TDP-002	HW-SW Map for the PVC
920-TDx-003	System Infrastructure Baseline
920-TDx-004	Floor Plans for DAAC <i>and</i> SMC
920-TDx-008	Mount Points for each DAAC
920-TDV-008	Mount Points for the VATC
920-TDP-008	Mount Points for the PVC

920-TDx-009	HW-Database Map for each DAAC <i>and SMC</i>
920-TDx-014	O/S and COTS Hardware Patch Map for each DAAC <i>and SMC</i>
920-TDV-014	O/S and COTS Hardware Patch Map for the VATC
920-TDP-014	O/S and COTS Hardware Patch Map for the PVC
920-TDx-015	SUN Platform UNIX Kernel Configuration for each DAAC <i>and SMC</i>

2.4 Related PSR Documents

914-TDA-195	Sun Solaris 8 OS Upgrade Bundle for the ECS Project
914-TDA-187	Sun and SGI Automount COTS Release Upgrades for the ECS Project
914-TDA-192	Java and Web Services COTS Maintenance Upgrade for Solaris 8 on the ECS Project
914-TDA-193	iPlanet 6.0 Enterprise Edition, Solaris 8 OS Maintenance Upgrade for the ECS Project
914-TDA-194	FLEXlm 8.0d Maintenance Upgrade for Solaris 8 and IRIX 6.5x for the ECS Project
914-TDA-189	Ghostview v1.5 and Ghostscript v6.5.2 for Solaris 8 on the ECS Project
914-TDA-188	Forte Developer 6 Update1 Upgrade for the ECS Project
914-TDA-191	JRE 1.3.1_01 (SUN), JRE 1.3.1 (SGI) Maintenance Upgrade for the ECS Project
914-TDA-184	Crack 5.0 for Sun Solaris 8 on the ECS Project
914-TDA-201	SGI MIPSpro 7.3.1.2/2.8
914-TDA-190	Forcheck 12.84 for Solaris 8 on the ECS Project

2.5 Vendor Documents

Solaris 8 and associated products' manuals, release notes, and other useful documents can be obtained via the web at the URL addresses listed in the table below:

Product	Site Title	URL
Solaris 8 - All Components Bundled products are: ◆ Sendmail ◆ Bind ◆ Disksuite ◆ NTP ◆ GNU Zip/Unzip ◆ traceroute	Sun Product Documentation	http://docs.sun.com
Tripwire	Technical Resource Library	http://www.tripwire.com/services_and_support/tech_support/library.cfm
Top 3.5beta12	UNIX TOP	http://www.groupsys.com/top/
Jet Direct E.10.18	HP JetDirect Printer Installer for UNIX (Version E.10.18) README.UNX File	ftp://ftp.hp.com/pub/networking/software/ja244en.readme.unx

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3. Overview of Transition Procedures

3.1 General Transition Strategy

Several different methods will be used to transition the ECS SUN machines from Solaris 5 to Solaris 8. These methods: Upgrade in Place, Replacement Approach, and Substitution Approach are described below.

3.1.1 Upgrade In Place

In this approach, some of the Sun machine(s) will be upgraded in place during a scheduled downtime. First, the machine will be brought down, i.e. all the operating functions will be halted. Solaris 8 and associated COTS and custom code will then be installed on the machine. After the upgrade has been completed, the machine is brought back up and is then put through check out and regression test activities. Once the regression test has been successfully completed, the machine is place back into operations.

3.1.2 Replacement Approach

The replacement approach is based on using a new or upgraded machine to replace an operational Sun machine. If the replacement machine is an existing machine, it is upgraded with more processing power, memory, and disk space. Then Solaris 8, associated COTS products, and custom code are installed. If the replacement machine is a new machine, the new machine is added to the network. Then Solaris 8 and associated COTS and custom code are installed. After checkout and regression tests have been successfully completed, the replacement machine is placed into operation. The machine being replaced is removed from the network.

3.1.3 Substitution Approach

In the substitution approach, a machine's server functions are transferred to a temporary host. Server functions are then shut down on the permanent host and then started on the temporary host. While the temporary platform is performing the SUN machine's functions, the permanent SUN machine itself is upgraded to Solaris 8. After the upgrade is completed, Solaris 8 custom code/COTS is installed and tested on the upgraded machine. After successful completion of the test, the temporary platform is deactivated and the upgraded machine is activated.

3.2 Hardware Movement/Modifications

Some hardware movement and modifications are necessary to accomplished the upgrade of the ECS Solaris operating system with minimal impact to DAAC operations. Tables 3-1 (EDC), 3-2 (GSFC), 3-3 (LaRC), 3-4 (NSIDC), and 3-5 (SMC) summarize the hardware activity at each of the DAACs and the SMC.

It should be noted that some Sun machines will NOT be upgraded during the Solaris 8 transition. These include the following:

- CM Server hosts will remain at Solaris 2.5.1 in order to support XRP-II. Operating System will be upgraded when current XRP-II functionality is migrated to Remedy.
- The Metadata Server hosts (xxsas01) machines required early delivery of Solaris 8 and will remain at Solaris 8 07/01. A future Solaris 8 patch upgrade will bring these machines to the Solaris 8 OS and patch baseline.
- The ACSLS hosts (xxdrsxx) machines required early delivery of Solaris 8 and will remain at Solaris 8 07/01. A future Solaris 8 patch upgrade will bring these machines to the Solaris 8 OS and patch baseline.
- The Data Pool Server hosts (xxdps01) have been Jumpstarted to the Solaris 8 02/02 and patch baseline before delivery and do not need to be upgraded for the Solaris 8 Transition.

Table 3-1. EDC Hardware Movement/Modification Plan (1 of 4)

Functional Name	Pre/Post-transition hostname	Pre-transition Configuration	Post-transition Configuration	Notes
OPS WS 01	e0acs03	Ultra 1 96 MB 1 x 167 MHz 2 GB root disk	Ultra 1 320 MB 1 x 167 MHz 18 GB root disk	4x64 MB DIMMs from e0pls01
OPS WS 01	e0acs04	Sparc 20 64 MB 1 x 50 MHz 2 GB root disk	Removed From Baseline	Consolidated into e0acs03
SDSRV (P)	e0acs05	E3000 1 GB 4 x 336 MHz 9 GB root disk	no change	
SDSRV (S)	e0acs06	E3000 1 GB 4 x 248 MHz 9 GB root disk	Removed from Baseline	
AIT WS	e0ais02	Sparc 20 128 MB 1 x 50 MHz 1 GB root disk	Ultra 2 576 MB 1 x 200 MHz 18 GB root disk	The new configuration is the former e0mss01. This new platform, will consolidate the old e0ais02 and e0ais06.

Table 3-1. EDC Hardware Movement/Modification Plan (2 of 4)

Functional Name	Pre/Post-transition hostname	Pre-transition Configuration	Post-transition Configuration	Notes
AIT WS/DBMS Svr	e0ais03	Ultra 2 256 MB 1 x 200 MHz 2 GB root disk	Ultra 2 256 MB 1 x 200 MHz 18 GB root disk	
X-Term Svr	e0ais06	Sparc 20 256 MHz 1 x 50 MHz 1 GB root disk	Removed From Baseline	Consolidated into new e0ais11
ASTER LUT DB Svr 01	e0ass01	Ultra 1 128 MB 1 x 167 MHz 2 GB root disk	Ultra 1 256 MB 1 x 167 MHz 18 GB root disk	2x32 MB DIMMs from e0acs03 and 2x32 from e0acs04
ASTER LUT DB Svr 01	e0ass02	Ultra 2 128 MB 1 x 167 MHz 2 GB root disk	Ultra 2 256 MB 1 x 167 MHz 18 GB root disk	4x64 MB DIMMs from e0css02
CSS Server	e0css02	Sparc 20 256 MB 2 GB root disk	Blade 100 512 MB 1x500 MHz 15GB root disk Removed Sparc 20 From Baseline	
Dist Server (S)	e0dis01	E4000 512 MB 2 x 168 MHz 2 GB root disk	Removed From Baseline	
Dist Server (P)	e0dis02	E4000 512 MB 2 x 168 MHz 2 GB root disk	E4000 1024 MB 4 x 168 MHz 18 GB root disk	
Data Spec WS 01	e0dms03	Ultra 1 64 MB 1 x 167 MHz 2 GB root disk	Ultra 1 256 MB 1 x 167 MHz 18 GB root disk	2x32 MB DIMMs from e0ais02, 4x32 from e0drs03
Data Spec WS 02	e0dms04	Ultra 1 192 MB 1 x 167 MHz 2 GB root disk	Ultra 1 256 MB 1 x 167 MHz 18 GB root disk	2x32 MB DIMMs from e0pls01

Table 3-1. EDC Hardware Movement/Modification Plan (3 of 4)

Functional Name	Pre/Post-transition hostname	Pre-transition Configuration	Post-transition Configuration	Notes
ACSL S WS 01	e0drs03	Sparc 5 224 MB 1 x 110 MHz 2 GB root disk	Ultra 10 256 MB 1 x 440 MHz 20 GB root disk	The hardware and operating system upgrades for this machine will be complete prior to Solaris 8 transition.
ACSL S WS 02	e0drs04	Sparc 5 224 MB 1 x 170 MHz 2 GB root disk	Ultra 10 256 MB 1 x 440 MHz 20 GB root disk	This the hardware and operating system upgrades for this machine will be complete prior to Solaris 8 transition.
ACSL S WS 03	e0drs08	Ultra 10 256 MB 1 x 333 MHz 9 GB root disk	no change	
Interface Srvr 02	e0ins01	E3000 1792 MB 2 x 168 MHz 9 GB root disk	no change	
Interface Srvr 01	e0ins02	E3000 1792 MB 2 x 336MHz 9 GB root disk	no change	
MSS File Srvr	e0mss01	Ultra 2 576 MB 2 x 168 2 GB root disk	E3000 1024 MB 4 x 248 9 GB root disk	The new configuration is the former e0acs06.
CM Server	e0mss02	Ultra 2 128 MB 2 x 168 MHz 2 GB root disk	no change	This machine will remain at Solaris 5
Backup Srvr	e0mss04	E3000 256 MB 1 x 168 MHz 2 GB root disk	E3000 256 MB 1 x 168 MHz 18 GB root disk	
App Srvr (S)	e0mss20	E3000 1024 MB 4 x 168 MHz 9 GB root disk	no change	
App Srvr (P)	e0mss21	E3000 1024 MB 2 x 336 MHz 9 GB root disk	no change	

Table 3-1. EDC Hardware Movement/Modification Plan (4 of 4)

Functional Name	Pre/Post-transition hostname	Pre-transition Configuration	Post-transition Configuration	Notes
Plan/Mgmt WS 02	e0pls01	Sparc 20 384 MB 1 x 75 MHz 1 GB root disk	Removed From Baseline	Consolidated into e0pls03
PDPS DBMS Srvr	e0pls02	E4000 512 MB 4 x 168 MHz 2 GB root disk	Removed from Baseline	
Plan/Mgmt WS 01	e0pls03	Ultra 1 384 MB 1 x 167 MHz 4 GB root disk	Ultra 1 384 MB 1 x 167 MHz 18 GB root disk	
Queuing Srvr	e0sps04	E4000 1 GB 4 x 168 MHz 2 GB root disk	E4000 2048 MB 8x168 MHz 18 GB root disk	Consolidated of e0pls02/e0sps04

Table 3-2. GSFC Hardware Movement/Modification Plan

Functional Name	Pre/Post-transition Hostname	Pre-transition Configuration	Post-transition Configuration	Notes
OPS WS 01	g0acs02	Ultra 1 64 MB 1x167 MHz 2 GB root disk	Ultra 1 256 MB 1x167 MHz 18 GB root disk	2x32 MB DIMMs from each of dms04, dms05 and acs06
SDSRV (P)	g0acs03	E3000 1 GB 4x333 MHz 9 GB root disk	No change	
SDSRV (S)	g0acs04	E3000 1 GB 4x333 MHz 9 GB root disk	Removed from Baseline	
OPS WS 02	g0acs06	Sparc 20 64 MB 1x50 MHz 1 GB root disk	Blade 100 256 MB 1 x 500 MHz 15 GB root disk	

Functional Name	Pre/Post-transition Hostname	Pre-transition Configuration	Post-transition Configuration	Notes
AIT WS/DBMS Srvr	g0ais01	Ultra 1 128 MB 1x167 MHz 2 GB root disk	Blade 100 512 MB 1 x 500 MHz 15 GB root disk	Ultra 1 becomes g0ais11
AIT WS	g0ais05	Sparc 20 64 MB 1x50 MHz 1 GB root disk	Blade 100 256 MB 1 x 500 MHz 15 GB root disk	
CSS Server	g0css02	Sparc 20 256 MB 2x75 MHz 2 GB root disk	Blade 100 512 MB 1 x 500 MHz 15 GB root disk	
Dist Server (S)	g0dis01	Removed from Baseline	Removed from Baseline	
Dist Server (P)	g0dis02	E4000 512 MB 2x168 MHz 2 GB root disk	Removed from Baseline	
Data Spec WS 01	g0dms03	Sparc 20 384 MB 1x75 MHz 2 GB root disk	Blade 100 512 MB 1 x 500 MHz 15 GB root disk	
Data Spec WS 02	g0dms04	Sparc 20 64 MB 1x50 MHz 2 GB root disk	Blade 100 256 MB 1 x 500 MHz 15 GB root disk	
Data Spec WS 03	g0dms05	Sparc 20 64 MB 1x50 MHz 2 GB root disk	Blade 100 256 MB 1 x 500 MHz 15 GB root disk	
ACSLWS WS 01	g0drs03	Sparc 5 224 MB 1x110 MHz 2 GB	Ultra 10 256 MB 1x440 MHz 20 GB root disk	The hardware and operating system upgrades for this machine will be complete prior to Solaris 8 transition.
ACSLWS WS 02	g0drs04	Sparc 5 224 MB 1x110 MHz 2 GB	Ultra 10 256 MB 1x440 MHz 20 GB root disk	The hardware and operating system upgrades for this machine will be complete prior to Solaris 8 transition.

Functional Name	Pre/Post-transition Hostname	Pre-transition Configuration	Post-transition Configuration	Notes
ACSLs WS 03	g0drs15	Ultra 10 134 MB 1x333 MHz 9 GB root disk	No change	
ACSLs WS 04	g0drs12	Ultra 10 134 MB 9 GB root disk	No change	
Interface Svr 02	g0ins01	E3000 1 GB 2x168 MHz 9 GB root disk	No change	
Interface Svr 01	g0ins02	E3000 1 GB 2x168 MHz 9 GB root disk	No change	
CM Server	g0mss02	Ultra 2 128 MB 2x167 MHz 2 GB root disk	no change	This machine will remain at 2.5.1
Backup Svr	g0mss07	E3000 256 MB 1x168 MHz 2 GB root disk	E3000 256 MB 1x168 MHz 18 GB root disk	
MSS File Svr	g0mss10	Ultra 2 512 MB 2x167 MHz 2 GB root disk	Ultra 2 512 MB 2x167 MHz 18 GB root disk	
App Svr (S)	g0mss20	E3000 1024 MB 4x168 MHz 9 GB root disk	No change	
App Svr (P)	g0mss21	E3000 1024 MB 2x336 MHz 9 GB root disk	No change	
PDPS DBMS Svr	g0pls02	E4000 512 MB 4x168 MHz 2 GB root disk	Removed from baseline	

Functional Name	Pre/Post-transition Hostname	Pre-transition Configuration	Post-transition Configuration	Notes
Plan/Mgmt WS 01	g0pls01	Ultra 2 512 MB 1x168 MHz 2 GB root disk	Blade 100 512 MB 1 x 500 MHz 15 GB root disk	Ultra 2 becomes g0ais10 to provide connectivity to sparcs storage array
Plan/Mgmt WS 02	g0pls03	Sparc 20 320 MB 1x75 MHz 2 GB root disk	Blade 100 512 MB 1 x 500 MHz 15 GB root disk	
Queuing Srvr	g0sps06	E4000 1.5 GB 4x338 MHz 2 GB root disk	E4000 2.25 GB 6 x 248 MHz 18 GB root disk	Consolidation of g0sps06 and g0pls02.
	coldspare	Sparc 5 224 MB TBD TBD	Removed from baseline	
	g0ais06	E1000 1 GB 1x50 MHz TBD	Removed from Baseline	
	g0ais07	Sparc 20 128 MB 1x50 MHz 1 GB root disk	Blade 100 256 MB 1 x 500 MHz 15 GB root disk	
	g0ais08	Sparc 20 168 MB 1x50 MHz 1 GB root disk	Blade 100 256 MB 1 x 500 MHz 15 GB root disk	
	g0ais09	Sparc 20 256 MB 2x75 MHz 1 GB root disk	Blade 100 256 MB 1 x 500 MHz 15 GB root disk	
	g0ais10	Sparc 20 256 MB 2x75 MHz 2 GB root disk	Ultra 2 512 MB 1x168 MHz 18 GB root disk	former g0pls01

Functional Name	Pre/Post-transition Hostname	Pre-transition Configuration	Post-transition Configuration	Notes
	g0ais11	Sparc 20 256 MB 2x75 MHz 2 GB root disk	Ultra 1 128 MB 1x167 MHz 18 GB root disk	former g0ais01
	g0ais12	Sparc 20 224 MB 1x50 MHz 2 GB root disk	Blade 100 512 MB 1 x 500 MHz 15 GB root disk	

Table 3-3. LaRC Hardware Movement/Modification Plan

Functional Name	Pre/Post-transition Hostname	Pre-transition Configuration	Post-transition Configuration	Notes
OPS WS 01	l0acs01	Ultra 1 64 MB 1 x 167 MHz 2 GB root disk	Blade 100 256 MB 1 x 500 MHz 15 GB root disk	Ultra 1 becomes l0acs06
SDSRV (P)	l0acs03	E3000 1 GB 4 x 336 MHz 9 GB root disk	No change	
SDSRV (S)	l0acs04	E3000 1 GB 4 x 248 MHz 9 GB root disk	Removed From Baseline	
OPS WS 02	l0acs06	Sparc 20 64 MB 1 x 50 MHz 2 GB root disk	Ultra 1 256 MB 1 x 167 MHz 18 GB root disk	former l0acs01, 6x32 MB DIMMs from ais09
AIT WS/DBMS Srvr	l0ais01	Ultra 1 128 MB 1 x 167 MHz 2 GB root disk	Blade 100 256 MB 1 x 500 MHz 15 GB root disk	Ultra 1 becomes l0ais09
AIT WS	l0ais09	Sparc 20 64 MB 1 x 50 MHz 1 GB root disk	Ultra 1 128 MB 1 x 167 MHz 18 GB root disk	former l0ais01

Functional Name	Pre/Post-transition Hostname	Pre-transition Configuration	Post-transition Configuration	Notes
X-Term Svr	l0ais10	Sparc 20 384 MB 1 x 75 MHz 2 GB root disk	Ultra 1 512 MB 1 x 167 MHz 18 GB root disk	former dms01, 4x64 MB DIMMs from each of css02, ais10
CSS Server	l0css02	Sparc 20 256 MB 2 x 75 MHz 2 GB root disk	Blade 100 512 MB 1 x 500 MHz 15 GB root disk	
Dist Server (S)	l0dis01	E4000 512 MB 2 x 168 MHz 2 GB root disk	Removed from Baseline	
Dist Server (P)	l0dis02	E4000 512 MB 2 x 168 MHz 2 GB root disk	E4000 512 MB 2 x 168 MHz 18 GB root disk	
Data Spec WS 01	l0dms01	Ultra 1 64 MB 1 x 167 MHz 2 GB root disk	Blade 100 512 MB 1 x 500 MHz 15 GB root disk	Ultra 1 becomes l0ais10
Data Spec WS 02	l0dms04	Sparc 20 64 MB 1 x 50 MHz 1 GB root disk	Blade 100 256 MB 1 x 500 MHz 15 GB root disk	
Data Spec WS 03	l0dms05	Sparc 20 128 MB 1 x 50 MHz 1 GB root disk	Ultra 2 576 MB 1 x 168 MHz 18 GB root disk	former l0pls02
ACSLWS WS 01	l0drs02	Sparc 5 224 MB 1 x 110 MHz 2 GB root disk	Ultra 10 256 MB 1 x 440 MHz 20 MB root disk	The hardware and operating system upgrades for this machine will be complete prior to Solaris 8 transition.
ACSLWS WS 03	l0drs05	Ultra 10 256 MB 1 x 333 MHz 9 GB root disk	No change	
Interface Svr 02	l0ins01	E3000 1 GB 2 x 168 MHz 9 GB root disk	No change	

Functional Name	Pre/Post-transition Hostname	Pre-transition Configuration	Post-transition Configuration	Notes
Interface Svr 01	l0ins02	E3000 1 GB 2 x 168 MHz 9 GB root disk	No change	
CM Server	l0mss01	Ultra 2 128 MB 2 x 168 MHz 2 GB root disk	Ultra 2 128 MB 2 x 168 MHz 18 GB root disk	
Backup Svr	l0mss05	E3000 256 MB 1 x 168 MHz 2 GB root disk	E3000 256 MB 1 x 168 MHz 18 GB root disk	
MSS File Svr	l0mss10	Ultra 2 576 MB 2 x 168 MHz 2 GB root disk	Ultra 2 576 MB 2 x 168 MHz 18 GB root disk	
App Svr (S)	l0mss20	E3000 1024 MB 4 x 168 MHz 9 GB root disk	No change	
App Svr (P)	l0mss21	E3000 1024 MB 2 x 336 MHz 9 GB root disk	No change	
PDPS DBMS Svr	l0pls01	E3000 2 GB 4 x 168 MHz 2 GB root disk	Removed from baseline	
Plan/Mgmt WS 01	l0pls02	Ultra 2 576 MB 1 x 168 MHz 1 GB root disk	Blade 100 256 MB 1 x 500 MHz 15 GB root disk	Ultra 2 becomes l0dms05
Queuing Svr	l0sps03	E3000 2 GB 1 x 168 MHz 2 GB root disk	E4000 5 GB 8 x 400 MHz 18 GB root disk	

Table 3-4. NSIDC Hardware Movement/Modification Plan

Functional Name	Pre/Post-transition Hostname	Pre-transition Configuration	Post-transition Configuration	Notes
OPS WS 01	n0acs03	Ultra 1 128 MB 1x167 MHz 2 GB root disk	Ultra 1 128 MB 1x167 MHz 18 GB root disk	
OPS WS 01	n0acs06	Sparc 20 64 MB 1x50 MHz 1 GB root disk	Blade 100 256 MB 1 x 500 MHz 15 GB root disk	
SDSRV (P)	n0acs04	E3000 1 GB 4x248 MHz 9 GB root disk	No change	
SDSRV (S)	n0acs05	E3000 1 GB 2x168 MHz 9 GB root disk	Removed from Baseline	
AIT WS/DBMS Svr	n0ais01	Ultra 1 128 MB 1x200 MHz 2 GB root disk	Ultra 1 192 MB 1x200 MHz 18 GB root disk	2x32 MB DIMMs from old n0css02
CSS Server	n0css02	Sparc 20 224 MB 1x50 MHz 2 GB root disk	Blade 100 512 MB 1 x 500 MHz 15 GB root disk	
Dist Server (S)	n0dis01	E3000 256 MB 1x168 MHz 2 GB root disk	Removed from Baseline	
Dist Server (P)	n0dis02	E3000 256 MB 1x168 MHz 2 GB root disk	E3000 256 MB 1x168 MHz 9 GB root disk	
Data Spec WS 02	n0dms04	Ultra 1 64 MB 1x167 MHz 2 GB root disk	Ultra 1 192 MB 1x167 MHz 18 GB root disk	4x32 MB DIMMs from old n0css02
ACSLWS WS 01	n0drs03	Sparc 5 224 MHz	Ultra 10 256 MB 1 x 440 MHz 20 GB root disk	The hardware and operating system upgrades for this machine will be complete prior to Solaris 8 transition.

Functional Name	Pre/Post-transition Hostname	Pre-transition Configuration	Post-transition Configuration	Notes
Interface Svr 02	n0ins01	E3000 1 GB 2x168 MHz 9 GB root disk	No change	
Interface Svr 01	n0ins02	E3000 1 GB 2x168 MHz 9 GB root disk	No change	
MSS File Svr	n0mss01	Ultra 2 576 MB 2x168 MHz 2 GB root disk	Ultra 2 576 MB 2x168 MHz 18 GB root disk	
CM Server	n0mss02	Ultra 2 384 MHz 2x200 MHz 2 GB root disk	no change	This machine will remain at 2.5.1
Backup Svr	n0mss05	E3000 256 MB 1x168 MHz 2 GB root disk	E3000 256 MB 1x168 MHz 18 GB root disk	
App Svr (S)	n0mss20	E3000 1024 MB 4x168 MHz 9 GB root disk	No change	
App Svr (P)	n0mss21	E3000 1024 MB 2x336 MHz 9 GB root disk	No change	
Plan/Mgmt WS 01	n0pls02	Ultra 2 576 MB 1x168 MHz 2 GB root disk	Removed from Baseline as n0pls02	Becomes n0ais05
Plan/Mgmt WS 02	n0pls03	Sparc 20 256 MB 2x75 MHz 2 GB root disk	Removed from Baseline	

Functional Name	Pre/Post-transition Hostname	Pre-transition Configuration	Post-transition Configuration	Notes
PDPS DBMS Srvr	n0pls01	E4000 512 MB 2x168 MHz 2 GB root disk	Removed from baseline	
Queuing Srvr	n0sps08	E4000 512 MB 2x168 MHz 2 GB root disk	E4000 1024 MB 4 x 168 MHz 18 GB root disk	Consolidation of n0pls01 and n0sps08
Xrunner/ Loadrunner Server	N0ais05	Sparc 20 384MB 1x75 MHz 2GB root disk	Ultra 2 564MB 1x168 MHz 18 GB root disk	This platform is the former n0pls02.

Table 3-5. SMC Hardware Movement/Modification Plan

Functional Name	Pre/Post-transition Hostname	Pre-transition Configuration	Post-transition Configuration	Notes
MSS File Server	m0mss01	Ultra 2	Ultra 2 18 GB root disk	
CM Server	m0mss02	Ultra 2	Ultra 2 18 GB root disk	
Tape Backup Server	m0mss04	E3000	E3000 18 GB root disk	
CSS Server	m0css03	Sparc 20	Blade 100 512 MB 1 x 500 MHz 15 GB root disk	

Functional Name	Pre/Post-transition Hostname	Pre-transition Configuration	Post-transition Configuration	Notes
FTP Server 02	m0css04	Sparc 20	Blade 100 512 MB 1 x 500 MHz 15 GB root disk	
FTP Server 01	m0css05	Sparc 20	Blade 100 512 MB 1 x 500 MHz 15 GB root disk	
Apps Server (S)	m0mss15	E3000	E3000 18 GB root disk	
APPs Server (P)	m0mss16	E3000	E3000 18 GB root disk	
	m0mss17	Sparc 20	Blade 100 512 MB 1 x 500 MHz 15 GB root disk	

3.3 General Sequence Of Transition Events At A DAAC

The following information provides overview of the goals and transition activities involved in the SUN machines' operating system upgrade.

3.3.1 Transition Goals

- Minimize downtime.
- End transition with original hosts names and Sybase server names to minimize documentation changes and confusion.
- Provide an easy rollback method.

3.3.2 Pre-Transition Activities

The transition activities will be preceded by the completion of hardware, COTS, and custom code preparatory tasks.

3.3.2.1 Hardware Preparation

There are some required hardware changes that have to be made to enable a timely transition for Solaris 2.5.1 to Solaris 8. The hardware preparation activity is described below:

- a. Certain machines must be upgraded with additional CPU, memory, disk space, etc. prior to the start of transition activities. These machines may be used as a temporary platform to allow the servers to continue processing while the server's permanent platform is being transitioned to Solaris 8. These machines may be used to consolidate servers on one machine. The machines and upgrade specific information is provided in Tables 3-1 – 3-5.
- b. Prior to upgrading a SUN machine to Solaris 8, the following actions should be performed:
 1. Reboot the machine and closely watch displayed messages to identify any existing errors. Resolve the errors, if any;
 2. check /var/adm/messages for any software or hardware errors. Resolve the errors, if any;
 3. Remove all unnecessary core files, .tar files, .zip files, log files, etc. from the root and /data1 file systems;
 4. Remove old or unnecessary comments, commented out mount points and swap devices/files from /etc/vfstab file;
 5. Unencapsulate any root disk partitions, including swap. Confirm all disks are okay via "vxdisk list" command;
 6. Check root disk partition table via "format" utility for Volume Manager private regions;
 7. Upgrade PROM firmware. Firmware update patches are located on the JumpStart server under the /data/jumpstart/Patches/firmware directory. See patch_no/readme files for instructions.
- c. Receive SUN Blade machines as replacement for specified existing machines. Add to floor. Cable to network and burn in.
- d. A Jumpstart server must be configured to facilitate the transition to Solaris 8. The Jumpstart server is SUN software running on a network machine and it enables the automated upgrade of another SUN machine's operating system to Solaris 8. The Jumpstart software must be on a machine running Solaris 8 which has adequate disk resources to store the Solaris 8 media image, Solaris 8 patches (i.e. patches not included in the media image), and other files that will be generated during the transition process. The Jumpstart server must also be configured on the local network on which the upgrades are to take place. The proposed Jumpstart machine for each site is listed in Table 3-6. The Jumpstart configuration process is as follows.

1. Physically connect (if not connected) the Jumpstart machine to the production network. In some cases, this will require a temporary re-cabling of the host from the M&O switch to the production switch.
2. Upgrade (if necessary) the Jumpstart host to Solaris 8.
3. Attach 2 18 GB Uni-Pack external drives and configure per 922-TD[site]-xxx disk configuration document.
4. Load the Solaris 8 media images and Solaris 8 patches onto the Jumpstart server. (Note, specific instructions for the preparation of the Jumpstart server will be provided in the ECS Solaris 8 OS Upgrade Bundle PSR Release Notes document.
5. When a SUN machine is ready to be upgraded to Solaris 8, execute the Jumpstart software and transition the SUN machine to Solaris 8 as instructed in the Solaris 8 OS Upgrade Bundle PSR Release Notes document.

Table 3-6. Jumpstart Servers

Site	Jumpstart Server
EDC	e0mos09
NSIDC	n0acs05
LaRC	l0pls03
GSFC	g0mos30
SMC	g0mos30

3.3.2.2 COTS Preparation

Upgrading ECS SUN machines to Solaris 8 will necessitate an upgrade to many other COTS products, as well. These COTS will either be delivered with ECS Release 6X software, with Solaris 8 PSR, with Solaris 8 Automounted COTS PSR Bundle, with Solaris 8 Web Services COTS PSR Bundle and with Solaris 8 related individual COTS product PSRs. Detailed information about the preparatory activities and installation of these COTS will be provided in their PSR documents. Summary of the COTS installation sequence follows:

- a. StorEdge Volume Manager 3.0.4 must be installed on the applicable hosts and the temporary host prior to the Solaris 8 transition.
- b. Sybase and Autosys should be installed on the temporary host prior to the upgrade of the machines that hosts these COTS.
- c. All automounted Solaris 8 COTS products should be installed prior to the beginning of the actual Solaris 8 transition. The automounted COTS are:
 1. PERL 5.6.1
 2. Tcl/Tk 8.3.3

3. Netscape Communicator 4.78
 4. FIND_DDOS 4.2
 5. Acrobat Reader 4.05 (SUN) and 5.0 (PC)
 6. Sybase Open Client v12.0 with EBF9917 for Sun
 7. Sybase Open Client v12.0 with EBF9921 for SGI
- d. The following COTS may be installed prior to the Solaris 8 transition activity:
1. AMASS 5.2.1
 2. ClearCase 4.1
 3. Tivoli 3.6.2
 4. FLEXlm 8.0d

3.3.2.3 Custom Code Preparation

The ECS custom code Release 6X has been revised to run in the Solaris 8 environment. Details of this release, i.e. custom code revisions, installation details, etc. is provided in the ECS Release 6X PSR documentation.

3.3.3 Transition Activities

- a. Substitution Approach (to be used on machines hosting DIS, PLS, SPS, INS, MSS servers):
 1. For the machine being upgraded, install its Solaris 2.5.1 custom code on the temporary host. For each mode, do the following:
 - create a tar file for the mode's custom code
 - FTP the tar file to the temporary host
 - shut down servers (in the mode being transitioned) on the permanent host
 - start servers and perform checkout of code (in the mode being transitioned) on the temporary host
 - after successful checkout, place mode into operation.
 2. Back up the permanent host's root and /data1 partition to the jump start server.
 3. Upgrade permanent host to Solaris 8.

- if StorEdge Volume Manager 3.0.4 resides on the permanent host, execute the Volume Manager upgrade procedure before upgrading to Solaris 8. Resolve any upgrade script errors before upgrading the operating system
 - Upgrade permanent host using Solaris 8 OS Upgrade Bundle PSR Release Notes
 - Copy Volume Manager patch for Solaris 8 from the Jump Start server and install it. Run Volume Manager upgrade finish script.
4. Install and configure Solaris 8 custom code on permanent host.
 5. Transition mode by mode to permanent host. For each mode:
 - shut down servers (for the mode being transitioned) on the temporary host
 - start servers and perform checkout of code (for the mode being transitioned) on the permanent host
 - after checkout is successfully completed, place mode into operation.
- b. Upgrade in Place Approach:
1. For NIS master machine, ypbind all clients to the secondary NIS server.
 2. Back up the host's root and /data1 partition to the jump start server.
 3. Upgrade host using Solaris 8 OS Bundle.
 4. Install and configure Solaris 8 custom code (if any) and related COTS on host.
 5. Perform checkout of code on host.
 6. After checkout is successfully completed:
 - (if NIS machine) ypbind all clients from the secondary NIS machine to the master NIS machine.
 - place host into operation.
- c. Replacement Approach:
1. For NIS master machine, ypbind all clients to the secondary NIS server.
 2. Back up the host's files.
 3. Connect Sun Blade 100 to the Sparc 20 monitor, to power and the network. Give the Blade 100 a temporary name.
 4. Install Solaris 8 software and related COTS on the Blade 100.

5. Copy files from the Sparc 20 to the Blade 100.
6. Perform checkout of Blade 100. After checkout, disconnect Sparc 20 from power and network and remove from the rack.
7. Change name of Blade 100 to be the name of the host that it is replacing.
8. After checkout is successfully completed:
 - (if NIS machine) ypbind all clients from the secondary NIS machine to the new master NIS machine.
 - place host into operation.

3.3.4 Risks

- Aggressive schedule may result in some important activity being overlooked or not being adequately exercised
- No two environments are the same
- Possibility of damaging computer boards during swapping activity and causing delay
- Minimal training of DAAC personnel
- Mount points and registry changes can only be verified at the DAACs.

Risk Mitigators:

- Efforts were made to keep procedures generic where possible
- Simulated each transition method in the VATC/PVC to discover and resolve any discrepancies before the DAACs transitions begin
- EDF personnel will support DAAC transition activities
- Plan to change host names (where necessary) early and resolve mount problems before the DAAC transition activities start.

4. Advance Preparation Procedures

4.1 Scope of Preparation

This section contains a set of procedures that can be performed in advance of the Solaris 8 transition activities. The advance preparation procedures include mount points preparations, COTS upgrades, configuration files preparation, and license server preparation. A checklist for transition readiness is also provided in this section. The checklist is to be used as a guide to verify whether or not the DAAC is ready to initiate Solaris 8 transition activities.

4.2 Mount Points Preparation

The DAAC should check the mount points with the baseline mount point map provided in the mount point baseline document, 920-TDX-008 for the Solaris 8 transition. This mount point review should be performed by someone other than the person(s) who made the mount point changes for the transition.

4.3 Configuration Files Preparation

To ensure that all the registry parameter changes are made, the EDF staff will provide registry patch files. There will be one patch for each machine upgrade (only if registry changes are needed). The patches will take care of machine renaming within registry parameters, as well as changes needed for Solaris 8.

4.4 COTS Licenses Preparations

4.4.1 License Server Preparations

Several different COTS vendors use the ECS SUN FLEXlm license servers to manage the licenses for their products. These license servers are set up in a redundant three server hosts' configuration. Fail-over to one of the other license server host will occur should one of the license server hosts go down or need to be brought down for some reason. The ECS sites' redundant three license server hosts are displayed in Table 4-4, below.

Table 4-4. ECS FLEXlm License Servers

Site	License Servers
EDC	e0css02, e0mss01, e0mss04
GSFC	g0css02, g0mss10, g0mss07
LaRC	l0css02, l0mss10, l0mss05
NSIDC	n0css02, n0mss01, n0mss05
SMC	m0css03, m0mss01, m0mss04
VATC	t1css01, t1mss04, t1mss02

This redundant server host configuration requires a key that specifies all three redundant license server hosts to each FLEXlm license server. It is this key that enables the license servers hosts to fail-over if one of the license servers hosts fails or is brought down. If one or more of the three redundant license servers host are replaced by another host, then all keys have to be replaced. The ECS COTS licenses coordinator has to request a new key from the COTS vendors for each of the COTS being managed by FLEXlm. The COTS products whose licenses are managed by a FLEXlm server are: IDL, DDTs, SUN compilers, CaseVision Workshop, BuilderXcessory, DatabaseXcessory, and Purify.

The following steps should be taken if one of the license server machines is replaced:

- a) Make a copy of the current license.dat file. This file should be identical for each server in the redundant license server configuration. Copying this file will negate the need to reenter the license allocation data.
- b) Identify the new set of three license servers and provide host-ids to Robin Castle (301-925-0726/rcastle@eos.east.hitc.com) or Jan Fisher (301-925-0718/jfisher@eos.east.hitc.com) to obtain new redundant license keys.
- c) Set up FLEXlm on the new set of redundant servers:
 1. install FLEXlm on the new license server;
 2. install new redundant license key on all three servers;
 3. copy the license.dat file to each license server's FLEXlm directory.
- d) Start FLEXlm as specified in the FLEXlm PSR document.
- e) Remove FLEXlm from the license server that has been replaced.

4.4.2 Autosys License Preparation

The COTS application, Autosys and its database, will be relocated to a different machine during the transition activities. Since the Autosys license key is host ID specific and resides in the Autosys database, a relocated Autosys database will not work on the new machine. To get around this problem, a temporary (non host ID specific) Autosys license key must be installed before the relocation occurs. This temporary Autosys license key (non host ID specific) must be

obtained from the Autosys vendor prior to the start of transition activity. The temporary key must be used during the transition of the machines that hosts Autosys.

To obtain COTS License Keys, contact Robin Castle, (301-925-0726/rcastle@eos.east.hitc.com) or Jan Fisher (301-925-0718/jfisher@eos.east.hitc.com).

4.5 Checklist for Transition Readiness

Table 4-5 lists the criteria for transition readiness.

Table 4-5. Transition Readiness Criteria

Number	Transition Readiness Criteria
1.	Have the machines been checked in accordance with the actions specified in Section 3.3.2.1 b?
2.	Has all the pre-Solaris 8 transition COTS been installed and tested? (Section 3.3.2.2)
3.	Have mount points been set up (commented out) in preparation for the temporary processing machine?
4.	Has there been an independent check on mount points with the baseline?
5.	Have a temporary non-host ID specific Autosys License Key been acquired? (Section 4.4.2)
6.	If a FLEXlm license server host is to be replaced, have all of the new COTS license keys (covering the new set of license server hosts) been acquired? (Section 4.4.1)
7.	Have the temporary host machine been prepared? (hardware upgraded, if necessary? Sybase and Autosys installed and configured?)
8.	Have the Jumpstart server been identified and prepared in accordance with instructions in the Solaris 8 OS Upgrade Bundle PSR Release Notes?
9.	Does the transition team have complete and correct instructions for all steps of the downtime, including rollback?
10.	Are replacement machines entered correctly in the site map?
11.	Are replacement machines up to baseline for all baseline documents: 920-TDx-001 HW diagram for each DAAC 920-TDx-002 HW-SW Maps for each DAAC 920-TDx-003 System Infrastructure 920-TDx-004 Floor Plans for each DAAC 920-TDx-008 Mount Points for each DAAC 920-TDx-009 HW-Database Maps for each DAAC 920-TDx-014 HW-Patch Maps for each DAAC 920-TDx-018 Host Memory for each DAAC 921-TDx-002 HW Network Diagrams 922-TDx-0yy Disk Partitioning Configurations at each DAAC 923-TDx-00y Primary DNS B/L Document at each DAAC

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5. Install OS and COTS

5.1 Installation of OS and COTS

Chapter 5 describes installation and upgrade activities for Solaris 8 operating system and the ECS COTS applications. It mentions the COTS packages and refers you to their associated PSR document for detailed information about the product. This Chapter also provides some detailed information about Sybase and Autosys that must be considered during the transition activities.

5.2 Pre-transition COTS Installation

Many of the ECS COTS products can be installed prior to the Solaris 8 transition. These COTS have a version that will run under Solaris 2.5.1 and Solaris 8 and they are listed in Table 5-2, below:

Table 5-2. Pre-transition COTS

COTS Name, Version	License Impact	Install Sequence Prerequisite/Comment
AMASS 5.1.2	None	Install when PSR is completed.
ClearCase 4.1	None	Install when PSR is completed???
Tivoli 3.6.2	None	Install when PSR is completed.
StorEdge Volume Mgr. 3.0.4		Install when PSR is completed.
FLEXIm for SUN/SGI 8.0d		Install when PSR is completed.
Forcheck 12.84		Install when PSR is completed.
JRE 1.3.1_01 SUN/1.3.1 SGI		Install before installing Solaris 8 Web Services COTS Bundle
Perl 5.6.1		Install with Solaris 8 automounted COTS.
TCL/tk 8.3.3		Install with Solaris 8 automounted COTS.
Netscape Comm. 4.78		Install with Solaris 8 automounted COTS.
Sybase Open Client 12.0, EBF 9917		Includes EBF 9917 for SUN and 9921 for SGI. Install with Solaris 8 automounted COTS.
FIND_DDOS 4.2		Install with Solaris 8 automounted COTS.
Acrobat Reader 4.05 Solaris/5.0 PC		Install with Solaris 8 automounted COTS.
IPlanet 6.0 Enterprise Edition		Install after Solaris 8 has been installed.

Note, COTS that are automounted can be installed prior to the Solaris 8 upgrade.

5.3 Sybase Installation

Sybase, used by ECS servers for database functions, must be installed on the temporary host, prior to the start of Solaris 8 transition activity, if one plans to use the “Substitution” Approach during the Solaris 8 transition. This approach calls for the use of a temporary host for processing purposes while the permanent host is being transitioned to Solaris 8. Detailed procedures covering the installation of Sybase on the temporary host, setting up the necessary Sybase device allocations, transferring databases from the permanent host to the temporary host, etc. are provided in Appendix A.

If Sybase licenses are required, contact Robin Castle, License Manager at 301-925-0726 (rcastle@eos.east.hitc.com) or Jan Fisher at 301-925-0718 (jfisher@eos.east.hitc.com).

5.4 Autosys Installation

Autosys must be installed on the temporary host to facilitate Autosys functions while the PLS/SPS consolidation/ Solaris 8 transition is taking place on the permanent host. Detailed procedures covering the installation of Autosys, its license and database are provided in Appendix B.

The Autosys license scheme is based on a machine’s host id and an instance name. For the Solaris 8 transition, a temporary Autosys license that is non-host id specific will be used on the temporary host. Therefore, a temporary Autosys license must be obtained prior to the start of transition activity for use on the temporary host. Explanations concerning the use of the temporary Autosys license are provided in Appendix B, Section B.1.

A new permanent Autosys license will also be required if Autosys is to be installed on a different machine after the Solaris 8 transition has been completed. If this is the case then a permanent and a temporary license should be obtained. Contact Robin Castle, License Manager at 301-925-0726 (rcastle@eos.east.hitc.com) or Jan Fisher at 301-925-0718 (jfisher@eos.east.hitc.com) to obtain the temporary and permanent licenses.

5.5 Solaris 8 Bundle Installation

Solaris 8 installation begins after all preparatory tasks for a particular machine has been completed. Detailed information concerning prerequisites to transition and comprehensive instructions for upgrading from Solaris 2.5.1 to Solaris 8 or installing Solaris 8 on a new machine can be found in the Solaris 8 OS Upgrade Bundle PSR Release Notes document.

6. Training Plan

6.1 Training Overview

The Solaris 8 training activities will occur over a two-week period. During this timeframe all aspects of the Solaris 8 upgrade and custom code transition activities will be addressed. By the end of the training period the DAAC representatives will be fully familiar with the procedures involved in completing the transition to the Solaris 8 environment.

6.2 Training Schedule

Solaris 8 Transition Training Agenda Monday April 29th

9:00 – 9:15	Meeting and Greeting/ Introduction	-Willard Selph
9:15 – 9:30	Solaris 8 Release Manager	-Royal White
9:30 – 10:15	6A.06 overview (Solaris 2.5 & 8)	-Jenny Boliek
10:15 – 10:35	Break	
10:35 – 11:30	Solaris 8 Transition Overview	-Lou Swentek
11:30 – 12:00	Solaris 8 Operating System Overview	-Kevin Lange
12:00 – 1:00	Lunch	
1:00 – 5:00	DBA's will break away after lunch with Deborah Hall for database training.	
1:00 – 2:30	Jumpstart server	-Ron Best
2:30 – 2:50	Break	
2:50 – 4:00	COTS Installation	-Lou Swentek
4:00 – 5:00	Wrap-up/End of Day	

Solaris 8 Transition Training Agenda Tuesday April 30th

9:00 – 9:15	Review of Day One	-Willard Selph
9:15 – 12:00	<i>Database hands-on move in VATC</i> -Deborah Hall	
9:15 – 10:30	Solaris 8 Transition Procedures	-Lou Swentek

10:30 – 10:50 Break

10:50 – 12:00 Solaris 8 Transition Procedures -Lou Swentek

12:00 – 1:00 Lunch

1:00 – 5:00 *Database moves* -Deborah Hall

1:00 – 2:00 Hands-on Jumpstart server install -Ron Best

2:00 – 5:00 Start upgrade of SPS02
(Consolidation method) -Lou Swentek

5:00 – 5:30 Wrap-up/End of Day

**Solaris 8 Transition Training Agenda
Wednesday May 1st**

9:00 – 9:15 Review of Day Two -Willard Selph

9:15 – 12:00 *Continue Database work* -Deborah Hall

9:15 – 12:00 Continue upgrade of SPS02
(Consolidation method) -Lou Swentek

12:00 – 1:00 Lunch

1:00 – 5:15 *Continue Database Work/Checkout* -Deborah Hall

1:00 – 5:15 Continue upgrade of SPS02
(Consolidation method) -Lou Swentek

5:15 – 5:30 Wrap-up/End of Day

**Solaris 8 Transition Training Agenda
Thursday May 2nd**

9:00 – 9:15 Review of Day Three -Willard Selph

9:15 – 12:00 *Continue Database moves/checkout* -Deborah Hall

9:15 – 12:00 Continue upgrade/testing of SPS02
(Consolidation method) -Lou Swentek

12:00 – 1:00 Lunch

1:00 – 5:15 *Complete Database moves/checkout* -Deborah Hall

1:00 – 5:15	Continue upgrade/testing of SPS02 (Consolidation method)	-Lou Swentek
5:15 – 5:30	Wrap-up/End of Day	

**Solaris 8 Transition Training Agenda
Friday May 3rd**

9:00 – 9:15	Review of Day Four	-Willard Selph
9:15 – 12:00	<i>Database reviews and departure</i>	<i>-Deborah Hall</i>
9:15 – 12:00	Start Upgrade of CSS01 (Replacement method)	-Lou Swentek
12:00 – 1:00	Lunch	
1:00 – 5:15	Continue upgrade/testing of CSS01 (Replacement method)	-Lou Swentek
5:15 – 5:30	Wrap-up/End of Day	

**Solaris 8 Transition Training Agenda
Monday May 6th**

9:00 – 9:15	Review of Day Five	-Willard Selph
9:15 – 12:00	Start Upgrade of INS01 (Substitution method)	-Lou Swentek
12:00 – 1:00	Lunch	
1:00 – 5:15	Continue of upgrade of INS01 (Substitution method)	-Lou Swentek
5:15 – 5:30	Wrap-up/End of Day	

**Solaris 8 Transition Training Agenda
Tuesday May 7th**

9:00 – 9:15	Review of Day Six	-Willard Selph
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9:15 – 12:00	Continue upgrade/testing of INS01 (Substitution method)	-Lou Swentek
12:00 – 1:00	Lunch	
1:00 – 5:15	Continue of upgrade/testing of INS01 (Substitution method)	-Lou Swentek
5:15 – 5:30	Wrap-up/End of Day	

**Solaris 8 Transition Training Agenda
Wednesday May 8th**

9:00 – 9:15	Review of Day Seven	-Willard Selph
9:15 – 12:00	Start Upgrade of PLS01/MSS04 (Upgrade in place)	-Lou Swentek
12:00 – 1:00	Lunch	
1:00 – 5:15	Continue of upgrade/testing of PLS01/MSS04 (Upgrade in place)	-Lou Swentek
5:15 – 5:30	Wrap-up/End of Day	

**Solaris 8 Transition Training Agenda
Thursday May 9th**

9:00 – 9:15	Review of Day Eight	-Willard Selph
9:15 – 12:00	Continue upgrade/testing of PLS01/MSS04 (Upgrade in place)	-Lou Swentek
12:00 – 1:00	Lunch	
1:00 – 5:15	Continue of upgrade/testing of PLS01/MSS04 (Upgrade in place)	-Lou Swentek
5:15 – 5:30	Wrap-up/End of Day	

**Solaris 8 Transition Training Agenda
Friday May 10th**

9:00 – 11:00	Review action items/Closing training-	Willard Selph
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7. DAACs, SMC, VATC Transition Procedures

7.1 EDC Transition Procedures

This ECS EDC transition upgrade procedures assumes that a single version of custom code is available for Solaris 2.5.1 and Solaris 8, that a version of Sybase compatible with Solaris 8 is available, and all mount points are configured as identified in the EDC mount points baseline (920-TDE-008). New Hardware associated with this plan includes:

- Root drives (already specified by Landover)
- 1024 Meg of memory for e0ins11
- 1024 Meg of memory for e0ins12
- 2 Ultra 10's with 256 Meg
- 436 Gig of raid for e0dis02, A5200, 12x36 Gig

EDC's temporary database device map is shown in Table -7-1 below.

Table 7-1. EDC Temporary Database Device Map

drive	Slice	Size (MB)	Device					
			e0ins01	e0ins02	e0mss20	e0mss21	e0pls02	e0sps04
9 GB disk	0	400	master	master	master	master	master	master
c0t2d0 (former /data2)	1	1500	sybsecurity	sybsecurity		sybsecurity	sybsecurity	sybsecurity
	3	500			tempdb_di_dev1	tempdb		c0t2d0s7
	5	2000	sybsecurityarchiv e					c0t2d0s6
	6	2000						c0t3d0s6
	7	2000						c0t4d0s6
9 GB disk	0	2000	subsrpdata	ecdmworking1	EDB_di_dev1	EcsAcIStorage_Index	c2t2d0s6	
c0t3d0 (former INS client map disk)	1	2000		ecdmworking2	EDB_di_dev2	MSSData4	c2t4d0s6	
	3	2000		ecdmworking3	di_dev1	MSSData6	c2t3d0s6	
	4	2000			di_dev2	MSSData7		
	5	500				dbcc_data_device		

drive	Slice	Size (MB)	Device					
			e0ins01	e0ins02	e0mss20	e0mss21	e0pls02	e0sps04
9 GB disk	0	2000		growth4		MSSData8	c1t2d0s6	
c0t4d0 (former INS client map disk)	1	2000		ioadadvservicedata		MSSLog3	dbcc_data_device	
	3	1000				rssd_data	dbcc_log_device	
	4	1000				rssd_log		
	5	1000				dbcc_log_device		

7.1.1 EDC Distribution Servers Consolidation/Transition

The distribution servers, e0dis01 and e0dis02, will be consolidated onto a single machine, e0dis01, under Solaris 2.5.1. RAID on e0dis01 already has a distribution partition and is sufficient to handle both e0dis01 and e0dis02. This will free up e0dis02 to be upgraded to Solaris 8. All distribution functionality will then be transitioned to e0dis02. Transition procedures are:

7.1.1.1 Preparation

- a. Upgrade e0dis01 hardware. Remove the 2x168 MHz CPU board from e0dis01 and install two 2x248 MHz CPU boards from e0acs06. This will provide e0dis01 with a 4x248 MHz, 1 GB configuration under Solaris 2.5.1 for the duration of DIS transition.
- b. Temporary relocation.

Consolidate custom code for e0dis01 and e0dis02 on e0dis01. Since e0dis02 is the primary distribution server, files and configurations will be copied from e0dis02 to e0dis01. For each mode, complete the following procedures to perform the transition:

1. On e0dis02, create a tar file containing all directories under the directory /usr/ecs/<MODE>/CUSTOM/<directory> for each mode being transitioned “**except**” for any mounted directories or log directories.
2. FTP the tar file to e0dis01 and untar it under the /usr/ecs/<MODE>/CUSTOM directory.
3. Using the registry GUI, copy .CFG file entries from the e0dis02 branch to the e0dis01 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the e0dis01 branch. The detailed procedures for doing this are as follows:
 - (a) On e0dms03, open the registry GUI by running /usr/ecs/<MODE>/CUSTOM/utilities/EcCsRegistryGUIStart <MODE>. Enter/verify the appropriate .registry database

information on the window that pops up and select 'OK.' Select the attribute tree name from the drop-down box that corresponds to the mode being transitioned (when the correct tree name is selected, the mode name will appear in the Attribute Information box in the bottom left corner of the screen).

- (b) Expand the tree branches under e0dis01 until the CFG branch appears. Highlight the CFG branch by clicking on it. Select the DELETE icon above and click to confirm the deletion when a confirmation box appears. It may take some time for the deletion to complete.
 - (c) Expand the tree branches under e0dis02 until the CFG branch appears. Highlight the CFG branch by clicking on it. Select the COPY icon above and click YES to confirm the copy when a confirmation box appears. It may take a little while for the copy operation to complete. Wait until a "Successfully completed node copy" message appears at the bottom of the window before continuing. If it does not successfully copy, try again!
 - (d) Select the config branch under e0dis01 so that it is highlighted and click on the Paste icon above. It may take a little while for the paste operation to complete. Wait until a "Successfully completed paste operation" message appears at the bottom of the window before continuing.
 - (e) To verify the paste operation, re-select the Attribute Tree Name from the drop-down box and expand the e0dis01 tree branch until the branches under CFG are displayed. Verify that they are the same as those under the e0dis02 CFG branch.
4. Shut down servers in the mode being transitioned on e0dis02.
 5. Start servers and perform checkout of relocated code in the mode being transitioned on e0dis01.
- c. Backup. Back up root and /data1 partitions from e0dis02 to the jump start server.
- d. Modify/Upgrade e0dis02 hardware.
1. Install new Sbus FC-AL interface boards, remove old fiber interface cards, add the 2x168 MHz CPU board from e0dis01, and configure the new disk array for Aster ingest. See disk configuration document, 922-TDE-006 Rev 09.
 2. Remove the disk board hosting the root disk and install the new 18 GB disk boards to replace old root disks in e0dis02. Partition the new disks per disk configuration document, 922-TDE-006 Rev 09.

7.1.1.2 Upgrade Software

Upgrade e0dis02 to Solaris 8 as specified in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.1.1.3 Custom Code Installation and Checkout

Transition mode by mode to e0dis02:

- a. Install Solaris 8 version of custom code on e0dis02 using EASI to install all packages on the host as listed in the .sitemap. No additional configuration is required.
- b. Run servers on the permanent host:
 1. Shut down servers in the mode being transitioned on e0dis01.
 2. Start servers in the mode being transitioned and perform checkout of code on e0dis02
- c. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on e0dis02.
- d. After checkout is successfully completed, place e0dis02 in operation.

7.1.1.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on e0dis02.
- b. Restart servers and COTS running on e0dis01.

7.1.1.5 Post transition activity

After checkout has been completed successfully on e0dis02, return the CPU boards that were borrowed from e0acs06 to e0acs06. This will leave e0dis01 with no CPU boards.

7.1.2 EDC Science Data Server Transition

The Science Data Server will be moved from e0acs05 to e0acs06, under Solaris 2.5.1. This will free up e0acs05 to be upgraded to Solaris 8. After e0acs05 has been upgraded to Solaris 8, Science Data Server code will be moved back to e0acs05. Procedures are:

7.1.2.1 Preparation

- a. Temporary relocation.

Install custom code for e0acs05 on e0acs06. Since e0acs05 is the primary SDSRV server, files and configurations will be copied from e0acs05 to e0acs06. For each mode, complete the following procedures to perform the transition:

 1. On e0acs06, create a tar file containing all directories under the directory /usr/ecs/<MODE>/CUSTOM/<directory> for each mode being transitioned “**except**” for any mounted directories or log directories.

2. FTP the tar file to e0acs06 and untar it under the /usr/ecs/<MODE>/CUSTOM directory.
 3. Using the registry GUI, copy .CFG file entries from the e0acs05 branch to the e0acs06 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the e0acs06 branch. Detailed procedures for doing this are similar to those outlined in section 7.1.1.1.b.3.
 4. Create temporary mount points mounted from e0acs06.
 5. Create temporary mount points mounted to e0acs06.
 6. Shut down servers in the mode being transitioned on e0acs05.
 7. Start servers and perform checkout of relocated code in the mode being transitioned on e0acs06.
- b. Backup. Back up / and /data1 partitions from e0acs05 to the jump start server
 - c. Modify/Upgrade hardware. Repartition e0acs05's root disk per disk configuration document, 922-TDE-016 Rev 03.

7.1.2.2 Upgrade Software

Upgrade e0acs05 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.1.2.3 Custom Code Installation and Checkout

Transition mode by mode from e0acs06 to e0acs05:

- a. Install Solaris 8 version of custom code on e0acs05 using EASI to install all packages on the host as listed in the .sitemap.
- b. Modify e0acs05 configuration parameters to reflect the proper version of Sybase OpenClient for the Solaris 8 baseline:
 1. Using ECS Assistant Subsystem Manager, perform a mkcfg on the EcDsSr component. Do not change any configuration values -- the mkcfg will automatically insert the correct version of Sybase OpenClient (12.0.0) in the EcDsScienceDataServer.CFG and EcDsResubmit.CFG files that are created.
 2. Populate the registry with the new configuration values by using the EcCoPopulateRegistry tool.
 3. Rename configuration files (as appropriate) from EcDsxxx.CFG to EcDsxxx.CFG.rgy so that servers start from the registry. Reminder -- do **not** rename the EcDsCIMuQaMetadataUpdate.CFG file.
- c. Run servers on the permanent host:
 1. Shut down servers in the mode being transitioned on e0acs06.

2. Start servers in the mode being transitioned and perform checkout of code on e0acs05.
- d. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on e0acs05.
- e. After checkout is successfully completed, place e0acs05 in operation.

7.1.2.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on e0acs05.
- b. Restart servers and COTS running on e0acs06.

7.1.2.5 Post transition activity

N/A

7.1.3 EDC SPS and PLS Consolidation/Transition

The SPS and PLS servers will be consolidated onto a single machine, e0sps04. Note that this transition involves the relocation of Autosys, which is a mode-independent COTS product. Autosys will therefore be relocated during one of the mode relocations. The steps that involve Autosys may be ignored when transitioning other modes.

7.1.3.1 Preparation

- a. Backup. Back up / and /data1 partitions from e0sps04 to the jump start server.
- b. Upgrade hardware.
 1. Move 9 GB drive c1t10d0 from e0ins01 and 9 GB drive c1t10d0 from e0ins02 and install in e0acs06 as c0t3d0 and c0t4d0. These drives, along with c0t2d0 on e0acs06 will be used for database space during transition.
 2. Partition these 9 GB drives per disk configuration diagram in 922-TDE-016 Rev 03. The database device mapping for these drives is defined in Table 7-1..
- c. Prepare COTS.
 1. Install Sybase on e0acs06 (follow installation instructions in PSR doc. 914-TDA-163 (Oct. 25, 2001)).
 2. Install interim version of Autosys on e0acs06. See Appendix B (Sections B.1 to B.1.4.2) for additional details on the Autosys installation. Follow the steps within those sections.
 3. Create PDPS database on e0acs06 for each mode on e0pls02. Ensure PDPS database device allocations are identical to the original PDPS database on e0pls02 as described in Appendix A. Create device allocations and as verified by the guidance provided in Appendix A. Section A.2.

d. Temporary relocation.

Install PLS/SPS custom code and COTS on e0acs06 and transition mode by mode to e0acs06 under 2.5.1. For each mode, complete the following procedures to perform the transition:

1. On e0sps04 and e0pls02 create a relocation tar file containing all directories under the directory /usr/ecs/<MODE>/CUSTOM/<directory> for each mode being transitioned “**except**” for any mounted directories or log directories. Be sure to include the .installed directory in the tar file.
2. FTP the tar files to e0acs06.
3. Using the registry GUI, copy .CFG file entries from the e0pls02, e0sps04 branches to the e0acs06 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the e0acs06 branch. Procedures are:
 - (a) On e0dms03, open the registry GUI by running /usr/ecs/<MODE>/CUSTOM/utilities/EcCsRegistryGUIStart <MODE>. Enter/verify the appropriate .registry database information on the window that pops up and select ‘OK.’ Select the attribute tree name from the drop-down box that corresponds to the mode being transitioned (when the correct tree name is selected, the mode name will appear in the Attribute Information box in the bottom left corner of the screen).
 - (b) Expand the tree branches under e0acs06 until the CFG branch appears. Highlight the CFG branch by clicking on it. Select the DELETE icon above and click to confirm the deletion when a confirmation box appears. It may take some time for the deletion to complete.
 - (c) Expand the tree branches under e0sps04 until the CFG branch appears. Highlight the CFG branch by clicking on it. Select the COPY icon above and click YES to confirm the copy when a confirmation box appears. It may take a little while for the copy operation to complete. Wait until a “Successfully completed node copy” message appears at the bottom of the window before continuing. If it does not successfully copy, try again!
 - (d) Select the config branch under e0acs06 so that it is highlighted and click on the Paste icon above. It may take a little while for the paste operation to complete. Wait until a “Successfully completed paste operation” message appears at the bottom of the window before continuing.
 - (e) For each .CFG file entry under the e0pls02 branch, copy and paste the configuration entry onto the e0acs06 branch.

- (f) To verify the paste operation, re-select the Attribute Tree Name from the drop-down box and expand the e0acs06 tree branch until the branches under CFG are displayed. Verify that they are the same as those under the e0sps04 and e0pls02 CFG branches.
4. On e0acs06, untar the two relocation tar files that are located under the /usr/ecs/<MODE>/CUSTOM directory.
5. Using ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/PDPS_DB_temp.rg ypatch registry patch to point to all servers accessing the PDPS database to e0acs06_svr. Note that you will need to run mkcfg to modify this value for any servers that may be running from .CFG files instead of the registry. Since this is a temporary configuration, you may wish to modify the .CFG file directly instead of running mkcfg.
6. Create temporary mount points mounted from e0acs06.
7. Create temporary mount points mounted to e0acs06 (e0spg01, e0spg05).
8. Shut down servers in the mode being transitioned on e0pls02 and e0sps04. In addition, if an Autosys instance is being installed, shut down all PDPS servers on all hosts in all modes as well.
9. Follow the procedures in Appendix B (Autosys Installation) to make Autosys operational on e0acs06.
10. Dump PDPS database on e0pls02.
11. Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp out the Logins and Users from e0pls02.
12. Load PDPS database on e0acs06.
13. Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from e0pls02.
14. Start servers and perform checkout of relocated code in the mode being transitioned on e0acs06.
- e. Modify/Upgrade hardware.
 1. Move both CPU boards from e0pls02 to e0sps04.
 2. Repartition e0sps04's internal disks per disk configuration diagram in 922-TDE-013 Rev 03.

7.1.3.2 Upgrade Software

- a. Upgrade e0sps04 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.
- b. Modify the Sybase configuration parameters as specified below to support the permanent re-location of the PDPS databases to the e0sps04 host:

Number of User Connections: 600

Number of Open Databases: 40

Total Memory: 65536

Number of Devices: 40

7.1.3.3 Custom Code Installation and Checkout

- a. Configure disk packs on e0sps04 for combined use of e0pls02 and e0sps04. See disk partition diagram in 922-TDE-014 Rev 03. Note, the PLS database devices will be created on unused slices on the existing SPS disk packs. Consequently, the disk packs attached to e0pls02 will not have to be relocated to e0sps04.

Transition mode by mode to e0sps04:

- b. Install Solaris 8 version of custom code on e0sps04 using EASI to install all of the packages on the host as listed in the .sitemap. Be sure to use the Solaris 8 version of the .sitemap file in the staging area (this version will show all packages previously installed on e0pls02 as being installed on e0sps04).
- c. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/PDPS_DB_final.rgypatch registry patch to modify all values for DBserver currently pointing to e0acs06_svr to point back to e0sps04_svr and to point all servers to the proper version of Sybase OpenClient (12.0.0) for servers running under Solaris 8 (run mkcfg for any servers running from .CFG files).
- d. Using the registry GUI, copy .CFG entries from the e0pls02 branch to e0sps04 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the e0sps04 branch. Refer to Section 7.1.3.1 d for more detailed instructions on Registry GUI usage.
- e. Shut down servers on e0acs06. Also shut down all PDPS servers running in all modes if Autosys is being transitioned back to e0sps04.
- f. Dump PDPS and Autosys databases on e0acs06.
- g. Execute instructions in Appendix A, Section A.1 G, Transitioning Logins and Users to bcp out the Logins and Users from e0acs06.
- h. Load PDPS and Autosys databases on e0sps04.
- i. Execute instructions in Appendix A, Section A.1 G, Transitioning Logins and Users to bcp in the Logins and Users from e0acs06 to e0sps04.
- j. Perform the steps listed in Appendix B, Section B.2, to reconfigure Autosys clients to point back to the e0sps04 instances of Autosys and to make the e0sps04 Autosys instances operational again.
- k. Start servers and perform checkout of code on e0sps04.
- l. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on e0sps04.
- m. After checkout is successfully completed, place e0sps04 in operation.

7.1.3.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on e0sps04.
- b. Restart servers and COTS running on e0acs06.

7.1.3.5 Post transition activity

N/A

7.1.4 EDC INS01 Transition

The following actions will facilitate the transition of e0ins01 to Solaris 8:

7.1.4.1 Preparation

- a. Prepare COTS
 1. Make sure Volume Manager 3.0.4, JRE 1.3.1_01 and Java are on the temporary host, e0acs06, and that Volume Manager on e0ins01 has been upgraded to version 3.0.4.
 2. Create SubServer database on the temporary host for each mode being transitioned in accordance with device allocations as specified in Appendix A, Section A.1 D,. Creating Temporary Databases. (Using devices on the three drives partitioned in step 7.1.3.1.b.)
- b. Backup. Back up / and /data1 partitions from e0ins01 to the jump start server.
- c. Modify/Upgrade hardware.
 1. Shutdown the /client_user_data partition (unused) and disconnect e0ins01 from the RAID.
 2. Repartition e0ins01's root disk per disk configuration diagram in the document, 922-TDE-009 Rev. 07.
- d. Temporary relocation.

Install e0ins01 custom code on e0acs06 and transition mode by mode to e0acs06 under 2.5.1. For each mode, complete the following procedures to perform the transition:

 1. On e0ins01, create a tar file containing all directories under the directory /usr/ecs/<MODE>/CUSTOM/<directory> for each mode being transitioned “**except**” for any mounted directories or log directories.
 2. FTP the tar file to e0acs06 and untar it under the /usr/ecs/<MODE>/CUSTOM directory.
 3. Using the registry GUI, copy .CFG file entries from the e0ins01 branch to the e0acs06 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the e0acs06 branch. Detailed procedures for doing this are similar to those outlined in section 7.1.1.1.b.3.

4. Using ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/SubServer_DB_Temp.rgypatch registry patch to point to all servers accessing the Subscription Server database to e0acs06_srvr. Note that you will need to run mkcfg to modify this value for any servers that may be running from .CFG files instead of the registry.
5. Shut down custom code servers in the mode being transitioned on e0ins01.
6. Dump the SubServer database and transaction log for the mode being transitioned from e0ins01.
7. Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp out the Logins and Users from e0ins01.
9. For each mode being transferred:
 - Load SubServer database on e0acs06
 - Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from e0ins01
10. Start servers and perform checkout of relocated code in the mode being transitioned on e0acs06.

7.1.4.2 Upgrade Software

Upgrade e0ins01 to Solaris 8 using the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document. Note, make sure you perform the Volume Manager procedures, noted in the Solaris 8 release notes, before and after execution of the Solaris 8 upgrade procedures.

7.1.4.3 Custom Code Installation and Checkout

Transition mode by mode to e0ins01:

- a. Install Solaris 8 version of custom code on e0ins01 using EASI to install all packages on the host as listed in the .sitemap.
- b. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/SubServer_DB_final.rgypatch registry patch to modify all values for DBServer currently pointing to e0acs06_srvr to point back to the e0ins01_srvr and to point the Subscription Server to the proper version of Sybase OpenClient (12.0.0) for running under Solaris 8 (run mkcfg for any servers running from .CFG files).
- c. Shut down servers in the mode being transitioned on e0acs06.
- d. Dump SubServer database and transaction logs from e0acs06.
- e. Load SubServer database on e0ins01
- f. Start servers and perform checkout of code on e0ins01.

- g. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on e0ins01.
- h. After checkout is successfully completed, place e0ins01 in operation.

7.1.4.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on e0ins01.
- b. Load root and /data1 partitions from backup made in 7.1.4.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.1.4.5 Post transition activity

N/A

7.1.5 EDC INS02 Transition

The following actions will facilitate the transition of e0ins02 to Solaris 8:

7.1.5.1 Preparation

- a. Prepare COTS
 - 1. Make sure Volume Manager 3.0.4 is on the temporary host, e0acs06
 - 2. Create databases (DMS and IOS) on temporary host for each mode being transitioned using devices on the three drives partitioned in step 7.1.3.1.b.
 - 3. Install Netscape Enterprise Server on the temporary host, e0acs06, and configure instances for JDT and ODFRM in each of the modes being transitioned. Instructions for this installation and JDT configuration are provided in 914-TDA-118 Rev 01.
- b. Backup. Back up root and /data1 partitions from e0ins02 to the jump start server.
- c. Modify/Upgrade hardware.
Repartition e0ins02's root disk per disk configuration diagram in the document, 922-TDE-009 Rev. 07.
- d. Temporary relocation.
Install e0ins02 custom code on e0acs06 and transition mode by mode from e0ins02 to e0acs06. For each mode, complete the following procedures to perform the transition:
 - 1. On e0ins02, create a tar file containing all directories under the directory /usr/ecs/<MODE>/CUSTOM/<directory> for each mode being transitioned **except** for any mounted directories or log directories.
 - 2. FTP the tar file to e0acs06 and untar it under the /usr/ecs/<MODE>/CUSTOM directory.

3. Using the registry GUI, copy .CFG file entries from the e0ins02 branch to the e0acs06 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the e0acs06 branch. Detailed procedures for doing this are similar to those outlined in section 7.1.1.1.b.3.
4. Using ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/DMS_IOS_DB_tem p.rgypatch registry patch to point to all servers accessing the DMS and IOS databases to e0acs06_svr. Note that you will need to run mkcfg to modify this value for any servers that may be running from .CFG files instead of the registry.
5. Shut down custom code servers in the mode being transitioned on e0ins02.
6. Dump DMS and IOS databases and transaction logs from e0ins02.
7. Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp out the Logins and Users from e0ins02 (Note: Execution of the instructions for copying out the Logins only needs to be performed once, not once per mode).
8. For each mode being transferred:
 - Load DMS database on e0acs06
 - Load IOS database on e0acs06
 - Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from e0ins02.
9. Modify any firewall rules to redirect incoming traffic for e0ins02 to e0acs06.
10. Start servers and perform checkout of relocated code in the mode being transitioned on e0acs06.

7.1.5.2 Upgrade Software

- a. Upgrade e0ins02 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document. Note, make sure you perform the Volume Manager procedures, noted in the Solaris 8 release notes, before and after execution of the Solaris 8 upgrade procedures.
- b. Install and configure iPlanet as described in the iPlanet PSR Release Notes document. Note that some portions of the iPlanet configuration for a given mode instance cannot be completed until the custom code installation is performed.

7.1.5.3 Custom Code Installation and Checkout

Transition mode by mode to e0ins02:

- a. Install Solaris 8 version of custom code on e0ins02 using EASI to install all packages on the host as listed in the .sitemap.
- b. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/DMS_IOS_DB_final.rgpatch registry patch to modify all values for DBServer currently pointing to e0acs06_svr to point back to the e0ins02_svr and to point the Advertising Server to the proper version of Sybase OpenClient (12.0.0) for running under Solaris 8 (run mkcfg for any servers running from .CFG files).
- c. Shut down servers in the mode being transitioned on e0acs06.
- d. Dump DMS and IOS databases and transaction logs from e0acs06.
- e. For each mode being transferred:
 1. Load DMS database on e0ins02
 2. Load IOS database on e0ins02
 3. Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from e0acs06.
- f. Remove any firewall rules that were temporarily installed to redirect e0ins02 traffic to e0acs06.
- g. Start servers and perform checkout of code in the mode being transitioned on e0ins02.
- h. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on e0ins02.
- i. After checkout is successfully completed, place e0ins02 in operation.

7.1.5.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on e0ins02.
- b. Load root and /data1 partitions from backup made in 7.1.5.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.1.5.5 Post transition activity

Swap 2x168 CPU modules in e0ins01 and e0ins02 with the four 248 MHz CPU modules in e0acs06.

7.1.6 EDC MSS21 Upgrade

The following actions will facilitate the transition of e0mss21 to Solaris 8:

7.1.6.1 Preparation

a. Prepare COTS

1. Make sure Volume Manager 3.0.4 is on the temporary host, e0acs06
2. Create MSS database on temporary host for each mode being transitioned in accordance with the device allocations as specified in Appendix A and as verified in the guidance provided in Section A.2. (Using devices on the three drives partitioned in step 7.1.3.1.b.)

b. Backup. Back up / and /data1 partitions from e0mss21 to the jump start server.

c. Temporary relocation.

Install e0mss21 custom code on e0acs06 and transition mode by mode to e0acs06. For each mode, complete the following procedures to perform the transition:

1. On e0mss21, create a tar file containing all directories under the directory /usr/ecs/<MODE>/CUSTOM/<directory> for each mode being transitioned **except** for any mounted directories or log directories.
2. FTP the tar file to e0acs06 and untar it under the /usr/ecs/<MODE>/CUSTOM directory.
3. Using the registry GUI, copy .CFG file entries from the e0mss21 branch to the e0acs06 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the e0acs06 branch. Detailed procedures for doing this are similar to those outlined in section 7.1.1.1.b.3.
4. Using ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/MSS_DB_temp.rgy patch registry patch to point to all servers accessing MSS database to e0acs06_svr. Note that you will need to run mkcfg to modify this value for any servers that may be running from .CFG files instead of the registry.
5. Shut down custom code servers in the mode being transitioned on e0mss21.
6. Shutdown replication agents on the MSS databases and drop subscription on the User Profile Table.
7. Dump MSS databases and transaction logs from e0mss21.
8. Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp out the Logins and Users from e0mss21.
9. For each mode being transferred:

- Load MSS database on e0acs06
 - Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from e0mss21.
10. Start servers and perform checkout of relocated code in the mode being transitioned on e0acs06.

7.1.6.2 Upgrade Software

- a. Upgrade e0mss21 to Solaris 8. as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document. Note, make sure you perform the Volume Manager procedures, noted in the Solaris 8 release notes, before and after execution of the Solaris 8 upgrade procedures.
- b. Install and configure iPlanet as described in the iPlanet PSR Release Notes document. Note that some portions of the iPlanet configuration for a given mode instance cannot be completed until the custom code installation is performed.

7.1.6.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on e0mss21:

- a. Install the Solaris 8 version of custom code on e0mss21 using EASI to install all packages on the host as listed in the .sitemap.
- b. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/MSS_DB_final.rgypatch registry patch to modify all values for DBServer currently pointing to e0acs06_srvr to point back to the e0mss21_srvr and to point MSS servers to the proper version of Sybase OpenClient (12.0.0) for running under Solaris 8 (run mkcfg for any servers running from .CFG files).
- c. Shut down servers in the mode being transitioned on e0acs06.
- d. Dump MSS databases and transaction logs from e0acs06.
- e. For each mode being transferred:
 - Load MSS database on e0mss21
- f. Start the replication agents on the MSS databases and create new subscriptions on the User Profile Table
- g. Start servers and perform checkout of code in the mode being transitioned on e0mss21.
- h. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on e0mss21.
- i. After checkout is successfully completed, place e0mss21 in operation.

7.1.6.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on e0mss21.
- b. Load root and /data1 partitions from backup made in 7.1.6.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.1.6.5 Post transition activity

7.1.7 EDC MSS20 Upgrade

The following actions are expected to transition e0mss20:

7.1.7.1 Preparation

Backup. Back up / and /data1 partitions from e0mss20 to the jump start server.

7.1.7.2 Upgrade Software

Upgrade e0mss20 to Solaris 8. as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.1.7.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on e0mss20:

- a. Install custom code packages from the staging area
- b. Start servers and perform checkout of code on e0mss20.
- c. After checkout is successfully completed, place e0mss20 in operation.

7.1.7.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down COTS running on e0mss20.
- b. Load root and /data1 partitions from backup made in 7.1.7.1
- c. Reboot machine
- d. Perform checkout.

7.1.7.5 Post transition activity

Configure the new A5200 disk array per disk configuration diagram in the document, 922-TDE-002 Rev. 07 and transition the dashboard database devices to this array.

7.1.8 EDC Workstations

The current plan for EDC does not require any new workstations. However, EDC would better utilize the ones they currently have.

EDC users use their Maintenance network for all of their daily needs and use X-Server emulation on their PC's. This decreases the need for workstations to perform daily activities.

7.1.8.1 e0css02

The e0css02 capability will be transferred from the Sparc 20 to a SUN Blade 100 Transition procedures are as follow:

7.1.8.1.1 Preparation

Before starting this procedure, all FLEXlm license keys will have to be re-requested with the Sun Blade host id replacing the host id for the current e0css02 (Sparc 20) in the license.dat file, /usr/local/flexlm/licenses/license.dat.

- a. Backup. Back up e0css02 files.
- b. Modify/Upgrade hardware.
 1. Connect Blade 100 ethernet interface (eri0) to the site Production Lan subnet.
 2. After the Blade 100 has been placed into operation as e0css02, remove 4x64 MB DIMMS from e0css02 (Sparc 20) for installation in e0ass02..

7.1.8.1.2 Install/Upgrade Software

Using a temporary hostname and IP address, JumpStart the Sun Blade 100 (using an initial install profile) to install the Solaris 8 operation system and recommended patches. Follow installation instructions provided in the Solaris 8 OS Upgrade Bundle PSR Release Notes document. Make sure the Sun Blade 100 can be logged into from the network after the JumpStart installation has completed. Partition disk per disk configuration diagram in 922-TDE-005 Rev. 04.

7.1.8.1.3 Custom Code Installation and Checkout

There is No Custom Code on e0css02. These are procedures that should be performed to complete the transfer of the e0css02 functions to the Sun Blade 100.

- a. Verify local COTS packages (ssh20, ssh21, tripwire, TCP Wrappers, JetDirect, Legato Networker Client, etc.) were installed successfully after the JumpStart process has completed. For "upgrade" installs, these packages are only installed if they already exists.
- b. Tar up configuration files below from the original e0css02 machine. If necessary, include any additional files that may be unique to DAAC site. Ftp or copy tar file to new Sun Blade 100 and extract.

System Files:

* /etc/passwd

NIS Files:

/etc/auto_master

* /etc/shadow	/etc/auto_home
* /etc/group	/etc/auto_tools
* /etc/inet/hosts	/etc/auto_restricted
/etc/inet/networks	/etc/auto_vobs
/etc/inet/services	/etc/netgroup
/etc/inet/ntp.conf	/var/yp/Makefile
	/var/yp/ypmake
	* /etc/mail/aliases

DNS Files:

/etc/named.boot

/etc/dns (entire directory, all DNS database files)

* File paths may differ at specific DAAC sites. Check the file locations in the /var/yp/Makefile of the original e0css02 machine to confirm correct files are copied over to new Sun Blade.

- c. Edit host name related files on Sun Blade, then reboot system into single-user mode.

```
# ifconfig eri0 down
# vi /etc/e0css02.eri0
# vi /etc/e0css02
```

- d. Recreate NIS domain via "ypinit -m" command.

```
# hostname e0css02
# domainname {ypdomain}
# ypinit -m
```

- e. Create DNS BIND 8 configuration file.

```
# /usr/sbin/named-bootconf < /etc/named.boot > /etc/named.conf
```

- f. Set up FlexLM using PSR document 914-TDA-065. Create license directory and install new license file for replacement e0css02 box.

```
# umask 22; mkdir -p /usr/local/flexlm/licenses
```

- g. Upgrade Flexlm binaries to v8.0d per upgrade PSR.

- h. Copy all FlexLM vendor daemons from the original e0css02 box

```
/etc/opt/licenses/ICSBX
/etc/opt/licenses/idl_lmgrd
/etc/opt/licenses/rational
/etc/opt/licenses/sunwlicd
```

- i. Ensure FlexLM Sun vendor daemon permissions are set correctly.
chmod 755 /opt/SUNWste/license_tools/suntechd
- j. Bring Blade 100 online as e0css02
 1. NIS bind all clients, Sun and SGI, to secondary NIS server.
 2. Shutdown original e0css02 box (Sparc 20).
 3. Bring new e0css02 Sun Blade online using real hostname and IP address of original e0css02 (Sparc 20).
 4. Change hostname IP address of original e0css02 (Sparc 20) to the temporary hostname and IP address used to build the new Sun Blade, then bring on-line for access to original files.
 5. Rebind original clients back to e0css02.
 6. Test yp commands like ypcat and ypwhich to confirm functionality. (Note, if the ypbind process is run with the -ypset option, the ypcat command will fail on a Solaris 2.5.1 client that is NIS bound to the new Solaris 8 e0css02 box. Restart ypbind without the -ypset option on all Solaris .25.1 clients.)

7.1.8.1.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. NIS bind all clients to the secondary NIS server.
- b. Shut down the new e0css02.
- c. Change hostname and IP address of original e0css02 (Sparc 20) to the original hostname and IP address then bring on-line for access to original files.
- d. Rebind secondary NIS machine's clients to e0css02 (Sparc 20)
- e. Perform checkout and place into operation.

7.1.8.2 Upgrade e0pls03

7.1.8.2.1 Preparation

- a. Backup. Back up files to tape.

- b. Modify/Upgrade hardware.

Install new 18 GB root disk in e0pls03 and partition per disk configuration diagram, 922-TDE-023 Rev. 01.

7.1.8.2.2 Upgrade Software

Upgrade e0pls03 to Solaris 8 using the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.1.8.2.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on e0pls03:

- a. Install custom code packages from the staging area.
- b. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/PLNMGTWS.rgypatch registry patch to modify all values Sybase OpenClient to the proper version (12.0.0) for running under Solaris 8 (run mkcfg for any servers running from .CFG files).
- c. Start servers and perform checkout of code on e0pls03.
- d. After checkout is successfully completed, place e0pls03 in operation.

7.1.8.2.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on e0pls03.
- b. Load root and /data1 partitions from backup made in 7.1.8.2.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.1.8.3 Retire e0pls01

- a. Transition functions from e0pls01 to e0pls03 and shutdown e0pls01.
- b. Remove 4x64 and 2x32 MB DIMMs from e0pls01.

7.1.8.4 Upgrade e0acs03

7.1.8.4.1 Preparation

- a. Backup. Back up root and /data1 partitions from e0acs03 to the jump start server.
- b. Modify/Upgrade hardware.

Install new 18 GB root disk in e0acs03 and partition per disk configuration diagram in 922-TDE-012 Rev. 01.

Remove 2x32 MB DIMMs from e0acs03 and install 4x64 MB from e0pls01.

7.1.8.4.2 Upgrade Software

Upgrade e0acs03 to Solaris 8 using the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.1.8.4.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on e0acs03:

- a. Install custom code packages from the staging area
- b. Modify e0acs03 configuration parameters to reflect the proper version of Sybase OpenClient for the Solaris 8 baseline:
 1. Using ECS Assistant Subsystem Manager, perform a mkcfg on the EcIn component. Do not change any configuration values -- the mkcfg will automatically insert the correct version of Sybase OpenClient (12.0.0) in the EcInGUI.CFG files that are created.
 2. Populate the registry with the new configuration values by using the EcCoPopulateRegistry tool.
 3. Rename configuration files (as appropriate) from EcInGUIxxx.CFG to EcInGUIxxx.CFG.rgy so that servers start from the registry.
- c. Start servers and perform checkout of code on e0acs03.
- d. After checkout is successfully completed, place e0acs03 in operation.

7.1.8.4.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on e0acs03.
- b. Load root and /data1 partitions from backup made in 7.1.8.4.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.1.8.5 Retire e0acs04

- a. Transition functions from e0acs04 to e0acs03 and shutdown e0acs04.
- b. Remove 2x32 MB DIMMs from e0acs04.

7.1.8.6 Upgrade e0ass01

7.1.8.6.1 Preparation

- a. Backup. Back up / and /data1 partitions from e0ass01 to the jump start server.
- b. Modify/Upgrade hardware.

Install new 18 GB root disk in e0ass01 and partition per disk configuration diagram, in 922-TDE-024 Rev. 01.

Install 2x32 MB DIMMs from e0acs03 and 2x32 MB DIMMs from e0acs04.

7.1.8.6.2 Upgrade Software

Upgrade e0ass01 to Solaris 8. using the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.1.8.6.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on e0ass01:

- a. Install custom code packages from the staging area
- b. Start servers and perform checkout of code on e0ass01.
- c. After checkout is successfully completed, place e0ass01 in operation.

7.1.8.6.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on e0ass01.
- b. Load root and /data1 partitions from backup made in 7.1.8.4.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.1.8.7 Upgrade e0ais03

7.1.8.7.1 Preparation

- a. Backup. Back up / and /data1 partitions from e0ais03 to the jump start server.
- b. Modify/Upgrade hardware.

Install new 18 GB root disk in e0acs03 and partition per disk configuration diagram in 922-TDE-021 Rev. 02. Remove the external drives attached to e0ais03.

7.1.8.7.2 Upgrade Software

Upgrade e0ais03 to Solaris 8 using the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.1.8.7.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on e0ais03:

- a. Install custom code packages from the staging area
- b. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/AITWS.rgypatch registry patch to modify all values Sybase OpenClient to the proper version (12.0.0) for running under Solaris 8 (run mkcfg for any servers running from .CFG files).
- c. Start servers and perform checkout of code on e0ais03.
- d. After checkout is successfully completed, place e0ais03 in operation.

7.1.8.7.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on e0ais03.
- b. Load root and /data1 partitions from backup made in 7.1.8.5.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.1.8.8 Upgrade e0mss01

7.1.8.8.1 Preparation

- a. Backup. Back up / and /data1 partitions from e0mss01 to the jump start server.
- b. Modify/Upgrade hardware.

Replace Ultra 2 platform with E3000 (the former e0acs06) and partition per disk configuration diagram in 922-TDE-011 Rev. 05. Remove the Sbus fiber interface card from the Ultra 2 platform and install in the E3000. Connect the fiber interface to the old e0dis01 RAID and configure per disk configuration diagram in the document, 922-TDE-011.

7.1.8.8.2 Upgrade Software

Upgrade E3000 to Solaris 8. as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document. Rename the E3000, e0mss01.

7.1.8.8.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on e0mss01:

- a. Install custom code packages from the staging area
- b. Perform checkout of code on e0mss01.
- c. After checkout is successfully completed, place e0mss01 in operation.

7.1.8.8.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down COTS running on e0mss01.
- b. Load root and /data1 partitions from backup made in 7.1.8.8.1
- c. Reboot machine
- d. Perform checkout.

7.1.8.9 Upgrade e0ass02

7.1.8.9.1 Preparation

- a. Backup. Back up / and /data1 partitions from e0ass02 to the jump start server.
- b. Modify/Upgrade hardware.

Install new 18 GB root disk in e0ass02 and partition per disk configuration diagram in 922-TDE-024 Rev. 01.

Install 4x64 MB DIMMs from e0css02. (Do we want to do this?)

7.1.8.9.2 Upgrade Software

Upgrade e0ass02 to Solaris 8 using the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.1.8.9.3 Custom Code Installation and Checkout.

Install and configure Solaris 8 custom code on e0ass02:

- a. Install custom code packages from the staging area
- b. Start servers and perform checkout of code on e0ass02.
- c. After checkout is successfully completed, place e0ass02 in operation.

7.1.8.9.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on e0ass02.
- b. Load root and /data1 partitions from backup made in 7.1.8.9.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.1.8.10 Upgrade e0dms03

7.1.8.10.1 Preparation

- a. Prepare COTS. Make sure COTS products version is compatible with Solaris 8.
- b. Backup. Back up / and /data1 partitions from e0dms03 to the jump start server.
- c. Modify/Upgrade hardware.

Install new 18 GB root disk in e0dms03 and partition per disk configuration diagram in 922-TDE-027 Rev. 01.

Install 2x32 MB DIMMS from e0asi02 and 4x32 MB DIMMS from e0drs03.

7.1.8.10.2 Upgrade Software

Upgrade e0dms03 to Solaris 8 using the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.1.8.10.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on e0dms03:

- a. Install custom code packages from the staging area
- b. Start servers and perform checkout of code on e0dms03.

- c. After checkout is successfully completed, place e0dms03 in operation.

7.1.8.10.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on e0dms03.
- b. Load root and /data1 partitions from backup made in 7.1.8.10.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.1.8.10.5 Post transition activity

N/A

7.1.8.11 Upgrade e0dms04

7.1.8.11.1 Preparation

- a. Prepare COTS. Make sure COTS products version is compatible with Solaris 8.
- b. Backup. Back up / and /data1 partitions from e0dms04 to the jump start server.
- c. Modify/Upgrade hardware.

Install new 18 GB root disk in e0dms04 and partition per disk configuration diagram in 922-TDE-027 Rev. 01.

Install 2x32 MB DIMMS from e0pls01.

7.1.8.11.2 Upgrade Software

Upgrade e0dms04 to Solaris 8. using the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.1.8.11.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on e0dms04:

- a. Install custom code packages from the staging area
- b. Start servers and perform checkout of code on e0dms04.
- c. After checkout is successfully completed, place e0dms04 in operation.

7.1.8.11.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on e0dms04.
- b. Load root and /data1 partitions from backup made in 7.1.8.11.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.1.8.11.5 Post transition activity

N/A

7.1.8.12 Upgrade e0mss04

7.1.8.12.1 Preparation

- a. Prepare COTS. Make sure COTS products version is compatible with Solaris 8.
- b. Backup. Back up / and /data1 partitions from e0mss04 to the jump start server.
- c. Modify/Upgrade hardware.

Install new 18 GB root disk in e0mss04 and partition per disk configuration diagram in 922-TDE-031 Rev. 02.

7.1.8.12.2 Upgrade Software

Upgrade e0mss04 to Solaris 8. using the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.1.8.12.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on e0mss04:

- a. Install custom code packages from the staging area
- b. Start servers and perform checkout of code on e0mss04.
- c. After checkout is successfully completed, place e0mss04 in operation.

7.1.8.12.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on e0mss04.
- b. Load root and /data1 partitions from backup made in 7.1.8.12.1
- c. Reboot machine
- d. Perform checkout.

7.1.8.12.5 Post transition activity

7.1.8.13 Upgrade e0ais02

The e0ais02 capability will be transferred from a Sparc 20 to an Ultra 2 (the former e0mss01). e0ais06's capability will be transferred to this machine also.

7.1.8.13.1 Preparation

- a. Backup. Back up e0ais02 and e0ais06 files.
- b. Modify/Upgrade hardware.
 1. Replace Sparc 20 with Ultra 2 (the former e0mss01).

2. Replace the root disk in the former e0mss01 and partition per disk configuration diagram in the document, 922-TDE-022 Rev. 01.

7.1.8.13.2 Install/Upgrade Software

Install Solaris 8 software and related COTS on the Ultra 2. Name the Ultra 2, e0ais02.

7.1.8.13.3 Custom Code Installation and Checkout.

- a. Load e0ais02 and e0ais06 files from backup.
- b. Perform checkout.
- c. After checkout is successfully completed, place new e0ais02 in operation.

7.1.8.14 e0mss02

e0mss02 will not be upgraded to Solaris 8 as part of this transition. This is because the three primary COTS products for this host, Remedy, Clearcase, and DDTS, will not be upgraded to versions that are compatible with Solaris 8 during transition.

7.2 GSFC Transition Procedures

The transition procedures for the Solaris 8 upgrade tasks at the GSFC DAAC are shown in this section. GSFC's temporary database device map is shown in Table 7-2 below.

Table 7-2. GSFC Temporary Database Device Map

	Slice	Size (MB)	Device					
			g0ins01	g0ins02	g0mss20	g0mss21	g0pls02	g0sps06
9 GB disk c0t1d0 (former /data2 & swap)	0	400	master	master		master	master	master
	1	1500	sybsecurity	sybsecurity		sybsecurity	sybsecurity	sybsecurity
	3	500	tempdb	tempdb		tempdb		
	5	2000				EcsAclStorage_Data		c1t0d0s1
	6	2000				mssdata1		c1t0d2s1
	7	2000				mssdata2		c1t1d0s1
9 GB disk c0t2d0 (former /data3)	0	2000	subsrindex	ecdmworking1		mssdata4	c1t1d0s1	
	1	2000	subsrdata	ioadadv servicedata		mssdata6	c1t0d0s1	
	3	2000		ecdmworking2		mssdata7	c1t0d3s1	
	4	2000		ecdmworking3		mssdata9	c1t2d0s1	
	5	500				rssid_data	c1t2d3s1	
9 GB disk c0t3d0 (former INS client map disk)	0	2000	subsr_vlog	sdsrv_data_log		msslog1		c1t2d0s1
	1	2000				msslog2		c1t2d2s1
	3	1000				msslog3		c1t4d0s1
	4	1000				rssid_log		
	5	1000				dbcc_log_dev		
9 GB disk c0t4d0 (former INS client map disk)	0	2000		ecdmdictservice		mssdata10	c1t3d3s1	
	1	2000				mssdata11	c1t2d0s1	
	3	2000				mssindex1	c1t2d3s3	
	4	2000				mssindex2		
	5	500				dbcc_data_dev		

7.2.1 GSFC Distribution Servers Consolidation/Transition

The distribution server, g0dis02, will be transitioned to Solaris 8 using g0acs04 as a temporary host under Solaris 2.5.1. This will free up g0dis02 to be upgraded to Solaris 8. All distribution functional capability will then be permanently transitioned to g0dis02.

7.2.1.1 Preparation

a. Temporary relocation.

Install custom code for g0dis02 on g0acs04. For each mode, complete the following procedures to perform the transition:

1. On g0dis02, create a tar file containing all directories under the directory /usr/ecs/<MODE>/CUSTOM/<directory> for each mode being transitioned **except** for any mounted directories or log directories.
2. FTP the tar file to g0acs04 and untar it under the /usr/ecs/<MODE>/CUSTOM directory.
3. Using the registry GUI, copy .CFG file entries from the g0dis02 branch to the g0acs04 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the g0acs04 branch. The detailed procedures for doing this are as follows:
 - (a) On g0dms03, open the registry GUI by running /usr/ecs/<MODE>/CUSTOM/utilities/EcCsRegistryGUIStart <MODE>. Enter/verify the appropriate .registry database information on the window that pops up and select 'OK.' Select the attribute tree name from the drop-down box that corresponds to the mode being transitioned (when the correct tree name is selected, the mode name will appear in the Attribute Information box in the bottom left corner of the screen).
 - (b) Expand the tree branches under g0acs04 until the CFG branch appears. Highlight the CFG branch by clicking on it. Select the DELETE icon above and click to confirm the deletion when a confirmation box appears. It may take some time for the deletion to complete.
 - (c) Expand the tree branches under g0dis02 until the CFG branch appears. Highlight the CFG branch by clicking on it. Select the COPY icon above and click YES to confirm the copy when a confirmation box appears. It may take a little while for the copy operation to complete. Wait until a "Successfully completed node copy" message appears at the bottom of the window before continuing. If it does not successfully copy, try again!
 - (d) Select the config branch under g0acs04 so that it is highlighted and click on the Paste icon above. It may take a little while for the paste operation to complete. Wait until a "Successfully completed paste operation" message appears at the bottom of the window before continuing.
 - (e) To verify the paste operation, re-select the Attribute Tree Name from the drop-down box and expand the g0acs04 tree branch until

the branches under CFG are displayed. Verify that they are the same as those under the g0dis02 CFG branch.

4. Shut down servers in the mode being transitioned on g0dis02.
 5. Start servers and perform checkout of relocated code in the mode being transitioned on g0acs04.
- b. Backup. Back up / and /data1 partitions from g0dis02 to the jump start server
- c. Modify/Upgrade g0dis02 and g0acs04 hardware.
1. Root disk configuration is not required for g0dis02 as CCR 02-0397 implemented this change.
 2. Install I/O board with fiber interface in g0acs04 (from old g0dis01) and connect to old g0dis01 RAID. Configure disk array per disk configuration diagram in 922-TDG-016 Rev. 03. The fiber optic cable that formerly connected to g0dis01 is just long enough to reach g0acs04 but will have to be run over the floor to reach.

7.2.1.2 Upgrade Software

Upgrade g0dis02 to Solaris 8 as specified in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.2.1.3 Custom Code Installation and Checkout

Transition mode by mode to g0dis02:

- a. Install the Solaris 8 version of custom code on g0dis02 using EASI to install all packages on the host as listed on the .sitemap. No additional configuration is required.
- b. Run servers on the permanent host (g0dis02):
 1. Shut down servers in the mode being transitioned on g0acs04.
 2. Start servers and perform checkout of code in the mode being transitioned on g0dis02
- c. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on g0dis02.
- d. After checkout is successfully completed, place g0dis02 in operation.

7.2.1.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on g0dis02.
- b. Restart servers and COTS running on g0acs04.

7.2.1.5 Post transition activity

N/A

7.2.2 GSFC Step 2. Science Data Server Transition

The Science Data Server will be moved from g0acs03 to g0acs04, under Solaris 2.5.1. This will free up g0acs03 to be upgraded to Solaris 8. After g0acs03 has been upgraded to Solaris 8, Science Data Server code will be moved back to g0acs03. Procedures are:

7.2.2.1 Preparation

a. Temporary relocation.

Install custom code for g0acs03 on g0acs04. Since g0acs03 is the primary SDSRV server, files and configurations will be copied from g0acs03 to g0acs04. For each mode, complete the following procedures to perform the transition:

1. On g0acs03, create a tar file containing all directories under the directory /usr/ecs/<MODE>/CUSTOM/<directory> for each mode being transitioned “**except**” for any mounted directories or log directories.
2. FTP the tar file to g0acs04 and untar it under the /usr/ecs/<MODE>/CUSTOM directory.
3. Using the registry GUI, copy .CFG file entries from the g0acs03 branch to the g0acs04 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the g0acs04 branch. Detailed procedures for doing this are similar to those outlined in section 7.2.1.1.a.3.
4. Create temporary mount points mounted from g0acs04.
5. Create temporary mount points mounted to g0acs04.
6. Shut down servers in the mode being transitioned on g0acs03.
7. Start servers and perform checkout of relocated code in the mode being transitioned on g0acs04.

b. Backup. Back up / and /data1 partitions from g0acs03 to the jump start server

c. Modify/Upgrade hardware. Repartition g0acs03’s root disk per disk configuration diagram in the document, 922-TDG-016 Rev. 03.

7.2.2.2 Upgrade Software

Upgrade g0acs03 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.2.2.3 Custom Code Installation and Checkout

Transition mode by mode from g0acs04 to g0acs03:

- a. Install the Solaris 8 version of the custom code on g0acs03 using EASI to install all packages on the host as listed in the .sitemap.

- b. Modify g0acs03 configuration parameters to reflect the proper version of Sybase OpenClient for the Solaris 8 baseline:
 - 1. Using ECS Assistant Subsystem Manager, perform a mkcfg on the EcDsSr component. Do not change any configuration values -- the mkcfg will automatically insert the correct version of Sybase OpenClient (12.0.0) in the EcDsScienceDataServer.CFG and EcDsResubmit.CFG files that are created.
 - 2. Populate the registry with the new configuration values by using the EcCoPopulateRegistry tool.
 - 3. Rename configuration files (as appropriate) from EcDsxxx.CFG to EcDsxxx.CFG.rgy so that servers start from the registry. Reminder -- do **not** rename the EcDsCIMuQaMetadataUpdate.CFG file.
- c. Run servers on the permanent host:
 - 1. Shut down servers in the mode being transitioned on g0acs04.
 - 2. Start servers and perform checkout of code in the mode being transitioned on g0acs03.
- d. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on g0acs03.
- e. After checkout is successfully completed, place g0acs03 in operation.

7.2.2.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on g0acs03.
- b. Restart servers and COTS running on g0acs04.

7.2.2.5 Post transition activity

N/A

7.2.3 GSFC SPS and PLS Consolidation/Transition

The SPS and PLS servers will be consolidated onto a single machine, g0sps06. Note that this transition involves the relocation of Autosys, which is a mode-independent COTS product. Autosys will therefore be relocated during one of the mode relocations. The steps that involve Autosys may be ignored when transitioning other modes.

7.2.3.1 Preparation

- a. Backup. Back up root and /data1 partitions from g0pls02 to the jump start server.
- b. Upgrade hardware.
 - 1. Install 2x248 MHz CPU board from Landover in g0sps06. This board was formerly part of the g0dis01 configuration.

2. Move 9 GB drive c1t11d0 from g0ins01 and 9 GB drive c1t11d0 from g0ins02 and install in g0acs04 as c0t3d0 and c0t4d0. These drives are mounted as /client_map_data2 on the INS machines and are unused. These drives, along with c0t1d0 and c0t2d0 on g0acs04 will be used for database space during transition. Partition these 4 9 GB drives per Table 7-2. This disk configuration is also shown in the disk configuration diagram in the document, 922-TDG-016 Rev. 03.
 3. Remove disk packs from g0pls02 and install on g0sps06.
- c. Prepare COTS.
- Create databases on g0acs04 for each mode being transitioned using devices on the three drives partitioned in step 7.2.3.1.b.
1. Install Sybase on e0acs06 (follow installation instructions in PSR doc. 914-TDA-163 (Oct. 25, 2001)).
 2. Install interim version of Autosys on g0acs04. See Appendix B (Sections B.1 to B.1.4.2) for additional details on the Autosys installation. Follow all steps within those sections.
 3. Create database (PDPS, same as on g0pls02) on g0acs04 for each corresponding mode on g0pls02. Ensure PDPS database device allocations are identical to the original PDPS database on g0pls02. Device allocations explanations are provided in Appendix A.
- d. Temporary relocation.
- Install PLS/SPS custom code and COTS on g0acs04 and transition mode by mode to g0acs04 under Solaris 2.5.1. For each mode, complete the following procedures to perform the transition:
1. On [g0sps06, g0pls02], create a relocation tar file containing all directories under the directory /usr/ecs/<MODE>/CUSTOM/<directory> for each mode being transitioned **except** for any mounted directories or log directories. Be sure to include the .installed directory in the tar file.
 2. FTP the tar files to g0acs04.
 3. Using the registry GUI, copy .CFG file entries from the g0pls02, g0sps06 branches to the g0acs04 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the g0acs04 branch. Procedures are:
 - (a) On g0dms03, open the registry GUI by running /usr/ecs/<MODE>/CUSTOM/utilities/EcCsRegistryGUIStart <MODE>. Enter/verify the appropriate .registry database information on the window that pops up and select 'OK.' Select the attribute tree name from the drop-down box that corresponds to the mode being transitioned (when the correct tree name is selected, the mode name will appear in the Attribute Information box in the bottom left corner of the screen).

- (b) Expand the tree branches under g0acs04 until the CFG branch appears. Highlight the CFG branch by clicking on it. Select the DELETE icon above and click to confirm the deletion when a confirmation box appears. It may take some time for the deletion to complete.
 - (c) Expand the tree branches under g0sps06 until the CFG branch appears. Highlight the CFG branch by clicking on it. Select the COPY icon above and click YES to confirm the copy when a confirmation box appears. It may take a little while for the copy operation to complete. Wait until a “Successfully completed node copy” message appears at the bottom of the window before continuing. If it does not successfully copy, try again!
 - (d) Select the config branch under g0acs04 so that it is highlighted and click on the Paste icon above. It may take a little while for the paste operation to complete. Wait until a “Successfully completed paste operation” message appears at the bottom of the window before continuing.
 - (e) For each .CFG File entry under the g0pls02 branch, copy and paste the configuration entry onto the g0acs04 branch.
 - (f) To verify the paste operation, re-select the Attribute Tree Name from the drop-down box and expand the g0acs04 tree branch until the branches under CFG are displayed. Verify that they are the same as those under the g0sps06 and g0pls02 CFG branches.
4. On g0acs04, untar the two relocation tar files that are located under the /usr/ecs/<MODE>/CUSTOM directory.
 5. Using ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/PDPS_DB_temp.rgypatch registry patch to point to all servers accessing the PDPS database to g0acs04_svr. Note that you will need to run mkcfg to modify this value for any servers that may be running from .CFG files instead of the registry. Since this is a temporary configuration, you may wish to modify the .CFG file directly instead of running mkcfg.
 6. Create temporary mount points mounted from g0acs04 (list, TBD).
 7. Create temporary mount points mounted to g0acs04 (g0spg01, g0spg07, g0spg10, g0spg11).
 8. Shut down servers in the mode being transitioned on g0pls02 and g0sps06. In addition, if an Autosys instance is being transitioned, shut down all PDPS servers on all hosts in all modes as well.
 9. Follow the steps listed in Appendix B, Section B.1, to make Autosys operational on e0acs06.

10. Dump PDPS database on g0pls02. Dump Autosys database on g0sps06.
11. Perform instructions in Appendix A, Section A.1, G, Transitioning Logins and Users, to bcp out the Logins and Users from g0pls02.
12. Load PDPS database on g0acs04.
13. Perform instructions in Appendix A, A.1, G, Transitioning Logins and Users, to bcp in the Logins and Users from g0pls02.
14. Start servers and perform checkout of relocated code in the mode being transitioned on g0acs04.

7.2.3.2 Upgrade Software

- a. Upgrade g0sps06 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.
- b. Modify the Sybase configuration parameters as specified below to support the permanent re-location of the PDPS databases to the g0sps06 host:

Number of User Connections: 550

Number of Open Databases: 40

Total Memory: 65536

Number of Devices: 60

7.2.3.3 Custom Code Installation and Checkout

- a. Configure the external disk on g0sps06 for combined use of g0pls02 and g0sps06. See disk partition diagram in the document, 922-TDG-014 Rev. 03. Note, the PLS database devices will be created on unused slices on the existing SPS external disks. Consequently external disks attached to g0pls02 will not have to be relocated to g0sps06.

Transition mode by mode from g0acs04 to g0sps06 running Solaris 8:

- b. Install the Solaris 8 version of custom code on g0sps06 using EASI to install all of the packages on the host as listed in the .sitemap. Be sure to use the Solaris 8 version of the .sitemap file in the staging area (this version will show all packages previously installed on g0pls02 as being installed on g0sps06).
- c. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/PDPS_DB_final.rgypatch registry patch to modify all values for DBServer currently pointing to g0acs04_svr to point back to g0sps06_svr and to point all servers to the proper version of Sybase OpenClient (12.0.0) for servers running under Solaris 8 (run mkcfg for any servers running from .CFG files).
- d. Using the registry GUI, copy .CFG entries from the g0pls02 branch to the g0sps06 branch. Do not copy a file entry if the corresponding entry already exists

- (and is properly configured) on the g0sps06 branch. Refer to Section 7.2.3.1 d for more detailed instructions on Registry GUI usage.
- e. Shut down servers on g0acs04. Also shut down all PDPS servers running in all modes if Autosys is being transitioned back to g0sps06.
 - f. Dump PDPS and Autosys databases on g0acs04.
 - g. Execute instructions in Appendix A, Section A.1 G, Transitioning Logins and Users to bcp out the Logins and Users from g0acs04.
 - h. Load PDPS and Autosys databases on g0sps06.
 - i. Execute instructions in Appendix A, Section A.1 G, Transitioning Logins and Users to bcp in the Logins and Users from g0acs04 to g0sps06.
 - j. Perform the steps listed in Appendix B, Section B.2, to reconfigure Autosys clients to point back to the g0sps06 instances of Autosys and to make the g0sps06 Autosys instances operational again.
 - k. Start servers and perform checkout of code on g0sps06.
 - l. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on g0sps06.
 - m. After checkout is successfully completed, place g0sps06 in operation.

7.2.3.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on g0sps06.
- b. Restart servers and COTS running on g0acs04.

7.2.3.5 Post transition activity

Move 8x32 MB DIMMs from g0pls02 to g0sps06.

7.2.4 GSFC INS01 Transition

INS01 transition procedures are as follow:

7.2.4.1 Preparation

- a. Prepare COTS
 1. Make sure Volume Manager 3.0.4, JRE 1.3.1_01 and Java are on the temporary host, g0acs04 and that Volume Manager on g0ins01 has been upgraded to version 3.0.4.
 2. Create a CSS/Subscription Server database on the temporary host for each mode being transitioned in accordance with device allocations as specified in Appendix A, Section A.1, D. Creating Temporary Databases. (Using devices on the three drives partitioned in step 7.2.3.1.b.)
- b. Backup. Back up root and /data1 partitions from g0ins01 to the jump start server.
- c. Modify/Upgrade hardware.

Shutdown the /client_user_data partition (unused) and disconnect g0ins01 from the RAID. Repartition g0ins01's root disk per disk configuration diagram in the document, 922-TDG-009 Rev. 05.

d. Temporary relocation.

Install g0ins01 custom code on g0acs04 and transition mode by mode to g0acs04 under Solaris 2.5.1. For each mode, complete the following procedures to perform the transition:

1. On g0ins01, create a tar file containing all directories under the directory /usr/ecs/<MODE>/CUSTOM/<directory> for each Mode being transitioned except for any mounted directories or log directories.
2. FTP the tar file to g0acs04 and untar it under the /usr/ecs/<MODE>/CUSTOM directory.
3. Using the registry GUI, copy .CFG file entries from the g0ins01 branch to the g0acs04 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the g0acs04 branch. Detailed procedures for doing this are similar to those outlined in section 7.2.1.1.a.3.
4. Using ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/SubServer_DB_Temp.rgypatch registry patch to point to all servers accessing the Subscription Server database to g0acs04_svr. Note that you will need to run mkcfg to modify this value for any servers that may be running from .CFG files instead of the registry.
5. Shut down custom code servers in the mode being transitioned on g0ins01.
6. Dump SubServer database and transaction logs for the mode being transitioned from g0ins01.
7. Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp out the Logins and Users from g0ins01.
8. For each mode being transferred:
 - Load SubServer database on g0acs04
 - Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from g0ins01 to g0acs04.
9. Start servers and perform checkout of relocated code in the mode being transitioned on g0acs04.

7.2.4.2 Upgrade Software

Upgrade g0ins01 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document. Note, make sure you perform the Volume Manager procedures, noted in the Solaris 8 release notes, before and after execution of the Solaris 8 upgrade procedures.

7.2.4.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on g0ins01:

- a. Install the Solaris 8 version of custom code using EASI to install all of the packages on the host as listed in the .sitemap.
- b. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/SubServer_DB_final.rgpatch registry patch to modify all values for DBServer currently pointing to g0acs04_svr to point back to the g0ins01_svr and to point the Subscription Server to the proper version of Sybase OpenClient (12.0.0) for running under Solaris 8. Run mkcfg for any servers running from .CFG files.
- c. Shut down servers in the mode being transitioned on g0acs04.
- d. Dump SubServer database and transaction logs from g0acs04.
- e. Transition mode by mode from g0acs04 to g0ins01. For each mode being transferred:
 - Load SubServer database on g0ins01
 - Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from g0acs04 to g0ins01.
- f. Start servers and perform checkout of code on g0ins01.
- g. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on g0ins01.
- h. After checkout is successfully completed, place g0ins01 in operation.

7.2.4.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on g0ins01.
- b. Load root and /data1 partitions from backup made in 7.2.4.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.2.4.5 Post transition activity

N/A

7.2.5 GSFC INS02 Transition

The following procedures will facilitate the transition of g0ins02 to Solaris 8:

7.2.5.1 Preparation

- a. Prepare COTS
 1. Make sure Volume Manager 3.0.4 is on the temporary host, g0acs04 and that Volume Manager has been upgraded to version 3.0.4 on g0ins02.
 2. Create databases (DMS and IOS) on temporary host for each mode being transitioned using devices on the three drives partitioned in step 7.2.3.1.b.
- b. Backup. Back up / and /data1 partitions from g0ins02 to the jump start server.
- c. Modify/Upgrade hardware.

Repartition g0ins02's root disk per disk configuration diagram in the document, 922-TDG-009 Rev. 05.
- d. Temporary relocation.

Install g0ins02 custom code on g0acs04 and transition mode by mode from e0ins02 to e0acs04. For each mode, complete the following procedures to perform the transition:

 1. Create a tar file containing all directories under the directory /usr/ecs/<MODE>/CUSTOM/<directory> for each mode being transitioned except for any mounted directories or log directories.
 2. FTP the tar file to g0acs04 and untar it under the /usr/ecs/<MODE>/CUSTOM directory.
 3. Using the registry GUI, copy .CFG file entries from the g0ins02 branch to the g0acs04 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the g0acs04 branch. Detailed procedures for doing this are similar to those outlined in section 7.2.1.1.a.3.
 4. Using ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/DMS_IOS_DB_Temp.rgypatch registry patch to point to all servers accessing the DMS and IOS databases to g0acs04_svr. Note that you will need to run mkcfg to modify this value for any servers that may be running from .CFG files instead of the registry.
 5. Shut down custom code servers in the mode being transitioned on g0ins02.
 6. Dump DMS and IOS databases and transaction logs in the mode being transitioned from g0ins02.
 7. Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp out the Logins and Users from g0ins02.

8. For each mode being transferred:
 - Load DMS database on g0acs04
 - Load IOS database on g0acs04.
 - Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from g0ins02 to g0acs04.
9. Modify any firewall rules required to redirect incoming traffic for g0ins02 to g0acs04.
10. Start servers and perform checkout of relocated code in the mode being transitioned on g0acs04.

7.2.5.2 Upgrade Software

- a. Upgrade g0ins02 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document. Note, make sure you perform the Volume Manager procedures, noted in the Solaris 8 release notes, before and after execution of the Solaris 8 upgrade procedures.
- b. Install and configure iPlanet as described in the iPlanet PSR Release Notes document. Note that some portions of the iPlanet configuration for a given mode instance cannot be completed until the custom code installation is performed.

7.2.5.3 Custom Code Installation and Checkout

Transition mode by mode to g0ins02:

- a. Install the Solaris 8 version of custom code on g0ins02 using EASI to install all of the packages on the host as listed in the .sitemap.
- b. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/DMS_IOS_DB_final.rgypa tch registry patch to modify all values for DBServer currently pointing to g0acs04_svr to point back to the g0ins02_svr and to point the Advertising Server to the proper version of Sybase OpenClient (12.0.0) for running under Solaris 8. Run mkcfg for any servers running from .CFG files.
- c. Shut down servers in the mode being transitioned on g0acs04.
- d. Dump DMS and IOS databases and transaction logs from g0acs04.
- e. For each mode being transferred:
 - Load DMS database on g0ins02
 - Load IOS database on g0ins02
 - Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from g0acs04 to g0ins02.

- f. Remove any firewall rules that were temporarily installed to redirect eoins02 traffic to eoacs06.
- g. Start servers and perform checkout of code on g0ins02.
- h. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on g0ins02.
- i. After checkout is successfully completed, place g0ins02 in operation.

7.2.5.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on g0ins02.
- b. Load root and /data1 partitions from backup made in 7.2.5.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.2.5.5 Post transition activity

N/A

7.2.6 GSFC MSS21 Upgrade

The following actions will facilitate the transition of g0mss21 to Solaris 8:

7.2.6.1 Preparation

- a. Prepare COTS
 - 1. Make sure Volume Manager 3.0.4 is on the temporary host, g0acs04 and g0mss21.
 - 2. Create MSS database on temporary host for each mode being transitioned in accordance with the device allocations as specified in Appendix A. (Using devices on the three drives partitioned in step 7.2.3.1.b.)
- b. Backup. Back up root and /data1 partitions from g0mss21 to the jump start server.
- c. Temporary relocation.
Install g0mss21 custom code on g0acs04 and transition mode by mode to g0acs04. For each mode, complete the following procedures to perform the transition:
 - 1. On g0mss21, create a tar file containing all directories under the directory /usr/ecs/<MODE>/CUSTOM/<directory> for each mode being transitioned **except** for any mounted directories or log directories.
 - 2. FTP the tar file to g0acs04 and untar it under the /usr/ecs/<MODE>/CUSTOM directory.
 - 3. Using the registry GUI, copy .CFG file entries from the g0mss21 branch to the g0acs04 branch. Do not copy a file entry if the corresponding entry

already exists (and is properly configured) on the g0acs04 branch. Detailed procedures for doing this are similar to those outlined in section 7.2.1.1.a.3.

4. Using ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/MSS_DB_temp.rgy patch registry patch to point to all servers accessing MSS database to g0acs04_svr. Note that you will need to run mkcfg to modify this value for any servers that may be running from .CFG files instead of the registry.
5. Shut down custom code servers in the mode being transitioned on g0mss21.
6. Shutdown the replication agents and drop subscription on the User Profile Table.
7. Dump MSS database and transaction logs from g0mss21.
8. Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp out the Logins and Users from g0mss21.
9. For each mode being transferred:
 - Load MSS database on g0acs04
 - Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from g0mss21.
10. Start servers and perform checkout of relocated code in the mode being transitioned on g0acs04.

7.2.6.2 Upgrade Software

- a. Upgrade g0mss21 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document. Note, make sure you perform the Volume Manager procedures, noted in the Solaris 8 release notes, before and after execution of the Solaris 8 upgrade procedures.
- b. Install and configure iPlanet as described in the iPlanet PSR Release Notes document. Note that some portions of the iPlanet configuration for a given mode instance cannot be completed until the custom code installation is performed.

7.2.6.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on g0mss21:

- a. Install the Solaris 8 version of custom code using EASI to install all of the packages on the host as listed in the .sitemap.
- b. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/MSS_DB_final.rgypatch

registry patch to modify all values for DBServer currently pointing to g0acs04_srvr to point back to the g0mss21_srvr and to point the MSS servers to the proper version of Sybase OpenClient (12.0.0) for running under Solaris 8. Run mkcfg for any servers running from .CFG files.

- c. Shut down servers in the mode being transitioned on g0acs04.
- d. Dump MSS database and transaction logs from g0acs04.
- e. For each mode being transferred:
 - Load MSS database on g0mss21
 - Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from g0acs04 to g0mss21.
- f. Start the replication agents and create subscription for the User Profile Table.
- g. Start servers and perform checkout of code in the mode being transitioned on g0mss21.
- h. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on g0mss21.
- i. After checkout is successfully completed, place g0mss21 in operation.

7.2.6.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on g0mss21.
- b. Load root and /data1 partitions from backup made in 7.2.6.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.2.6.5 Post transition activity

N/A.

7.2.7 MSS20 Upgrade

The following actions will facilitate the transition of g0mss20 to Solaris 8:

7.2.7.1 Preparation

Backup. Back up root and /data1 partitions from g0mss20 to the jump start server.

7.2.7.2 Upgrade Software

Upgrade g0mss20 to Solaris 8. as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.2.7.3 Custom Code Installation and Checkout

There is no custom code on this platform.

7.2.7.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down COTS running on g0mss20.
- b. Load root and /data1 partitions from backup made in 7.2.7.1
- c. Reboot machine
- d. Perform checkout.

7.2.7.5 Post transition activity

Configure the new A5200 disk array per disk configuration diagram in the document, 922-TDG-002 Rev. 05 and transition the dashboard devices to this array.

7.2.8 GSFC Workstations

7.2.8.1 Upgrade Workstations: g0pls01 and g0ais10

g0pls01 capability will be transferred to a SUN Blade 100 that will be named g0pls01. The current g0pls01 machine will be upgraded and renamed g0ais10. The current g0ais10 machine (Sparc 20) will be retired.

7.2.8.1.1 Preparation

- a. Backup. Back up files for g0pls01 and g0ais10.
- b. Modify/Upgrade hardware.
 1. Shutdown g0pls01 and g0ais10.
 2. Install new 18 GB root disk in g0pls01 and partition per disk configuration diagram in the document, 922-TDG-022 Rev. 01.
 3. Start up g0pls01 and rename it, “g0ais10.”
 4. Disconnect old g0ais10 from the Sparc Storage Array and connect new g0ais10 (formerly g0pls01) to the array.
 5. Disconnect power cord, network cable, and monitor from old g0ais10 (Sparc 20); remove the Sparc 20 chassis.
 6. Install the new Blade 100; connect Blade 100 to power, network, and the old g0ais10 monitor using the video adapter.

7.2.8.1.2 Upgrade Software

Install Solaris 8 software and related COTS on the Blade 100. Name the Blade 100, g0pls01. (Note Solaris 8 and related COTS can be installed on the Blade in advance.

Configure g0pls01 disks per disk configuration diagram in the document, 922-TDG-023 Rev. 02.

Upgrade g0ais10 to Solaris 8. as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.2.8.1.3 Custom Code Installation and Checkout

g0pls01:

- a. Install the Solaris 8 version of custom code using EASI to install all of the packages on the host as listed in the .sitemap.
- b. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/PLNMGTWS.rgypatch registry patch to modify all values Sybase OpenClient to the proper version (12.0.0) for running under Solaris 8 (run mkcfg for any servers running from .CFG files).
- c. Perform checkout.
- d. After checkout is successfully completed, place g0pls01 in operation.

g0ais10:

There is no custom code on this platform.

7.2.8.2 Upgrade Workstations: g0ais01 and g0ais11

The g0ais01 capability will be transferred to a SUN Blade 100. The current g0ais01 machine will be upgraded and renamed g0ais11. The current g0ais11 machine (Sparc 20) will be retired.

7.2.8.2.1 Preparation

- a. Backup. Back up files for g0ais01 and g0ais11 to tape.
- b. Modify/Upgrade hardware.
 1. Shutdown g0ais01 and g0ais11.
 2. Install new 18 GB root disk in g0ais01 and partition per disk configuration diagram in the document, 922-TDG-022 Rev. 01.
 3. Start up g0ais01 and rename it, "g0ais11."
 4. Disconnect old g0ais11 from the Sparc Storage Array and connect the new g0ais11 (formerly g0ais01) to the array.
 5. Disconnect power cord, network cable, and monitor from old g0ais11 (Sparc 20); remove the Sparc 20 chassis.
 6. Install the new Blade 100; connect Blade 100 to power, network, and the old g0ais11 monitor using the video adapter.

7.2.8.2.2 Upgrade Software

Install Solaris 8 software and related COTS on the Blade 100. Name the Blade 100, g0ais01. (Note Solaris 8 and related COTS can be installed on the Blade in advance.) Partition g0ais01 disks per disk configuration diagram in the document, 922-TDG-021 Rev. 01.

Upgrade g0ais11 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.2.8.2.3 Custom Code Installation and Checkout.

g0ais01:

- a. Install the Solaris 8 version of custom code using EASI to install all of the packages on the host as listed in the .sitemap.
- b. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/AITWS.rgypatch registry patch to modify all values Sybase OpenClient to the proper version (12.0.0) for running under Solaris 8 (run mkcfg for any servers running from .CFG files).
- c. Perform checkout.
- d. After checkout is successfully completed, place g0ais01 in operation.

g0ais11:

There is no custom code on this platform.

7.2.8.3 Upgrade g0pls03

The g0pls03 capability will be transferred from a Sparc 20 to a SUN Blade 100.

7.2.8.3.1 Preparation

- a. Backup. Back up g0pls03 files.
- b. Modify/Upgrade hardware.
 1. Disconnect power, network cable, and monitor from g0pls03.
 2. Remove g0pls03 (Sparc 20) and replace with a Blade 100.
 3. Connect Blade 100 to power, network, and the old g0pls03 monitor (using the video adapter).

7.2.8.3.2 Install/Upgrade Software

Install Solaris 8 software and related COTS on the (Blade 100). Name the Blade 100, g0pls03. Configure g0pls03 disks per disk configuration diagram in the document, 922-TDG-023 Rev. 02.

7.2.8.3.3 Custom Code Installation and Checkout

There is no custom code on this platform.

7.2.8.4 Upgrade g0css02

7.2.8.4.1 Preparation

Before starting this procedure, all FLEXlm license keys will have to be re-requested with the Sun Blade host id replacing the host id for the current g0css02 (Sparc 20) in the license.dat file, /usr/local/flexlm/licenses/license.dat.

- a. Backup. Back up g0css02 files.
- b. Modify/Upgrade hardware.

Connect Blade 100 ethernet interface (eri0) to the site Production LAN subnet.

7.2.8.4.2 Upgrade Software

Using a temporary hostname and IP address, JumpStart the Sun Blade 100 (using an initial install profile) to install the Solaris 8 operation system and recommended patches. Follow installation instructions provided in the Solaris 8 OS Upgrade Bundle PSR Release Notes document. Make sure the Sun Blade 100 can be logged into from the network after the JumpStart installation has completed. Partition disks per disk configuration diagram in the document, 922-TDG-005 Rev. 02.

7.2.8.4.3 Custom Code Installation and Checkout

There is No Custom Code on g0css02. These are procedures that should be performed to complete the transfer of the g0css02 functions to the Sun Blade 100.

- a. Verify local COTS packages (ssh20, ssh21, tripwire, TCP Wrappers, JetDirect, Legato Networker Client, etc.) were installed successfully after the JumpStart process has completed. For “upgrade” installs, these packages are only installed if they already exists.
- b. Tar up configuration files below from the original g0css02 machine. If necessary, include any additional files that may be unique to DAAC site. Ftp or copy tar file to new Sun Blade 100 and extract.

<u>System Files:</u>	<u>NIS Files:</u>
* /etc/passwd	/etc/auto_master
* /etc/shadow	/etc/auto_home
* /etc/group	/etc/auto_tools
* /etc/inet/hosts	/etc/auto_restricted
/etc/inet/networks	/etc/auto_vobs

```
/etc/inet/services          /etc/netgroup
/etc/inet/ntp.conf          /var/yp/Makefile
                             /var/yp/ypmake
                             * /etc/mail/aliases
```

DNS Files:

```
/etc/named.boot
/etc/dns    (entire directory, all DNS database files)
```

* File paths may differ at specific DAAC sites. Check the file locations in the /var/yp/Makefile of the original g0css02 machine to confirm correct files are copied over to new Sun Blade.

- c. Edit host name related files on Sun Blade, then reboot system into single-user mode.

```
# ifconfig eri0 down
# vi /etc/g0css02.eri0
# vi /etc/g0css02
```

- d. Recreate NIS domain via "ypinit -m" command.

```
# hostname g0css02
# domainname {ypdomain}
# ypinit -m
```

- e. Create DNS BIND 8 configuration file.

```
# /usr/sbin/named-bootconf < /etc/named.boot > /etc/named.conf
```

- f. Set up FlexLM using PSR document 914-TDA-065. Create license directory and install new license file for replacement g0css02 box.

```
# umask 22; mkdir -p /usr/local/flexlm/licenses
```

- g. Upgrade Flexlm binaries to v8.0d per upgrade PSR.

- h. Copy all FlexLM vendor daemons from the original g0css02 box

```
/etc/opt/licenses/ICSBX
/etc/opt/licenses/idl_lmgrd
/etc/opt/licenses/rational
```

/etc/opt/licenses/sunwlicd

- i. Ensure FlexLM Sun vendor daemon permissions are set correctly.
chmod 755 /opt/SUNWste/license_tools/suntechd
- j. Bring Blade 100 online as g0css02
 1. NIS bind all clients, Sun and SGI, to secondary NIS server.
 2. Shutdown original g0css02 box (Sparc 20).
 3. Bring new g0css02 Sun Blade online using real hostname and IP address of original g0css02 (Sparc 20).
 4. Change hostname and IP address of original g0css02 (Sparc 20) to the temporary hostname and IP address used to build the new Sun Blade, then bring on-line for access to original files.
 5. Rebind original clients back to g0css02.
 6. Test yp commands like ypcat and ypwhich to confirm functionality. (Note, if the ypbind process is run with the -ypset option, the ypcat command will fail on a Solaris 2.5.1 client that is NIS bound to the new Solaris 8 g0css02 box. Restart ypbind without the -ypset option on all Solaris 2.5.1 clients.)

7.2.8.4.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. NIS bind all clients to the secondary NIS server.
- b. Shut down the new g0css02.
- c. Change hostname IP address of original g0css02 (Sparc 20) to the original hostname and IP address then bring on-line for access to original files.
- d. Rebind secondary NIS machine's clients to g0css02 (Sparc 20)
- e. Perform checkout and place into operation.

7.2.8.5 Upgrade g0ais05

The g0ais05 capability will be transferred from a Sparc 20 to a SUN Blade 100.

7.2.8.5.1 Preparation

- a. Backup. Back up g0ais05 files.
- b. Modify/Upgrade hardware.
 1. Disconnect power, network cable, and monitor from g0ais05.

2. Remove g0ais05 (Sparc 20) and replace with a Blade 100.
3. Connect Blade 100 to power, network, and the old g0ais05 monitor (using the video adapter).

7.2.8.5.2 Install/Upgrade Software

Install Solaris 8 software and related COTS on the Blade 100. Name the Blade 100, g0ais05. Partition disks per disk configuration diagram in the document, 922-TDG-021 Rev. 01.

7.2.8.5.3 Custom Code Installation and Checkout

There is no custom code on this platform.

7.2.8.6 Upgrade g0ais07

The g0ais07 capability will be transferred from a Sparc 20 to a SUN Blade 100.

7.2.8.6.1 Preparation

- a. Backup. Back up g0ais07 non-operating system files.
- b. Modify/Upgrade hardware.
 1. Disconnect power, network cable, and monitor from g0ais07.
 2. Remove g0ais07 (Sparc 20) and replace with a Blade 100.
 3. Connect Blade 100 to power, network, and the old g0ais07 monitor (using the video adapter). Disconnect 4mm tape drive from old platform and connect it to the new Blade 100.

7.2.8.6.2 Install/Upgrade Software

Install Solaris 8 software and related COTS on the Blade 100. Name the Blade 100, g0ais07. Partition disks per disk configuration diagram in the document, 922-TDG-021 Rev. 01.

7.2.8.6.3 Custom Code Installation and Checkout

There is no custom code on this platform.

7.2.8.7 Upgrade g0ais08

The g0ais08 capability will be transferred from a Sparc 20 to a SUN Blade 100.

7.2.8.7.1 Preparation

- a. Backup. Back up g0ais08 files.

- b. Modify/Upgrade hardware.
 - 1. Disconnect power, network cable, and monitor from g0ais08.
 - 2. Remove g0ais08 (Sparc 20) and replace with a Blade 100.
 - 3. Connect Blade 100 to power, network, and the old g0ais08 monitor (using the video adapter).

7.2.8.7.2 Install/Upgrade Software

Install Solaris 8 software and related COTS on the Blade 100. Name the Blade 100, g0ais08. Partition disks per disk configuration diagram in the document, 922-TDG-021 Rev. 01.

7.2.8.7.3 Custom Code Installation and Checkout

There is no custom code on this platform.

7.2.8.8 Upgrade g0ais09

The g0ais09 capability will be transferred from a Sparc 20 to a SUN Blade 100.

7.2.8.8.1 Preparation

- a. Backup. Back up g0ais09 files.
- b. Modify/Upgrade hardware.
 - 1. Disconnect power, network cable, and monitor from g0ais09.
 - 2. Remove g0ais09 (Sparc 20) and replace with a Blade 100.
 - 3. Connect Blade 100 to power, network, and the old g0ais09 monitor (using the video adapter).

7.2.8.8.2 Install/Upgrade Software

Install Solaris 8 software and related COTS on the Blade 100. Name the Blade 100, g0ais09. Partition disks per disk configuration diagram in the document, 922-TDG-021 Rev. 01.

7.2.8.8.3 Custom Code Installation and Checkout

There is no custom code on this platform.

7.2.8.9 Upgrade g0ais12

The g0ais12 capability will be transferred from a Sparc 20 to a SUN Blade 100.

7.2.8.9.1 Preparation

- a. Backup. Back up g0ais12 files.

- b. Modify/Upgrade hardware.
 - 1. Disconnect power, network cable, and monitor from g0ais12.
 - 2. Remove g0ais12 (Sparc 20) and replace with a Blade 100.
 - 3. Connect Blade 100 to power, network, and the old g0ais12 monitor (using the video adapter).

7.2.8.9.2 Install/Upgrade Software

Install Solaris 8 software and related COTS on the Blade 100. Name the Blade 100, g0ais12. Partition disks per disk configuration diagram in the document, 922-TDG-021 Rev. 01.

7.2.8.9.3 Custom Code Installation and Checkout

There is no custom code on this platform.

7.2.8.10 Upgrade g0dms03

The g0dms03 capability will be transferred from a Sparc 20 to a SUN Blade 100.

7.2.8.10.1 Preparation

- a. Backup. Back up g0dms03 files.
- b. Modify/Upgrade hardware.
 - 1. Disconnect power, network cable, and monitor from g0dms03.
 - 2. Remove g0dms03 (Sparc 20) and replace with a Blade 100.
 - 3. Connect Blade 100 to power, network, and the old godms03 monitor (using the video adapter).

7.2.8.10.2 Install/Upgrade Software

Install Solaris 8 software and related COTS on the Blade 100. Name the Blade 100, g0dms03. Partition disks per disk configuration diagram in the document, 922-TDG-027 Rev. 01.

7.2.8.10.3 Custom Code Installation and Checkout

- a. Install the Solaris 8 version of custom code using EASI to install all of the packages on the host as listed in the .sitemap.
- b. Perform checkout.
- c. After checkout is successfully completed, place new g0dms03 in operation.

7.2.8.11 Upgrade g0dms04

The g0dms04 capability will be transferred from a Sparc 20 to a SUN Blade 100.

7.2.8.11.1 Preparation

- a. Backup. Back up g0dms04 files.
- b. Modify/Upgrade hardware.
 1. Disconnect power, network cable, and monitor from g0dms04.
 2. Remove 2x32 MB DIMMS from g0dms04.
 3. Remove g0dms04 (Sparc 20) and replace with a Blade 100.
 4. Connect Blade 100 to power, network, and the old g0dms04 monitor (using the video adapter).

7.2.8.11.2 Install/Upgrade Software

Install Solaris 8 software and related COTS on the (Blade 100). Name the Blade 100, g0dms04. Partition disks per disk configuration diagram in the document, 922-TDG-027 Rev. 01.

7.2.8.11.3 Custom Code Installation and Checkout

- a. Install Solaris 8 version of custom code using EASI to install all of the packages on the host as listed in the .sitemap.
- b. Perform checkout.
- c. After checkout is successfully completed, place new g0dms04 in operation.

7.2.8.12 Upgrade g0dms05

The g0dms05 capability will be transferred from a Sparc 20 to a SUN Blade 100.

7.2.8.12.1 Preparation

- a. Backup. Back up g0dms05 files.
- b. Modify/Upgrade hardware.
 1. Disconnect power, network cable, and monitor from g0dms05.
 2. Remove 2x32 MB DIMMS from g0dms05.
 3. Remove g0dms05 (Sparc 20) and replace with a Blade 100.
 4. Connect Blade 100 to power, network, and the old g0dms05 monitor (using the video adapter).

7.2.8.12.2 Install/Upgrade Software

Install Solaris 8 software and related COTS on the (Blade 100). Name the Blade 100, g0dms05. Partition disks per disk configuration diagram in the document, 922-TDG-027 Rev. 01.

7.2.8.12.3 Custom Code Installation and Checkout

- a. Install the Solaris 8 version of custom code using EASI to install all of the packages on the host as listed in the .sitemap.
- b. Perform checkout.
- c. After checkout is successfully completed, place new g0dms05 in operation.

7.2.8.13 Upgrade g0acs06

The g0acs06 capability will be transferred from a Sparc 20 to a SUN Blade 100.

7.2.8.13.1 Preparation

- a. Backup. Back up g0acs06 files.
- b. Modify/Upgrade hardware.
 1. Disconnect power, network cable, and monitor from g0acs06.
 2. Remove 2x32 MB DIMMS from g0acs06.
 3. Remove g0acs06 (Sparc 20) and replace with a Blade 100.
 4. Connect Blade 100 to power, network, and the old g0acs06 monitor (using the video adapter).

7.2.8.13.2 Install/Upgrade Software

Install Solaris 8 software and related COTS on the (Blade 100). Name the Blade 100, g0acs06. Partition disks per disk configuration diagram in the document, 922-TDG-012 Rev. 01.

7.2.8.13.3 Custom Code Installation and Checkout

There is no custom code on this platform.

7.2.8.14 Upgrade g0mss07

7.2.8.14.1 Preparation

- a. Prepare COTS. Make sure COTS products version is compatible with Solaris 8.
- b. Backup. Back up root and /data1 partitions from g0mss07 to the jump start server.
- c. Modify/Upgrade hardware.

Install new 18 GB root disk in g0mss07 and partition per disk configuration diagram in the document, 922-TDG-031 Rev. 01.

7.2.8.14.2 Upgrade Software

Upgrade g0mss07 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.2.8.14.3 Custom Code Installation and Checkout

There is no custom code to be installed on this platform.

7.2.8.15 Upgrade g0acs02

7.2.8.15.1 Preparation

- a. Prepare COTS. Make sure COTS products version is compatible with Solaris 8.
- b. Backup. Back up root and /data1 partitions from g0acs02 to the jump start server.
- c. Modify/Upgrade hardware.
 1. Install new 18 GB root disk in g0acs02 and partition per disk configuration diagram in the document, 922-TDG-012 Rev. 01.
 2. Install 6x32 MB DIMMS (taken from g0dms04, g0dms05, and g0acs06) in g0acs02.

7.2.8.15.2 Upgrade Software

Upgrade g0acs02 to Solaris 8. as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.2.8.15.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on g0acs02:

- a. Install the Solaris 8 version of custom code using EASI to install all of the packages on the host as listed in the .sitemap.
- b. Modify g0acs02 configuration parameters to reflect the proper version of Sybase OpenClient for the Solaris 8 baseline:
 1. Using ECS Assistant Subsystem Manager, perform a mkcfg on the EcIn component. Do not change any configuration values -- the mkcfg will automatically insert the correct version of Sybase OpenClient (12.0.0) in the EcInGUI.CFG files that are created.
 2. Populate the registry with the new configuration values by using the EcCoPopulateRegistry tool.
 3. Rename configuration files (as appropriate) from EcInGUIxxx.CFG to EcInGUIxxx.CFG.rgy so that servers start from the registry.
- c. Perform checkout of code on g0acs02.
- d. After checkout is successfully completed, place g0acs02 in operation.

7.2.8.16 Upgrade g0mss10

7.2.8.16.1 Preparation

- a. Prepare COTS. Make sure COTS products version is compatible with Solaris 8.
- b. Backup. Back up root and /data1 partitions from g0mss10 to the jump start server.
- c. Modify/Upgrade hardware.

Install new 18 GB root disk in g0mss10 and partition per disk configuration diagram in the document, 922-TDG-011 Rev. 04.

7.2.8.16.2 Upgrade Software

Upgrade g0mss10 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.2.8.16.3 Custom Code Installation and Checkout

There is no custom code on this platform.

7.2.8.17 Retire g0ais06

g0ais06 will be retired from the baseline during Solaris transition.

7.2.8.18 g0mss02

g0mss02 will not be upgraded to Solaris 8 as a part of this transition. This is because the three primary COTS products for this host, Remedy, Clearcase, and DDTS, will not be upgraded to a version that is compatible with Solaris 8 before or during the Solaris 8 transition activity.

7.3 LaRC Transition Procedures

The transition procedures for the Solaris 8 upgrade tasks at the LaRC DAAC are listed in this section. LaRC temporary database device map is shown in Table 7-3 below.

Table 7-3. LaRC Temporary Database Device Map

drive	Slice	Size (MB)	Device						
			l0ins01	l0ins02	l0mss20	l0mss21			
9 GB disk c0t2d0 (former /data2)	0	400	master	master	master	master			
	1	1500	sybsecurity	sybsecurity		sybsecurity			
	3	500			tempdb_di_dev1	tempdb			
	5	2000	sybsecurityarchive						
	6	2000							
	7	2000							
9 GB disk c0t4d0 (former INS client map)	0	2000	subsrvdata	ecdmworking1	EDB_di_dev1	EcsAclStorage_Index			
	1	2000		ecdmworking2	EDB_di_dev2	MSSData4			
	3	2000		ecdmworking3	di_dev1	MSSData6			
	4	2000			di_dev2	MSSData7			
	5	500				dbcc_data_device			
9 GB disk c0t5d0 (former INS client map)	0	2000		growth4		MSSData8			
	1	2000		ioadadv servicedata		MSSLog3			
	3	1000				rssd_data			
	4	1000				rssd_log			
	5	1000				dbcc_log_device			

7.3.1 LaRC Distribution Servers Consolidation/Transition

The distribution servers, l0dis01 and l0dis02, will first be consolidated onto a single machine, l0dis01, under Solaris 5. This will free up l0dis02 to be upgraded to Solaris 8 and then to have l0dis01 and l0dis02 code moved to l0dis02. The consolidation and transition tasks are as follows:

7.3.1.1 Preparation

a. Temporary relocation.

Consolidate custom code for l0dis02 on l0dis01 and transition mode by mode from l0dis02 to l0dis01. Since l0dis02 is the primary distribution server, files and configurations will be copied from l0dis02 to l0dis01. For each mode, complete the following procedures to perform the transition:

1. On e0dis02, create a tar file containing all directories under the directory /usr/ecs/<MODE>/CUSTOM/<directory> for each mode being transitioned **except** for any mounted directories or log directories.
2. FTP the tar file to l0dis01 and untar it under the /usr/ecs/<MODE>/CUSTOM directory.
3. Using the registry GUI, copy .CFG file entries from the l0dis02 branch to the l0dis01 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the l0dis01 branch. The detailed procedures for doing this are as follows:
 - (a) On l0dms01, open the registry GUI by running /usr/ecs/<MODE>/CUSTOM/utilities/EcCsRegistryGUIStart <MODE>. Enter/verify the appropriate .registry database information on the window that pops up and select 'OK.' Select the attribute tree name from the drop-down box that corresponds to the mode being transitioned (when the correct tree name is selected, the mode name will appear in the Attribute Information box in the bottom left corner of the screen).
 - (b) Expand the tree branches under l0dis01 until the CFG branch appears. Highlight the CFG branch by clicking on it. Select the DELETE icon above and click to confirm the deletion when a confirmation box appears. It may take some time for the deletion to complete.
 - (c) Expand the tree branches under l0dis02 until the CFG branch appears. Highlight the CFG branch by clicking on it. Select the COPY icon above and click YES to confirm the copy when a confirmation box appears. It may take a little while for the copy operation to complete. Wait until a "Successfully completed node copy" message appears at the bottom of the window before continuing. If it does not successfully copy, try again!
 - (d) Select the config branch under l0dis01 so that it is highlighted and click on the Paste icon above. It may take a little while for the paste operation to complete. Wait until a "Successfully completed paste operation" message appears at the bottom of the window before continuing.

- (e) To verify the paste operation, re-select the Attribute Tree Name from the drop-down box and expand the l0dis01 tree branch until the branches under CFG are displayed. Verify that they are the same as those under the l0dis02 CFG branch.
- 4. Shut down servers in the mode being transitioned on l0dis02.
- 5. Start servers and perform checkout of relocated code in the mode being transitioned on l0dis01.
- b. Backup. Back up / and /data1 partitions from l0dis02 to the jump start server
- c. Modify/Upgrade l0dis02 hardware.
Install new 18 GB disk boards to replace old root disks in l0dis02 and partition per disk configuration diagram in the document, 922-TDL-006 Rev. 03.

7.3.1.2 Upgrade Software

Upgrade l0dis02 to Solaris 8 as specified in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.3.1.3 Custom Code Installation and Checkout

Transition mode by mode from l0dis01 to l0dis02:

- a. Install the Solaris 8 version of custom code on l0dis02 using EASI to install all packages on the host as listed on the .sitemap. No additional configuration is required.
- b. Run servers on the permanent host (l0dis02):
 - 1. Shut down servers in the mode being transitioned on l0dis01.
 - 2. Start servers in the mode being transitioned and perform checkout of code on l0dis02.
- c. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on l0dis02.
- d. After checkout is successfully completed, place l0dis02 into operation.

7.3.1.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on l0dis02.
- b. Restart servers and COTS running on l0dis01.

7.3.1.5 Post transition activity

N/A

7.3.2 LaRC Science Data Server Transition

The Science Data Server will be moved from l0acs03 to l0acs04, under Solaris 2.5.1. This will free up l0acs03 to be upgraded to Solaris 8. After l0acs03 has been upgraded to Solaris 8, Science Data Server code will be moved back to l0acs03. Procedures are:

7.3.2.1 Preparation

a. Temporary relocation.

Install custom code for l0acs03 on l0acs04 and transition mode by mode from l0acs03 to l0acs04. Since l0acs03 is the primary SDSRV server, files and configurations will be copied from l0acs03 to l0acs06. For each mode, complete the following procedures to perform the transition:

1. On l0acs03, create a tar file containing all directories under the directory /usr/ecs/<MODE>/CUSTOM/<directory> for each mode being transitioned “**except**” for any mounted directories or log directories.
2. FTP the tar file to l0acs04 and untar it under the /usr/ecs/<MODE>/CUSTOM directory.
3. Using the registry GUI, copy .CFG file entries from the l0acs03 branch to the l0acs04 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the l0acs04 branch. Detailed procedures for doing this are similar to those outlined in section 7.3.1.1.b.3.
4. Create temporary mount points mounted from l0acs04.
5. Create temporary mount points mounted to l0acs04.
6. Shut down servers in the mode being transitioned on l0acs03.
7. Start servers and perform checkout of relocated code in the mode being transitioned on l0acs04.

b. Backup. Back up / and /data1 partitions from l0acs03 to the jump start server

c. Modify/Upgrade hardware. Repartition l0acs03’s root disk per disk configuration diagram in the document, 922-TDL-016 Rev. 03.

7.3.2.2 Upgrade Software

Upgrade l0acs03 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.3.2.3 Custom Code Installation and Checkout

Transition mode by mode from l0acs04 to l0acs03:

- a. Install the Solaris 8 version of custom code on l0acs03 using EASI to install all packages on the host as listed on the .sitemap.

- b. Modify l0acs03 configuration parameters to reflect the proper version of Sybase OpenClient for the Solaris 8 baseline:
 1. Using ECS Assistant Subsystem Manager, perform a mkcfg on the EcDsSr component. Do not change any configuration values -- the mkcfg will automatically insert the correct version of Sybase OpenClient (12.0.0) in the EcDsScienceDataServer.CFG and EcDsResubmit.CFG files that are created.
 2. Populate the registry with the new configuration values by using the EcCoPopulateRegistry tool.
 3. Rename configuration files (as appropriate) from EcDsxxx.CFG to EcDsxxx.CFG.rgy so that servers start from the registry. Reminder -- do **not** rename the EcDsCIMuQaMetadataUpdate.CFG file.
- c. Run servers on the permanent host (l0acs03):
 1. Shut down servers on l0acs04.
 2. Start servers and perform checkout of code on l0acs03.
- d. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on l0acs04.
- e. After checkout is successfully completed, place l0acs03 in operation.

7.3.2.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on l0acs03.
- b. Restart servers and COTS running on l0acs04.

7.3.2.5 Post transition activity

N/A

7.3.3 LaRC SPS and PLS Consolidation/Transition

The SPS and PLS servers will be consolidated onto a new host, l0sps11.

7.3.3.1 Preparation

- a. Backup. Back up root and /data1 partitions from l0sps03 and l0pls01 to the jump start server.
- b. Prepare COTS.
Create databases on l0sps11 for each mode being transitioned using devices shown on disk configuration diagram, 922-TDL-014 Rev. 04. The server should be named l0sps03_srvr since this server will be renamed l0sps03 before it becomes operational.

1. Install Sybase on l0sps11 (follow installation instructions in PSR doc. 914-TDA-163 (Oct. 25, 2001)).
2. Install Autosys on l0sps11. See Appendix B (Sections B.1 to B.1.4.2) for additional details on the Autosys installation. Follow all steps within those sections.
3. Create database (PDPS, same as on l0pls01) on l0sps11. Ensure PDPS database device allocations are identical to the original PDPS database on l0pls01. Device allocations explanations are provided in Appendix A, Section A.1.

7.3.3.2 Upgrade Software

- a. Upgrade l0sps11 to Solaris 8 as specified in the instructions provided in the Solaris 8 OS Upgrade Bundle PSR Release Notes document.
- b. Modify the Sybase configuration parameters as specified below to support the PDPS databases on the l0sps11 host:

Number of User Connections: 350

Number of Open Databases: 40

Total Memory: 65536

Number of Devices: 35

7.3.3.3 Custom Code Installation and Checkout

Install existing PLS/SPS custom code on l0sps11 and transition mode by mode. For each mode, complete the following procedures to perform the transition:

- a. On l0sps03 and l0pls01, create a relocation tar file containing all directories under the directory /usr/ecs/<MODE>/CUSTOM/<directory> for each mode being transitioned **except** for any mounted directories or log directories. Be sure to include the .installed directory in the tar file.
- b. FTP the tar files to l0sps11.
- c. On l0sps11, untar the two relocation tar files that are located under the /usr/ecs/<MODE>/CUSTOM directory.
- d. On l0dms01, using the registry GUI, copy .CFG file entries from the l0pls01 branch to the l0sps03 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the l0sps03 branch. Procedures are:
 1. On l0dms01, open the registry GUI by running /usr/ecs/<MODE>/CUSTOM/utilities/EcCsRegistryGUIStart <MODE>. Enter/verify the appropriate .registry database information on the window that pops up and select 'OK.' Select the attribute tree name from the drop-

- down box that corresponds to the mode being transitioned (when the correct tree name is selected, the mode name will appear in the Attribute Information box in the bottom left corner of the screen).
2. Expand the tree branches under l0sps03 until the CFG branch appears.
 3. Expand the tree branch under l0pls01 until the CFG branch appears. For each entry under the .CFG branch on l0pls01, highlight the entry name, select the COPY icon above and click yes to confirm the copy when prompted.
 4. Under the l0sps03 branch, highlight the “CFG” branch by clicking on it. Click the PASTE icon and wait until the paste operation is completed.
 5. Repeat steps 3 and 4 until all entries under the l0pls01 branch are copied under the l0sps03 branch.
 6. To verify the paste operation, re-select the Attribute Tree Name from the drop-down box and expand the l0sps03 tree branch until the branches under CFG are displayed. Verify that it includes all of those under the l0pls01 CFG branch.
- e. Install Solaris 8 version of custom code on l0sps11 using EASI to install all of the packages on the host as listed in the .sitemap. Be sure to use the Solaris 8 version of the .sitemap file in the staging area (this version will show all packages previously installed on l0pls01 as being installed on l0sps03).
 - f. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/PDPS_DB_final.rgypatch registry patch to point all servers to the proper version of Sybase OpenClient (12.0.0) for all servers running under Solaris 8 (run mkcfg for any servers running from .CFG files).
 - g. Shut down servers in the mode being transitioned on l0pls01 and l0sps03. In addition, if an Autosys instance is being transitioned, shut down all PDPS servers on all hosts in all modes as well.
 - h. Dump PDPS and Autosys databases on l0pls01 and l0sps03 and FTP to l0sps11.
 - i. Execute instructions in Appendix A, Section A.1, G, Transitioning Logins and Users to bcp out the Logins and Users from l0pls01 and FTP files to l0sps11.
 - j. Shut down l0sps03 and l0sps11. Rename l0sps11 to be l0sps03.
 - k. Follow the remaining steps in Appendix B, Section B.2 to make Autosys operational on l0sps03.
 - l. Load PDPS and Autosys databases on l0sps03.
 - m. Execute instructions in Appendix A, Section A.1 G, Transitioning Logins and Users to bcp in the Logins and Users from l0pls01 to the new l0sps03.

- n. Start servers and perform checkout of code on l0sps03.
- o. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on l0sps03.
- p. After checkout is successfully completed , place l0sps03 in operation.

7.3.3.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on l0sps03. Shut down the new l0sps03.
- b. Restart servers and COTS running on l0pls01 and the old l0sps03.

7.3.3.5 Post transition activity

Remove the 2x400 MHz CPU boards from slot 5 of l0pls01 and install in the new l0sps03. Also remove the 2x400 MHz CPU board from slot 7 and install in the new l0sps03. Remove the second bank of DIMMS from this board and install in the existing CPU board which has no memory.

7.3.4 LaRC INS01 Transition

The following actions will facilitate the transition of l0ins01 to Solaris 8:

7.3.4.1 Preparation

- a. Prepare COTS
 - 1. Make sure Volume Manager 3.0.4, JRE 1.3.1_01 and Java are on the temporary host, l0acs04 and l0ins01.
 - 2. Create Subscription Server databases on the temporary host for each mode being transitioned in accordance with device allocations as specified in Appendix A, Section A.1, D Creating Temporary Databases (using the devices on the three drives partitioned in step 7.3.3.1.b).
- b. Backup. Back up root and /data1 partitions from l0ins01 to the jump start server.
- c. Modify/Upgrade hardware.
 - 1. Shutdown the /client_user_data partition (unused) and disconnect l0ins01 from the RAID.
 - 2. Remove c1t10d0 and c1t11d0 (unused 9 GB drives mounted as /client_map_data1 and 2) from l0ins01 and c1t11d0 from l0ins02 and install in l0acs04. Partition l0acs04 disk drives per disk configuration diagram in the document, 922-TDL-016 Rev. 03.
 - 3. Repartition l0ins01's root disk per disk configuration diagram in the document, 922-TDL-009 Rev. 07.
- d. Temporary relocation.

Install l0ins01 custom code on l0acs04 and transition mode by mode to l0acs04. For each mode, complete the following procedures to perform the transition:

1. Create a tar file containing all directories under the directory /usr/ecs/<MODE>/CUSTOM/<directory> for each mode being transitioned **except** for any mounted directories or log directories.
2. FTP the tar file to l0acs04 and untar it under the /usr/ecs/<MODE>/CUSTOM directory.
3. Using the registry GUI, copy .CFG file entries from the l0ins01 branch to the l0acs04 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the l0acs04 branch. Detailed procedures for doing this are similar to those outlined in section 7.3.1.1.b.3.
4. Using ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/SubServer_DB_temp.rgypatch registry patch to point to all servers accessing the Subscription Server database to l0acs04_svr. Note that you will need to run mkcfg to modify this value for any servers that may be running from .CFG files instead of the registry.
5. Shut down custom code servers in the mode being transitioned on l0ins01.
6. Dump the SubServer database and transaction logs from l0ins01.
7. Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp out the Logins and Users from l0ins01.
8. For each mode being transferred:
 - Load SubServer database on l0acs04
 - Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from l0ins01 to l0acs04.
9. Start servers and perform checkout of relocated code on l0acs04.

7.3.4.2 Upgrade Software

Upgrade l0ins01 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document. Note, make sure you perform the Volume Manager procedures, noted in the Solaris 8 release notes, before and after execution of the Solaris 8 upgrade procedures.

7.3.4.3 Custom Code Installation and Checkout

Transition mode by mode from l0acs04 to l0ins01:

- a. Install the Solaris 8 version of custom code on l0ins01 using EASI to install all of the packages on the host as listed in the .sitemap.
- b. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/SubServer_DB_final.rgypatch registry patch to modify all values for DBServer currently pointing to l0acs04_svr to point back to the l0ins01_svr and to point the Subscription Server to the proper version of Sybase OpenClient (12.0.0) for running under Solaris 8. Run mkcfg for any servers running from .CFG files.
- c. Shut down servers in the mode being transitioned on l0acs04.
- d. Dump SubServer database and transaction logs from l0acs04.
- e. Reload the database on l0ins01:
 - Load SubServer database on l0ins01
 - Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from l0acs04 to l0ins01.
- f. Start servers and perform checkout of code on l0ins01.
- g. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on l0ins01.
- h. After checkout is successfully completed, place l0ins01 in operation.

7.3.4.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on l0ins01.
- b. Load root and /data1 partitions from backup made in 7.3.4.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.3.4.5 Post transition activity

N/A

7.3.5 LaRC INS02 Transition

The following actions will facilitate the transition of l0ins02 to Solaris 8:

7.3.5.1 Preparation

- a. Prepare COTS
 1. Make sure Volume Manager 3.0.4 is on the temporary host, l0acs04 and l0ins02.

2. Create databases (DMS and IOS) on temporary host for each mode being transitioned in accordance with commands provided in Appendix A (Creating Temporary Databases).
- b. Backup. Back up root and /data1 partitions from l0ins02 to the jump start server.
 - c. Repartition l0ins02's root disk per disk configuration diagram in the document, 922-TDL-009 Rev. 07.
 - d. Temporary relocation.
 Install l0ins02 custom code on l0acs04 and transition mode by mode to l0acs04. For each mode, complete the following procedures to perform the transition:
 1. On l0ins02, create a tar file containing all directories under the directory /usr/ecs/<MODE>/CUSTOM/<directory> for each mode being transitioned **except** for any mounted directories or log directories.
 2. FTP the tar file to l0acs04 and untar it under the /usr/ecs/<MODE>/CUSTOM directory.
 3. Using the registry GUI, copy .CFG file entries from the l0ins02 branch to the l0acs04 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the l0acs04 branch. Detailed procedures for doing this are similar to those outlined in section 7.3.1.1.b.3.
 4. Using ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/DMS_IOS_DB_Temp.rgypatch registry patch to point to all servers accessing the DBServer database to l0acs04_svr. Note that you will need to run mkcfg to modify this value for any servers that may be running from .CFG files instead of the registry.
 5. Shut down custom code servers in the mode being transitioned on l0ins02.
 6. Dump DMS and IOS databases and transaction logs in the mode being transitioned from l0ins02.
 7. Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp out the Logins and Users from l0ins02.
 8. For each mode being transferred:
 - Load DMS database on l0acs04
 - Load IOS database on l0acs04
 - Perform instructions in Appendix A (Sybase Installation), for Transitioning Logins and Users, to bcp in the Logins and Users from l0ins02 to l0acs04.
 9. Modify any firewall rules to redirect incoming traffic for l0ins02 to l0acs04.

10. Start servers and perform checkout of relocated code in the mode being transitioned on l0acs04.

7.3.5.2 Upgrade Software

- a. Upgrade l0ins02 to Solaris 8. as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document. Note, make sure you perform the Volume Manager procedures, noted in the Solaris 8 release notes, before and after execution of the Solaris 8 upgrade procedures.
- b. Install and configure iPlanet as described in the iPlanet PSR Release Notes document. Note that some parts of the iPlanet configuration for a given mode instance cannot be completed until the custom code installation is performed.

7.3.5.3 Custom Code Installation and Checkout

Transition mode by mode to l0ins02:

- a. Install Solaris 8 version of custom code on l0ins02 using EASI to install all packages on the host as listed on the .sitemap.
- b. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/DMS_IOS_DB_final.rgypatch registry patch to modify all values for DBServer currently pointing to l0acs04_svr to point back to the l0ins02_svr and to point the Advertising Server to the proper version of Sybase OpenClient (12.0.0) for running under Solaris 8 (run mkcfg for any servers running from .CFG files).
- c. Shut down servers in the mode being transitioned on l0acs04.
- d. Dump DMS and IOS databases and transaction logs from l0acs04.
- e. For each mode being transferred:
 - Load DMS database on l0ins02
 - Load IOS database on l0ins02Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from l0acs04 to l0ins02.
- f. Start servers and perform checkout of code on l0ins02.
- g. Remove any firewall rules that were temporarily installed to redirect l0ins02 traffic to l0acs06.
- h. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on l0ins02.
- i. After checkout is successfully completed, place l0ins02 in operation.

7.3.5.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on l0ins02.

- b. Load root and /data1 partitions from backup made in 7.3.5.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.3.5.5 Post transition activity

N/A

7.3.6 LaRC MSS21 Upgrade

The following actions will facilitate the transition of l0mss21 to Solaris 8:

7.3.6.1 Preparation

- a. Prepare COTS
 - 1. Make sure Volume Manager 3.0.4 is on the temporary host, l0acs04 and l0mss21.
 - 2. Create MSS database on temporary host for each mode being transitioned in accordance with the device allocations as specified in Appendix A, Section A.2 (Using the devices created in step 7.3.3.1.b.)
- b. Backup. Back up root and /data1 partitions from l0mss21 to the jump start server.
- c. Temporary relocation.
 Install l0mss21 custom code on l0acs04 and transition mode by mode to l0acs04. For each mode, complete the following procedures to perform the transition:
 - 1. Create a tar file containing all directories under the directory /usr/ecs/<MODE>/CUSTOM/<directory> for each mode being transitioned **except** for any mounted directories or log directories.
 - 2. FTP the tar file to l0acs04 and untar it under the /usr/ecs/<MODE>/CUSTOM directory.
 - 3. Using the registry GUI, copy .CFG file entries from the l0mss21 branch to the l0acs04 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the l0acs04 branch. Detailed procedures for doing this are similar to those outlined in section 7.3.1.1.b.3.
 - 4. Using ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/MSS_DB_Temp.rg ypatch registry patch to point to all servers accessing MSS database to l0acs04_svr. Note that you will need to run mkcfg to modify this value for any servers that may be running from .CFG files instead of the registry.
 - 5. Shut down custom code servers in the mode being transitioned on l0mss21.

6. Shutdown the replication agents and drop subscription on the User Profile Table.
7. Dump MSS database and transaction logs from l0mss21.
8. Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp out the Logins and Users from l0mss21.
9. For each mode being transferred:
 - Load MSS database on l0acs04
 - Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from l0mss21 to l0acs04.
10. Start servers and perform checkout of relocated code in the mode being transitioned on l0acs04.

7.3.6.2 Upgrade Software

- a. Upgrade l0mss21 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document. Note, make sure you perform the Volume Manager procedures, noted in the Solaris 8 release notes, before and after execution of the Solaris 8 upgrade procedures.
- b. Install and configure iPlanet as described in the iPlanet PSR Release Notes document. Note that some portions of the iPlanet configuration for a given mode instance cannot be completed until the custom code installation is performed.

7.3.6.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on l0mss21:

- a. Install the Solaris 8 version of custom code on l0mss21 using EASI to install all packages on the host as listed in the .sitemap.
- b. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/SubServer_DB_final.rgypatch registry patch to modify all values for DBServer currently pointing to l0acs04_srvr to point back to the l0mss21_srvr and to point MSS servers to the proper version of Sybase OpenClient (12.0.0) for running under Solaris 8. Run mkcfg for any servers running from .CFG files.
- c. Shut down servers in the mode being transitioned on l0acs04.
- d. Dump MSS database and transaction logs from l0acs04.
- e. For each mode being transferred:
 - Load MSS database on l0mss21

- Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from l0acs04 to l0mss21.
- f. Start the replication agents and create subscription for the User Profile Table.
- g. Start servers and perform checkout of code in the mode being transitioned on l0mss21.
- h. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on l0mss21.
- i. After checkout is successfully completed, place l0mss21 in operation.

7.3.6.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on l0mss21.
- b. Load root and /data1 partitions from backup made in 7.3.6.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.3.6.5 Post transition activity

N/A

7.3.7 MSS20 Upgrade

The following actions will facilitate the transition of l0mss20 to Solaris 8:

7.3.7.1 Preparation

Backup. Back up root and /data1 partitions from l0mss20 to the jump start server.

7.3.7.2 Upgrade Software

Upgrade l0mss20 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.3.7.3 Custom Code Installation and Checkout

There is no custom code on this platform.

7.3.7.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut COTS running on l0mss20.
- b. Load root and /data1 partitions from backup made in 7.3.7.1
- c. Reboot machine
- d. Perform checkout.

7.3.7.5 Post transition activity

N/A

7.3.8 LaRC Workstations Transition

7.3.8.1 Upgrade Workstations: l0ais01 and l0ais09

l0ais01 capability will be transferred to a SUN Blade 100 that will be name l0ais01. The current l0ais01 machine will undergo hardware upgrade and then renamed, l0ais09. The current l0ais01 machine (Sparc 20) will be retired.

7.3.8.1.1 Preparation

- a. Backup. Back up files for l0ais01 and l0ais09.
- b. Modify/Upgrade hardware.
 1. Shutdown l0ais01 and l0ais09.
 2. Install new 18 GB root disk in l0ais01 and partition per disk configuration diagram in the document, 922-TDL-022 Rev. 01.
 3. Start up l0ais01 and rename it, “l0ais09.”
 4. Disconnect old l0ais09 from the Sparc Storage Array and connect the new l0ais09 (formerly l0ais01) to the array.
 5. Disconnect power cord, network cable, and monitor from old l0ais09 (Sparc 20); remove the 6x32 MB memory DIMMS from the old l0ais09 and save for l0acs06 upgrade; remove the Sparc 20 chassis.
 6. Install the new Blade 100; connect Blade 100 to power, network, and the old l0ais09 monitor (using the video adapter).

7.3.8.1.2 Upgrade Software

Upgrade l0ais09 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

Install Solaris 8 software and related COTS on the Blade 100. Name the Blade 100, l0ais01. Partition disks per disk configuration diagram in the document, 922-TDL-021 Rev. 02.

7.3.8.1.3 Custom Code Installation and Checkout

l0ais01:

- a. Load files from backup.

- b. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/AITWS.rgypatch registry patch to modify all values Sybase OpenClient to the proper version (12.0.0) for running under Solaris 8 (run mkcfg for any servers running from .CFG files). **NOTE:** The registry patch will have entries for both l0ais01 and l0ais09. If both machines are not being transitioned at the same time, entries for the machine that is still at Sun 2.5.1 must be commented out prior to applying the registry patch or the code on that machine will not run properly.
- c. Perform checkout.
- d. After checkout is successfully completed, place l0ais01 in operation.

l0ais09:

- a. Load files from backup.
- b. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/AITWS.rgypatch registry patch to modify all values Sybase OpenClient to the proper version (12.0.0) for running under Solaris 8 (run mkcfg for any servers running from .CFG files). **NOTE:** The registry patch will have entries for both l0ais01 and l0ais09. If both machines are not being transitioned at the same time, entries for the machine that is still at Sun 2.5.1 must be commented out prior to applying the registry patch or the code on that machine will not run properly.
- c. Perform checkout.
- d. After checkout is successfully completed, place l0ais09 in operation.

7.3.8.2 Upgrade Workstations: l0pls02 and l0dms05

l0pls02's capability will be transferred to a SUN Blade 100 that will be named, l0pls02. The current l0pls02 machine will undergo hardware upgrade and renamed, l0dms05. The current l0pls02 machine (Sparc 20) will be retired.

7.3.8.2.1 Preparation

- a. Backup. Back up files for l0pls02 and l0dms05.
- b. Modify/Upgrade hardware.
 1. Shutdown l0pls02 and l0dms05.
 2. Install new 18 GB root disk in l0pls02 and partition per disk configuration diagram in the document, 922-TDL-027 Rev. 02.
 3. Start up l0pls02 and rename it, "l0dms05."
 4. Disconnect power cord, network cable, and monitor from old l0dms05 (Sparc 20); remove the Sparc 20 chassis.

5. Install the new Blade 100; connect Blade 100 to power, network, and the old I0dms05 monitor (using the video adapter). Configure the Blade 100 as I0pls02.

7.3.8.2.2 Upgrade Software

Upgrade I0dms05 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

Install Solaris 8 software and related COTS on the Blade 100. Name the Blade 100, I0pls02. (Note, Solaris 8 and related COTS can be installed on the Blade in advance.) Partition I0pls02 disks per disk configuration diagram in the document, 922-TDL-023 Rev. 02.

7.3.8.2.3 Custom Code Installation and Checkout

I0dms05:

- a. Load files from backup.
- b. Perform checkout.
- c. After checkout is successfully completed, place I0dms05 in operation.

I0pls02:

- a. Load files from backup of the original I0pls02 host.
- b. Install Solaris 8 version of custom code on I0pls02 using EASI to install all packages on the host as specified in the .sitemap.
- c. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/PLNMGTWS.rgypatch registry patch to modify all values Sybase OpenClient to the proper version (12.0.0) for running under Solaris 8 (run mkcfg for any servers running from .CFG files).
- d. Perform checkout.
- e. After checkout is successfully completed, place I0pls02 in operation.

7.3.8.3 Upgrade Workstations: I0acs01 and I0acs06

I0acs01's capability will be transferred to a SUN Blade 100. The current I0acs01 machine will undergo a hardware upgrade and renamed I0acs06. The current I0acs06 machine (Sparc 20) will be retired.

7.3.8.3.1 Preparation

- a. Backup. Back up files for I0acs01 and I0acs06.
- b. Modify/Upgrade hardware.
 1. Shutdown I0acs01 and I0acs06.

2. Install new 18 GB root disk in l0acs01 and partition per disk configuration diagram in the document, 922-TDL-012 Rev. 01.
3. Install additional 6x32 MB DIMMS in l0acs01 (taken from l0ais09).
4. Start up l0acs01 and rename it, "l0acs06."
5. Disconnect power cord, network cable, and monitor from old l0acs06 (Sparc 20); remove the Sparc 20 chassis.
6. Install the new Blade 100; connect Blade 100 to power, network, and the old l0acs06 monitor (using the video adapter).

7.3.8.3.2 Upgrade Software

Upgrade l0acs06 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

Install Solaris 8 software and related COTS on the Blade 100. Name the Blade 100, l0acs01. (Note Solaris 8 and related COTS can be installed on the Blade in advance.) Partition disks per disk configuration diagram in the document, 922-TDL-012 Rev. 01.

7.3.8.3.3 Custom Code Installation and Checkout

l0acs06:

- a. Load files from backup.
- b. Install Solaris 8 version of custom code on l0acs06 using EASI to install all packages on the host as specified in the .sitemap.
- c. Modify l0acs06 configuration parameters to reflect the proper version of Sybase OpenClient for the Solaris 8 baseline:
 1. Using ECS Assistant Subsystem Manager, perform a mkcfg on the EcIn component. Do not change any configuration values -- the mkcfg will automatically insert the correct version of Sybase OpenClient (12.0.0) in the EcInGUI.CFG files that are created.
 2. Populate the registry with the new configuration values by using the EcCoPopulateRegistry tool.
 3. Rename configuration files (as appropriate) from EcInGUIxxx.CFG to EcInGUIxxx.CFG.rgy so that servers start from the registry.
- d. Perform checkout.
- e. After checkout is successfully completed, place l0acs06 in operation.

l0acs01:

- a. Load files from backup.
- b. Install Solaris 8 version of custom code on l0acs01 using EASI to install all packages on the host as specified in the .sitemap.

- c. Modify l0acs01 configuration parameters to reflect the proper version of Sybase OpenClient for the Solaris 8 baseline:
 1. Using ECS Assistant Subsystem Manager, perform a mkcfg on the EcIn component. Do not change any configuration values -- the mkcfg will automatically insert the correct version of Sybase OpenClient (12.0.0) in the EcInGUI.CFG files that are created.
 2. Populate the registry with the new configuration values by using the EcCoPopulateRegistry tool.
 3. Rename configuration files (as appropriate) from EcInGUIxxx.CFG to EcInGUIxxx.CFG.rgy so that servers start from the registry.
- d. Perform checkout.
- e. After checkout is successfully completed, place l0acs01 in operation.

7.3.8.4 Upgrade l0css02

The l0css02 capability will be transferred from the Sparc 20 to a SUN Blade 100.

7.3.8.4.1 Preparation

Before starting this procedure, all FLEXlm license keys will have to be re-requested with the Sun Blade host id replacing the host id for the current l0css02 (Sparc 20) in the license.dat file, /usr/local/flexlm/licenses/license.dat.

- a. Backup. Back up files.
- b. Modify/Upgrade hardware.

Connect Blade 100's ethernet interface (eri0) to the site Production LAN subnet.

7.3.8.4.2 Upgrade Software

Using a temporary hostname and IP address, JumpStart the Sun Blade 100 (using an initial install profile) to install the Solaris 8 operation system and recommended patches. Follow installation instructions provided in the Solaris 8 OS Upgrade Bundle PSR Release Notes document. Make sure the Sun Blade 100 can be logged into from the network after the JumpStart installation has completed. Partition disks per disk configuration diagram in the document, 922-TDL-005 Rev. 02.

7.3.8.4.3 Custom Code Installation and Checkout

There is No Custom Code on l0css02. These are procedures that should be performed to complete the transfer of the l0css02 functions to the Sun Blade 100.

- a. Verify local COTS packages (ssh20, ssh21, tripwire, TCP Wrappers, JetDirect, Legato Networker Client, etc.) were installed successfully after the JumpStart process has completed. For "upgrade" installs, these packages are only installed if they already exists.

- b. Tar up configuration files below from the original l0css02 machine. If necessary, include any additional files that may be unique to DAAC site. Ftp or copy tar file to new Sun Blade 100 and extract.

System Files:

* /etc/passwd
* /etc/shadow
* /etc/group
* /etc/inet/hosts
/etc/inet/networks
/etc/inet/services
/etc/inet/ntp.conf

NIS Files:

/etc/auto_master
/etc/auto_home
/etc/auto_tools
/etc/auto_restricted
/etc/auto_vobs
/etc/netgroup
/var/yp/Makefile
/var/yp/ypmake
* /etc/mail/aliases

DNS Files:

/etc/named.boot
/etc/dns (entire directory, all DNS database files)

* File paths may differ at specific DAAC sites. Check the file locations in the /var/yp/Makefile of the original l0css02 machine to confirm correct files are copied over to new Sun Blade.

- c. Edit host name related files on Sun Blade, then reboot system into single-user mode.

```
# ifconfig eri0 down  
# vi /etc/l0css02.eri0  
# vi /etc/l0css02
```

- d. Recreate NIS domain via "ypinit -m" command.

```
# hostname l0css02  
# domainname {ypdomain}  
# ypinit -m
```

- e. Create DNS BIND 8 configuration file.
 - # /usr/sbin/named-bootconf < /etc/named.boot > /etc/named.conf
- f. Set up FlexLM using PSR document 914-TDA-065. Create license directory and install new license file for replacement l0css02 box.
 - # umask 22; mkdir -p /usr/local/flexlm/licenses
- g. Upgrade Flexlm binaries to v8.0d per upgrade PSR.
- h. Copy all FlexLM vendor daemons from the original l0css02 box
 - /etc/opt/licenses/ICSBX
 - /etc/opt/licenses/idl_lmgrd
 - /etc/opt/licenses/rational
 - /etc/opt/licenses/sunwlicd
- i. Ensure FlexLM Sun vendor daemon permissions are set correctly.
 - # chmod 755 /opt/SUNWste/license_tools/suntechd
- j. Bring Blade 100 online as l0css02
 1. NIS bind all clients, Sun and SGI, to secondary NIS server.
 2. Shutdown original l0css02 box (Sparc 20).
 3. Bring new l0css02 Sun Blade online using real hostname and IP address of original l0css02 (Sparc 20).
 4. Change hostname and IP address of original l0css02 (Sparc 20) to the temporary hostname and IP address used to build the new Sun Blade, then bring on-line for access to original files.
 5. Rebind original clients back to l0css02.
 6. Test yp commands like ypcat and ypwhich to confirm functionality. (Note, if the ypbind process is run with the -ypset option, the ypcat command will fail on a Solaris 2.5.1 client that is NIS bound to the new Solaris 8 l0css02 box. Restart ypbind without the -ypset option on all Solaris .25.1 clients.)

7.3.8.4.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. NIS bind all clients to the secondary NIS server.
- b. Shut down the new l0css02.

- c. Change hostname IP address of original l0css02 (Sparc 20) to the original hostname and IP address then bring on-line for access to original files.
- d. Rebind secondary NIS machine's clients to l0css02 (Sparc 20)
- e. Perform checkout and place into operation.

7.3.8.5 Upgrade l0dms04

The l0dms04 capability will be transferred from a Sparc 20 to a SUN Blade 100.

7.3.8.5.1 Preparation

- a. Backup. Back up l0dms04 files.
- b. Modify/Upgrade hardware.
 - 1. Disconnect power, network cable, and monitor from l0dms04 (Sparc 20).
 - 2. Remove l0dms04 (Sparc 20) and replace with a Blade 100.
 - 3. Connect Blade 100 to power, network, and the old l0dms04monitor (using the video adapter).
 - 4. Configure the new platform as l0dms04.

7.3.8.5.2 Install/Upgrade Software

Install Solaris 8 software and related COTS on the Blade 100. Name the Blade 100, l0dms04. Partition disks per disk configuration diagram in the document, 922-TDL-027 Rev. 02.

7.3.8.5.3 Custom Code Installation and Checkout

- a. Load files from backup.
- b. Perform checkout.
- c. After checkout is successfully completed, place new l0dms04 in operation.

7.3.8.6 Upgrade Workstations: l0ais10 and l0dms01

7.3.8.6.1 Preparation

- a. Backup. Back up files for l0ais10 and l0dms01.
- b. Modify/Upgrade hardware.
 - 1. Shutdown l0ais10 and l0dms01.
 - 2. Disconnect power cord, network cable, and monitor from old l0ais10 (Sparc 20); remove the Sparc 20 chassis.

3. Remove 4x32 MB DIMMs from l0ais10.
4. Install new 18 GB root disk in l0dms01 and partition per disk configuration diagram in the document, 922-TDL-037 Rev. 01.
5. Install additional 6x32 MB DIMMs in l0dms01 (4 from l0ais10 and 2 from l0css02)
6. Start up l0dms01 and rename it, "l0ais10."
7. Install the new Blade 100; connect Blade 100 to power, network, and the old l0ais10 monitor (using the video adapter).

7.3.8.6.2 Upgrade Software

Upgrade l0ais10 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

Install Solaris 8 software and related COTS on the Blade 100. Name the Blade 100, l0dms01. (Note, Solaris 8 and related COTS can be installed on the Blade in advance.) Partition disks per disk configuration diagram in the document, 922-TDL-027 Rev. 02.

7.3.8.6.3 Custom Code Installation and Checkout

l0ais10:

There is no custom code on this platform.

l0dms01:

- a. Load files from backup.
- b. Install the Solaris 8 version of custom code on l0dms01 using EASI to install all packages on the host as listed in the .sitemap.
- c. Perform checkout.
- d. After checkout is successfully completed, place l0dms01 in operation.

7.3.8.7 Upgrade l0mss05

The l0mss05 platform will be upgraded to Solaris 8.

7.3.8.7.1 Preparation

- a. Backup. Back up l0mss05 files.
- b. Modify/Upgrade hardware.

Install new 18 GB root disk in l0mss05 and partition per disk configuration diagram in the document, 922-TDL-031 Rev. 02.

7.3.8.7.2 Install/Upgrade Software

Upgrade I0mss05 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.3.8.7.3 Custom Code Installation and Checkout

There is no custom code on this platform.

7.3.8.8 Upgrade I0mss10

The I0mss10 platform will be upgraded to Solaris 8.

7.3.8.8.1 Preparation

- a. Backup. Back up I0mss10 files.
- b. Modify/Upgrade hardware.

Install new 18 GB root disk in I0mss10 and partition per disk configuration diagram in the document, 922-TDL-011 Rev. 04.

7.3.8.8.2 Install/Upgrade Software

Upgrade I0mss10 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.3.8.8.3 Custom Code Installation and Checkout

There is no custom code on this platform.

7.3.8.9 I0mss01

I0mss01 will not be upgraded to Solaris 8 as a part of this transition. This is because the three primary COTS products for this host, Remedy, Clearcase, and DDTs, will not be upgraded to Solaris 8 during transition.

7.4 NSIDC Transition Procedures

The Solaris 8 upgrade procedures to be performed at the NSIDC DAAC are described in this section. The method of transition will be to upgrade each machine in place.

7.4.1 NSIDC Distribution Server Transition

The distribution server, n0dis02, will be upgraded to Solaris 8. The transition tasks are as follow:

7.4.1.1 Preparation

- a. Backup. Back up root and /data1 partitions from n0dis02 to the jump start server. Shutdown n0dis02.
- b. Modify/Upgrade n0dis02 hardware.
Move two 9 GB disks from n0acs05 to n0dis02 and partition per disk configuration diagram in the document, 922-TDN-006 Rev. 02.

7.4.1.2 Upgrade Software

Upgrade n0dis02 to Solaris 8 as specified in the Solaris 8 Upgrade Bundle PSR Release Notes document. Note, make sure you perform the Volume Manager procedures, noted in the Solaris 8 release notes, before and after execution of the Solaris 8 upgrade procedures.

7.4.1.3 Custom Code Installation and Checkout

- a. Install and configure Solaris 8 custom Code and COTS on n0dis02.
- b. Start servers and perform checkout of code on n0dis02
- c. After checkout is successfully completed, place n0dis02 into operation.

7.4.1.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on n0dis02.
- b. Load Solaris 2.5.1 environment on n0dis02 from the jump start server.
- c. Restart servers and COTS on n0dis02.

7.4.1.5 Post transition activity

N/A

7.4.2 NSIDC Science Data Server Transition

The Science Data Server, n0acs04, will be upgraded to Solaris 8. The transition tasks are as follow:

7.4.2.1 Preparation

- a. Backup. Back up root and /data1 partitions from n0acs04 to the jump start server.
Shutdown n0acs04.
- b. Modify/Upgrade n0acs04 hardware.
Repartition n0acs04's root disks per disk configuration diagram in the document, 922-TDN-016 Rev. 04.

7.4.2.2 Upgrade Software

Upgrade n0acs04 to Solaris 8 as specified in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.4.2.3 Custom Code Installation and Checkout

- a. Install and configure Solaris 8 custom Code and COTS on n0acs04.
- b. Start servers and perform checkout of code on n0acs04
- c. After checkout is successfully completed, place n0acs04 into operation.

7.4.2.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on n0acs04.
- b. Load Solaris 2.5.1 environment on n0acs04 from the jump start server.
- c. Restart servers and COTS on n0acs04.

7.4.2.5 Post transition activity.

N/A

7.4.3 NSIDC SPS and PLS Consolidation/Transition

The SPS and PLS servers will be consolidated onto a single machine, n0sps08. Note that this transition involves the relocation of Autosys, which is a mode-independent COTS product. Autosys will therefore be relocated during one of the mode relocations. The steps that involve Autosys may be ignored when transitioning other modes.

7.4.3.1 Preparation

- a. Backup. Back up / and /data1 partitions from n0sps08 and n0pls01 to the jump start server.
- b. Prepare PDPS Databases on n0sps08
 1. Create PDPS database on n0sps08 for each corresponding mode on n0pls01.

2. Ensure PDPS database device allocations are identical to the original PDPS database on n0pls01. Device allocation explanations are provided in Appendix A, Section A.2.
 3. Dump PDPS databases and transaction logs on n0pls01.
 4. Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp out the Logins and Users from n0pls01.
 5. Load PDPS database on n0sps08.
 6. Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from n0pls01 to n0sps08.
- c. Upgrade hardware.
1. Install new disk board in n0sps08 and configure per disk configuration diagram in the document, 922-TDN-014 Rev. 05.
 2. move the 2x168 MHz CPU board from n0pls01 to n0sps08

7.4.3.2 Upgrade Software

Upgrade n0sps08 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.4.3.3 Custom Code Installation and Checkout

1. Configure disk packs on n0sps08 for combined use of n0pls01 and n0sps08. See disk partition diagram in the document, 922-TDN-014 Rev. 05. Note, the PLS database devices will be created on unused slices on the existing SPS disk packs. Consequently, the disk packs attached to n0pls01 will not have to be relocated to n0sps08.
2. Install custom code and COTS on n0sps08.
3. Start servers and perform checkout of code on n0sps08.
4. After checkout is successfully completed, place n0sps08 in operation.

7.4.3.4 Rollback (use only if necessary to restore the Solaris 5 environment)

1. Shut down all the servers and COTS running on n0sps08.
2. Load Solaris 2.5.1 environment on n0sps08 from the jump start server.

7.4.3.5 Post transition activity

N/A

7.4.4 NSIDC INS01 Transition

The following actions will facilitate the transition of n0ins01 to Solaris 8:

7.4.4.1 Preparation

- a. Prepare COTS
- b. Backup. Back up root and /data1 partitions from n0ins01 to the jump start server.
- c. Modify/Upgrade hardware.

Repartition c1t0d0 and c1t10d0 per disk configuration diagram in the document, 922-TDN-009 Rev. 05. This will increase the size of root and use one of the former client map disks for /data1.

7.4.4.2 Upgrade Software.

Upgrade n0ins01 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document. Note, make sure you perform the Volume Manager procedures before and after the Solaris 8 upgrade as specified in the Solaris 8 OS Upgrade Bundle PSR Release Notes document.

7.4.4.3 Custom Code Installation and Checkout

- a. Install and configure Solaris 8 custom code on n0ins01:
- b. Start servers and perform checkout of code on n0ins01.
- c. After checkout is successfully completed, place n0ins01 in operation.

7.4.4.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on n0ins01.
- b. Load root and /data1 partitions from backup made in 7.4.4.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.4.4.5 Post transition activity

N/A

7.4.5 NSIDC INS02 Transition

The following actions will facilitate the transition of n0ins02 to Solaris 8:

7.4.5.1 Preparation

- a. Prepare COTS
- b. Backup. Back up root and /data1 partitions from n0ins02 to the jump start server.
- c. Modify/Upgrade hardware.

Repartition c1t0d0 and c1t10d0 per disk configuration diagram in the document, 922-TDN-009 Rev. 05. This will increase the size of root and use one of the former client map disks for /data1.

7.4.5.2 Upgrade Software

- a. Upgrade n0ins02 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document. Note, make sure you perform the Volume Manager procedures, noted in the Solaris 8 release notes, before and after execution of the Solaris 8 upgrade procedures.
- b. Install and configure iPlanet as described in the iPlanet PSR Release Notes document. Note that some parts of the iPlanet configuration for a given mode instance cannot be completed until the custom code installation is performed.

7.4.5.3 Custom Code Installation and Checkout

- a. Install and configure Solaris 8 custom code on n0ins02:
- b. Start servers and perform checkout of code on n0ins02.
- c. After checkout is successfully completed, place n0ins02 in operation.

7.4.5.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on n0ins02.
- b. Load root and /data1 partitions from backup made in 7.4.5.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.4.5.5 Post transition activity

N/A

7.4.6 NSIDC MSS21 Transition

The following actions will facilitate the transition of n0mss21 to Solaris 8:

7.4.6.1 Preparation

Backup. Back up root and /data1 partitions from n0mss21 to the jump start server.

7.4.6.2 Upgrade Software

- a. Upgrade n0mss21 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document. Note, make sure you perform the Volume Manager procedures, noted in the Solaris 8 release notes, before and after execution of the Solaris 8 upgrade procedures.
- b. Install and configure iPlanet as described in the iPlanet PSR Release Notes document. Note that some parts of the iPlanet configuration for a given mode instance cannot be completed until the custom code installation is performed.

7.4.6.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on n0mss21:

- a. Install custom code packages from the staging area
- b. Start servers and perform checkout of code on n0mss21.
- c. After checkout is successfully completed, place n0mss21 in operation.

7.4.6.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on n0mss21.
- b. Load root and /data1 partitions from backup made in 7.4.6.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.4.6.5 Post transition activity

N/A

7.4.7 NSIDC MSS20 Transition

The following actions will facilitate the transition of n0mss20 to Solaris 8:

7.4.7.1 Preparation

Backup. Back up root and /data1 partitions from n0mss20 to the jump start server.

7.4.7.2 Upgrade Software

Upgrade n0mss20 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.4.7.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on n0mss20:

- a. Install custom code packages from the staging area
- b. Start servers and perform checkout of code on n0mss20.
- c. After checkout is successfully completed, place n0mss20 in operation.

7.4.7.4 Rollback (use only if necessary to restore the Solaris 5 environment)

- a. Shut down all the servers and COTS running on n0mss20.
- b. Load root and /data1 partitions from backup made in 7.4.7.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.4.7.5 Post transition activity

N/A

7.4.8 NSIDC Workstations Transition

7.4.8.1 Upgrade n0css02

The n0css02 capability will be transferred from a Sparc 20 to a SUN Blade 100.

7.4.8.1.1 Preparation

Before starting this procedure, all FLEXlm license keys will have to be re-requested with the Sun Blade host id replacing the host id for the current n0css02 (Sparc 20) in the license.dat file, /usr/local/flexlm/licenses/license.dat.

- a. Backup. Back up n0css02 files.
- b. Modify/Upgrade hardware.
 1. Connect Blade 100 ethernet interface (eri0) to the site Production LAN subnet.
 2. After the Blade 100 has been placed into operation as n0css02, remove 6x32 MB DIMMs from n0css02 (Sparc 20).

7.4.8.1.2 Upgrade Software

Using a temporary hostname and IP address, JumpStart the Sun Blade 100 (using an initial install profile) to install the Solaris 8 operation system and recommended patches. Follow installation instructions provided in the Solaris 8 OS Upgrade Bundle PSR Release Notes document. Make sure the Sun Blade 100 can be logged into from the network after the JumpStart installation has completed. Partition disks per disk configuration diagram in the document, 922-TDN-005 Rev. 02.

7.4.8.1.3 Custom Code Installation and Checkout

There is No Custom Code on n0css02. These are procedures that should be performed to complete the transfer of the n0css02 functions to the Sun Blade 100.

- a. Verify local COTS packages (ssh20, ssh21, tripwire, TCP Wrappers, JetDirect, Legato Networker Client, etc.) were installed successfully after the JumpStart process has completed. For “upgrade” installs, these packages are only installed if they already exists.
- b. Tar up configuration files below from the original n0css02 machine. If necessary, include any additional files that may be unique to DAAC site. Ftp or copy tar file to new Sun Blade 100 and extract.

System Files:

NIS Files:

* /etc/passwd	/etc/auto_master
* /etc/shadow	/etc/auto_home
* /etc/group	/etc/auto_tools
* /etc/inet/hosts	/etc/auto_restricted
/etc/inet/networks	/etc/auto_vobs
/etc/inet/services	/etc/netgroup
/etc/inet/ntp.conf	/var/yp/Makefile
	/var/yp/ypmake
	* /etc/mail/aliases

DNS Files:

/etc/named.boot

/etc/dns (entire directory, all DNS database files)

* File paths may differ at specific DAAC sites. Check the file locations in the /var/yp/Makefile of the original n0css02 machine to confirm correct files are copied over to new Sun Blade.

- c. Edit host name related files on Sun Blade, then reboot system into single-user mode.

```
# ifconfig eri0 down
# vi /etc/n0css02.eri0
# vi /etc/n0css02
```

- d. Recreate NIS domain via "ypinit -m" command.

```
# hostname n0css02
# domainname {ypdomain}
# ypinit -m
```

- e. Create DNS BIND 8 configuration file.

```
# /usr/sbin/named-bootconf < /etc/named.boot > /etc/named.conf
```

- f. Set up FlexLM using PSR document 914-TDA-065. Create license directory and install new license file for replacement n0css02 box.

```
# umask 22; mkdir -p /usr/local/flexlm/licenses
```

- g. Upgrade Flexlm binaries to v8.0d per upgrade PSR.
- h. Copy all FlexLM vendor daemons from the original n0css02 box
 - /etc/opt/licenses/ICSBX
 - /etc/opt/licenses/idl_lmgrd
 - /etc/opt/licenses/rational
 - /etc/opt/licenses/sunwlicd
- i. Ensure FlexLM Sun vendor daemon permissions are set correctly.
 - # chmod 755 /opt/SUNWste/license_tools/suntechd
- j. Bring Blade 100 online as n0css02
 1. NIS bind all clients, Sun and SGI, to secondary NIS server.
 2. Shutdown original n0css02 box (Sparc 20).
 3. Bring new n0css02 Sun Blade online using real hostname and IP address of original n0css02 (Sparc 20).
 4. Change hostname and IP address of original n0css02 (Sparc 20) to the temporary hostname and IP address used to build the new Sun Blade, then bring on-line for access to original files.
 5. Rebind original clients back to n0css02.
 6. Test yp commands like ypcat and ypwhich to confirm functionality. (Note, if the ypbind process is run with the -ypset option, the ypcat command will fail on a Solaris 2.5.1 client that is NIS bound to the new Solaris 8 n0css02 box. Restart ypbind without the -ypset option on all Solaris 2.5.1 clients.)

7.4.8.1.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. NIS bind all clients to the secondary NIS server.
- b. Shut down the new n0css02.
- c. Change hostname IP address of original n0css02 (Sparc 20) to the original hostname and IP address then bring on-line for access to original files.
- d. Rebind secondary NIS machine's clients to n0css02 (Sparc 20)
- e. Perform checkout and place into operation.

7.4.8.2 Upgrade n0acs06

The n0acs06 capability will be transferred from a Sparc 20 to a SUN Blade 100.

7.4.8.2.1 Preparation

- a. Backup. Back up n0acs06 non-operating system files.
- b. Modify/Upgrade hardware.
 1. Disconnect power, network cable, and monitor from n0acs06 (Sparc 20).
 2. Remove n0acs06 (Sparc 20) and replace with a Blade 100.
 3. Connect Blade 100 to power, network, and the old n0acs06 monitor (using the video adapter).

7.4.8.2.2 Install/Upgrade Software

Install Solaris 8 software and related COTS on the Blade 100. Name the Blade 100, n0acs06. Partition n0acs06's disks per disk configuration diagram in the document, 922-TDN-012 Rev. 01.

7.4.8.2.3 Custom Code Installation and Checkout

- a. Install Solaris 8 custom code packages from the staging area.
- b. Load files from backup.
- c. Perform checkout.
- d. After checkout is successfully completed, place new n0acs06 in operation.

7.4.8.3 Upgrade Workstations: n0pls02 and n0ais05

n0pls02 will be retired from the baseline. The current n0pls02 machine will be upgraded and renamed n0ais05. The current n0ais05 machine (Sparc 20) will be retired.

7.4.8.3.1 Preparation

- a. Backup. Back up files for n0pls02 and n0ais05.
- b. Modify/Upgrade hardware.
 1. Shutdown n0pls02 and n0ais05.
 2. Install new 18 GB root disk in n0pls02 and partition per disk configuration diagram in the document, 922-TDN-021 Rev. 01.
 3. Start up n0pls02 and rename it, "n0ais05."

7.4.8.3.2 Upgrade Software

Upgrade n0ais05 to Solaris 8 specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.4.8.3.3 Custom Code Installation and Checkout

- a. Install Solaris 8 custom code packages from the staging area.
- b. Load files backup.
- c. Perform checkout.
- d. After checkout is successfully completed, place n0ais05 in operation.

7.4.8.4 Upgrade n0ais01

The n0ais01 platform's operating system will be upgraded to Solaris 8.

7.4.8.4.1 Preparation

- a. Backup. Back up root and /data1 partitions from n0ais01 to the jump start server.
- b. Modify/Upgrade hardware.
 1. Install new 18 GB root disk in n0ais01 and partition per disk configuration diagram in the document, 922-TDN-021 Rev. 01.
 2. Install 2x32 MB DIMMs from n0css02 in n0ais01.

7.4.8.4.2 Install/Upgrade Software

Upgrade n0ais01 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.4.8.4.3 Custom Code Installation and Checkout

- a. Install Solaris 8 custom code packages from the staging area.
- b. Load files from backup.
- c. Perform checkout.
- d. After checkout is successfully completed, place n0ais01 in operation.

7.4.8.5 Upgrade n0dms04

The n0dms04 platform's operating system will be upgraded to Solaris 8.

7.4.8.5.1 Preparation

- a. Backup. Back up root and /data1 partitions from n0dms04 to the jump start server.
- b. Modify/Upgrade hardware.

1. Install new 18 GB root disk in n0dms04 and partition per disk configuration diagram in the document, 922-TDN-027 Rev. 01.
2. Install 4x32 MB DIMMs from n0css02 in n0dms04.

7.4.8.5.2 Install/Upgrade Software

Upgrade n0dms04 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.4.8.5.3 Custom Code Installation and Checkout

- a. Install Solaris 8 custom code packages from the staging area.
- b. Load files from backup.
- c. Perform checkout.
- d. After checkout is successfully completed, place n0dms04 in operation.

7.4.8.6 Upgrade n0mss01

The n0mss01 platform's operating system will be upgraded to Solaris 8.

7.4.8.6.1 Preparation

- a. Backup. Back up root and /data1 partitions from n0mss01 to the jump start server.
- b. Modify/Upgrade hardware.

Install new 18 GB root disk in n0mss01 and partition per disk configuration diagram in the document, 922-TDN-011 Rev. 04.

7.4.8.6.2 Install/Upgrade Software

Upgrade n0mss01 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.4.8.6.3 Custom Code Installation and Checkout

- a. Install Solaris 8 custom code packages from the staging area.
- b. Load files from backup.
- c. Perform checkout.
- d. After checkout is successfully completed, place n0mss01 in operation.

7.4.8.7 Upgrade n0mss05

The n0mss05 platform's operating system will be upgraded to Solaris 8.

7.4.8.7.1 Preparation

- a. Backup. Back up root and /data1 partitions from n0mss05 to the jump start server.
- b. Modify/Upgrade hardware.
Install new 18 GB root disk in n0mss05 and partition per disk configuration diagram in the document, 922-TDN-031 Rev. 03.

7.4.8.7.2 Install/Upgrade Software

Upgrade n0mss05 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.4.8.7.3 Custom Code Installation and Checkout

- a. Install Solaris 8 custom code packages from the staging area.
- b. Load files from backup.
- c. Perform checkout.
- d. After checkout is successfully completed, place n0mss05 in operation.

7.4.8.8 Upgrade n0acs03

The n0acs03 platform's operating system will be upgraded to Solaris 8.

7.4.8.8.1 Preparation

- a. Backup. Back up root and /data1 partitions from n0acs03 to the jump start server.
- b. Modify/Upgrade hardware.
Install new 18 GB root disk in n0acs03 and partition per disk configuration diagram in the document, 922-TDN-012 Rev. 01.

7.4.8.8.2 Install/Upgrade Software

Upgrade n0acs03 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.4.8.8.3 Custom Code Installation and Checkout

- a. Install Solaris 8 custom code packages from the staging area.
- b. Load files from backup.
- c. Perform checkout.
- d. After checkout is successfully completed, place n0acs03 in operation.

7.4.8.9 n0pls03

n0pls03 is unused and will be retired.

7.4.8.10 n0mss02

n0mss02 will not be upgraded to Solaris 8 as a part of this transition. This is because the three primary COTS products for this host, Remedy, Clearcase, and DDTS, will not be upgraded to Solaris 8 during transition.

7.5 SMC Transition Procedures

The SMC transition procedures are listed below.

7.5.1 SMC m0mss01 Upgrade

The m0mss01 platform is the MSS file server. This will be an in-place upgrade. Transition procedures are as follow:

7.5.1.1 Preparation

- a. Backup. Back up root and /data1 partitions from m0mss01 to the jump start server.
- b. Modify/Upgrade hardware.
Install new 18 GB root disk in m0mss01 and partition per disk configuration diagram in the document, 922-TDS-011 Rev. 02.

7.5.1.2 Upgrade Software

Upgrade m0mss01 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.5.1.3 Custom Code Installation and Checkout

(No custom code on m0mss01)

Perform checkout of m0mss01.

7.5.1.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down all COTS running on m0mss01.
- b. Load root and /data1 partitions from backup made in step 7.5.1.1.
- c. Reboot machine.
- d. Perform checkout.

7.5.2 SMC m0mss02 Upgrade

The m0mss02 platform is the CM server. This will be an in-place upgrade. Transition procedures are as follow:

7.5.2.1 Preparation

a. Backup. Back up root and /data1 partitions from m0mss02 to the jump start server.

b. Modify/Upgrade hardware.

Install new 18 GB root disk in m0mss02 and partition per disk configuration diagram in the document, 922-TDS-011 Rev. 02.

7.5.2.2 Upgrade Software

Upgrade m0mss02 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.5.2.3 Custom Code Installation and Checkout

(No custom code on m0mss02)

Perform checkout of m0mss02.

7.5.2.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

a. Shut down all COTS running on m0mss02.

b. Load root and /data1 partitions from backup made in step 7.5.2.1.

c. Reboot machine.

d. Perform checkout.

7.5.3 SMC m0mss04 Upgrade

The m0mss04 platform is the tape backup server. This will be an in-place upgrade. Transition procedures are as follow:

7.5.3.1 Preparation

a. Backup. Back up root and /data1 partitions from m0mss04 to the jump start server.

b. Modify/Upgrade hardware.

Install new 18 GB root disk in m0mss04 and partition per disk configuration diagram in the document, 922-TDS-031 Rev. 01.

7.5.3.2 Upgrade Software

Upgrade m0mss04 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.5.3.3 Custom Code Installation and Checkout

Perform checkout of m0mss04.

7.5.3.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down all COTS running on m0mss04.
- b. Load root and /data1 partitions from backup made in step 7.5.3.1.
- c. Reboot machine.
- d. Perform checkout.

7.5.4 SMC m0mss15 Upgrade

The m0mss15 platform is the Application server. This will be an in-place upgrade. Transition procedures are as follow:

7.5.4.1 Preparation

Backup. Back up root and /data1 partitions from m0mss15 to the jump start server.

7.5.4.2 Upgrade Software

Upgrade m0mss15 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.5.4.3 Custom Code Installation and Checkout

Perform checkout of m0mss15.

7.5.4.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down all COTS running on m0mss15.
- b. Load root and /data1 partitions from backup made in step 7.5.4.1.
- c. Reboot machine.
- d. Perform checkout.

7.5.5 SMC m0mss16 Upgrade

The m0mss16 platform is the primary Application server. This will be an in-place upgrade. Transition procedures are as follow:

7.5.5.1 Preparation

Backup. Back up root and /data1 partitions from m0mss16 to the jump start server.

7.5.5.2 Upgrade Software

Upgrade m0mss16 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.5.5.3 Custom Code Installation and Checkout

Perform checkout of m0mss16.

7.5.5.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down all COTS running on m0mss16.
- b. Load root and /data1 partitions from backup made in step 7.5.5.1.
- c. Reboot machine.
- d. Perform checkout.

7.5.6 SMC m0css03 Upgrade

The m0css03 is the CSS Network Server. This platform will be replaced by a SUN Blade 100. Transition procedures are as follow:

7.5.6.1 Preparation

- a. Backup. Back up files.
- b. Modify/Upgrade hardware.
 1. Disconnect power cord, network cable, and monitor from m0css03 (Sparc 20).
 2. Remove m0css03 (Sparc 20) and replace with a Blade 100.
 3. Connect Blade 100 to power, network, and the old m0css03 monitor (using the video adapter).

7.5.6.2 Upgrade Software

Install Solaris 8 and related COTS on the Blade 100 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document. Name the Blade 100, m0css03. Partition m0css03's disk per disk configuration diagram in the document, 922-TDS-005 Rev. 00.

7.5.6.3 Custom Code Installation and Checkout

- a. Load files from backup
- b. Perform checkout of m0css03.
- c. After checkout is successfully completed, place m0css03 into operation.

7.5.6.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down Blade 100.
- b. Reassemble m0css03 (Sparc 20)
- c. Reboot m0css03 (Sparc 20).
- d. Perform checkout.

7.5.7 SMC m0css04 Upgrade

The m0css04 is the FTP Server. This platform will be replaced by a SUN Blade 100. Transition procedures are as follow:

7.5.7.1 Preparation

- a. Backup. Back up files.
- b. Modify/Upgrade hardware.
 1. Disconnect power cord, network cable, and monitor from m0css04 (Sparc 20).
 2. Remove m0css04 (Sparc 20) and replace with a Blade 100.
 3. Connect Blade 100 to power, network, and the old monitor (using the video adapter).

7.5.7.2 Upgrade Software

Install Solaris 8 and related COTS on the Blade 100 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document. Name the Blade

100, m0css04. Partition m0css04's disks per disk configuration diagram in the document, 922-TDS-047 Rev. 00.

7.5.7.3 Custom Code Installation and Checkout

- a. Load files from backup.
- b. Perform checkout of m0css04.
- c. After checkout is successfully completed, place m0css04 into operation.

7.5.7.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down Blade 100.
- b. Reassemble m0css04 (Sparc 20)
- c. Reboot m0css04 (Sparc 20).
- d. Perform checkout.

7.5.8 SMC m0css05 Upgrade

This platform will be replaced by a SUN Blade 100. Transition procedures are as follow:

7.5.8.1 Preparation

- a. Backup. Back up files.
- b. Modify/Upgrade hardware.
 1. Disconnect power cord, network cable, and monitor from m0css05 (Sparc 20).
 2. Remove m0css05 (Sparc 20) and replace with a Blade 100.
 3. Connect Blade 100 to power, network, and the old m0css05 monitor (using the video adapter).

7.5.8.2 Upgrade Software

Install Solaris 8 and related COTS on the Blade 100 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document. Name the Blade 100, m0css05. Partition m0css05's disks per disk configuration diagram in the document, 922-TDS-047 Rev. 00.

7.5.8.3 Custom Code Installation and Checkout

- a. Load files from backup.

- b. Perform checkout of m0css05.
- c. After checkout is successfully completed, place m0css05 into operation.

7.5.8.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down Blade 100.
- b. Reassemble m0css05 (Sparc 20)
- c. Reboot m0css05 (Sparc 20).
- d. Perform checkout.

7.5.9 SMC m0mss17 Upgrade

This platform will be replaced by a SUN Blade 100. Transition procedures are as follow:

7.5.9.1 Preparation

- a. Backup. Back up files.
- b. Modify/Upgrade hardware.
 - 1. Disconnect power cord, network cable, and monitor from m0mss17 (Sparc 20).
 - 2. Remove m0mss17 (Sparc 20) and replace with a Blade 100.
 - 3. Connect Blade 100 to power, network, and the old m0mss17 monitor (using the video adapter).

7.5.9.2 Upgrade Software

Install Solaris 8 and related COTS on the Blade 100 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document. Name the Blade 100, m0mss17. Partition m0mss17's disks per disk configuration diagram in the document, 922-TDS-048 Rev. 00.

7.5.9.3 Custom Code Installation and Checkout

- a. Load files from backup.
- b. Perform checkout of m0mss17.
- c. After checkout is successfully completed, place m0mss17 into operation.

7.5.9.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down Blade 100.
- b. Reassemble m0mss17 (Sparc 20)
- c. Reboot m0mss17 (Sparc 20).
- d. Perform checkout.

7.6 VATC Transition Procedures

The ECS VATC is the site where the Solaris 8 transition strategy is formulated. The strategy will be developed through a series of transition to Solaris 8 and rollback to Solaris 5 exercises. The first exercise helped to develop the overall transition strategy. The second exercise will refine and validate actual transition procedures. The third exercise will serve as a training vehicle for DAAC personnel.

The VATC transition procedures are described below. Note that during the first VATC transition only, the PLS-SPS consolidation and upgrade occurred first in order to free up the t1pls01 machine for use in the transition of other machines. So these procedures reflect the start of the second exercise where t1pls01 will serve as a temporary host.

7.6.1 VATC Distribution Server (t1dps01) Transition

The t1pls01 platform that was freed up by the PLS consolidation during the first VATC transition will be used to temporarily host the custom code normally run on t1dps01. After any required hardware upgrades are applied, the Solaris upgrade will be performed on t1dps01. Finally, all custom code will be moved back to the upgraded t1dps01. Transition procedures are:

7.6.1.1 Preparation

a. Temporary relocation.

Install custom code on t1pls01. For each mode, complete the following procedures to perform the transition:

1. Create a tar file containing all directories under the /usr/ecs/<MODE>/CUSTOM/ directory for each mode being transitioned except for any mounted directories (the /logs directory may also be omitted from the tar file to save disk space)
2. FTP the tar file to t1pls01 and untar it under the /usr/ecs/<MODE>/CUSTOM directory.
3. Using the registry GUI, copy .CFG file entries from the t1dps01 branch to the t1pls01 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the t1pls01 branch. The detailed procedures for doing this are as follows:
 - (a) On t1dms02, open the registry GUI by running /usr/ecs/<MODE>/CUSTOM/utilities/EcCsRegistryGUIStart <MODE>. Enter/verify the appropriate .registry database information on the window that pops up and select 'OK.' Select the attribute tree name from the drop-down box that corresponds to the mode being transitioned (when the correct tree name is selected, the mode name will appear in the Attribute Information box in the bottom left corner of the screen).

- (b) Expand the tree branches under t1pls01 until the CFG branch appears. Highlight the CFG branch by clicking on it. Select the DELETE icon above and click to confirm the deletion when a confirmation box appears. It may take some time for the deletion to complete.
 - (c) Expand the tree branches under t1dps01 until the CFG branch appears. Highlight the CFG branch by clicking on it. Select the COPY icon above and click YES to confirm the copy when a confirmation box appears. It may take a little while for the copy operation to complete. Wait until a “Successfully completed node copy” message appears at the bottom of the window before continuing. If it does not successfully copy, try again!
 - (d) Select the config branch under t1pls01 so that it is highlighted and click on the Paste icon above. It may take a little while for the paste operation to complete. Wait until a “Successfully completed paste operation” message appears at the bottom of the window before continuing.
 - (e) To verify the paste operation, re-select the Attribute Tree Name from the drop-down box and expand the t1pls01 tree branch until the branches under CFG are displayed. Verify that they are the same as those under the t1dps01 CFG branch.
4. Shut down servers in the mode being transitioned on t1dps01.
 5. Start servers and perform checkout of relocated code in the mode being transitioned on t1pls01.
- b. Backup. Back up root and /data1 partitions from t1dps01 to the jump start server.
 - c. Modify/Upgrade hardware: Perform root disk re-partition on t1dps01.

7.6.1.2 Upgrade Software

Upgrade t1dps01 to Solaris 8 as specified in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.6.1.3 Custom Code Installation and Checkout

- a. Install the Solaris 8 version of custom code on t1dps01 using EASI to install all custom code packages on the host as listed in the .sitemap.
- b. Transition mode by mode to t1dps01
 1. Shut down servers in the mode being transitioned on t1pls01.

2. Start servers and perform checkout of relocated code in the mode being transitioned on t1dps01 .
- c. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on t1dps01.
- d. After checkout is successfully completed, place t1dps01 in operation.

7.6.1.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down all custom servers and COTS running on t1dps01.
- b. Load root and /data1 partitions from backup made in 7.6.1.1.
- c. Reboot machine.
- d. Start custom code servers and perform checkout .

7.6.1.5 Post transition activity

N/A

7.6.2 Science Data Server (t1acs03)

The upgrade procedures for the Science Data Server are as follow:

7.6.2.1 Preparation

- a. Temporary relocation.

Install custom code for t1acs03 on t1pls01. For each mode, complete the following procedures to perform the transition:

1. On t1acs03, create a tar file containing all directories under the /usr/ecs/<MODE>/CUSTOM/ directory for each mode being transitioned “**except**” for any mounted directories (the /logs directory may also be omitted from the tar file to save disk space)
2. FTP the tar file to t1pls01 and untar it under the /usr/ecs/<MODE>/CUSTOM directory.
3. Using the registry GUI, copy .CFG file entries from the t1acs03 branch to the t1pls01 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the t1pls01 branch. Detailed procedures for doing this are similar to those outlined in section 7.6.1.1.a.3.
4. Create temporary mount points mounted from t1pls01.
5. Create temporary mount points mounted to t1pls01.

6. Shut down servers in the mode being transitioned on t1acs03.
 7. Start servers and perform checkout of relocated code in the mode being transitioned on t1pls01.
- b. Backup. Back up root and /data1 partitions from t1acs03 to the jump start server.
 - c. Modify/Upgrade hardware: Perform root disk re-partition on t1acs03.

7.6.2.2 Upgrade Software

Upgrade t1acs03 to Solaris 8 as specified in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.6.2.3 Custom Code Installation and Checkout

Transition mode by mode from t1pls01 to t1acs03:

- a. Install the Solaris 8 version of custom code on t1acs03 using EASI to install all packages on the host as listed in the .sitemap.
- b. Modify t1acs03 configuration parameters to reflect the proper version of Sybase OpenClient for the Solaris 8 baseline:
 1. Using ECS Assistant Subsystem Manager, perform a mkcfg on the EcDsSr component. Do not change any configuration values -- the mkcfg will automatically insert the correct version of Sybase OpenClient (12.0.0) in the EcDsScienceDataServer.CFG and EcDsResubmit.CFG files that are created.
 2. Populate the registry with the new configuration values by using the EcCoPopulateRegistry tool.
 3. Rename configuration files (as appropriate) from EcDsxxx.CFG to EcDsxxx.CFG.rgy so that servers start from the registry. Reminder -- do **not** rename the EcDsCIMuQaMetadataUpdate.CFG file.
- c. Start servers on t1acs03:
 1. Modify the t1acs03 .CFG file and registry values for Sybase Open Client to reference sybOCv12.0.0.
 2. Shut down servers on t1pls01.
 3. Start servers and perform checkout of relocated code on t1acs03 .
- d. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on t1acs03.
- e. After checkout is successfully completed, place t1acs03 in operation.

7.6.2.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down all custom servers and COTS running on t1acs03.
- b. Load root and /data1 partitions from backup made in 7.6.2.1.
- c. Reboot machine.
- d. Start custom code servers and perform checkout .

7.6.3 VATC PDPS Sun Platforms (SPS and PLS) Consolidation/Transition

The SPS and PLS server platforms will be consolidated into a single platform, t1sps02. During the first VATC exercise, all code will be moved from t1pls01 onto the SPS platform (t1sps02). The t1pls01 platform will then be used as a temporary platform for most of the remaining server upgrades.

Note that this transition involves the relocation of Autosys, which is a mode-independent COTS product. Autosys will therefore be relocated during one of the mode relocations. The steps that involve Autosys may be ignored when transitioning other modes.

7.6.3.1 Preparation

- a. Prepare COTS.
 1. Install interim version of Autosys on t1pls01. See Appendix B (Sections b.1 to B.1.4.2) for additional details on the Autosys installation. Follow all steps within those sections.
 2. Create database (PDPS, same as on t1pls01) on t1sps02. Refer to Appendix A, Sybase Installation.

- b. Consolidation.

Install and configure t1pls01 custom code on t1sps02 and transition mode by mode to t1sps02. For each mode, complete the following procedures to perform the transition:

1. Create tar file from /usr/ecs/<MODE> directory for each mode being transitioned **except** for any mounted directories or log directories.
2. Install custom code on t1sps02 using ECS Assist (EASI or Subsystem Manager)
3. Using the registry GUI, copy .CFG file entries from the t1pls01 branch to the t1sps02 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the t1sps02 branch. Procedures are:

- (a) On t1dms02, open the registry GUI by running /usr/ecs/<MODE>/CUSTOM/utilities/EcCsRegistryGUIStart <MODE>. Enter/verify the appropriate .registry database information on the window that pops up and select 'OK.' Select the attribute tree name from the drop-down box that corresponds to the mode being transitioned (when the correct tree name is selected, the mode name will appear in the Attribute Information box in the bottom left corner of the screen).
 - (b) Expand the tree branch under t1pls01 until the CFG branch appears. Highlight the CFG branch by clicking on it. Select the COPY icon above and click YES to confirm the copy when a confirmation box appears. It may take a little while for the copy operation to complete. Wait until a "Successfully completed node copy" message appears at the bottom of the window before continuing. If it does not successfully copy, try again!
 - (c) Select the config branch under t1sps02 so that it is highlighted and click on the Paste icon above. It may take a little while for the paste operation to complete. Wait until a "Successfully completed paste operation" message appears at the bottom of the window before continuing.
 - (d) To verify the paste operation, re-select the Attribute Tree Name from the drop-down box and expand the t1sps02 tree branch until the branches under CFG are displayed. Verify that they are the same as those under the t1pls01 CFG branch.
4. Shut down all SPS and PLS custom servers (on t1ais01, t1pls01, t1pls02, and t1sps02).
 5. Dump PDPS database and transaction logs from t1pls01.
 6. Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp out the Logins and Users from t1pls01.
 7. Using the Registry GUI, move the value of PDPS database servers to t1sps02_svr (run mkcfg for any servers running from .CFG files).
 8. Start all DPS and PLS custom servers (on t1ais01, t1pls02, and t1sps02).
- c. Modify/Upgrade hardware. Repartition disks as indicated in the disk partition document.
 - d. Temporary relocation.
- Install and configure t1sps02 custom code on t1pls01. For each mode, complete the following procedures to perform the transition:

1. On t1sps02, create a relocation tar file containing all directories under the /usr/ecs/<MODE>/CUSTOM/ directory for each mode being transitioned except for any mounted directories or log directories. Be sure to include the .installed directory in the tar file.
2. FTP the tar file to t1pls01.
3. On t1dms02, using the registry GUI, copy .CFG file entries from the t1sps02 branch to the t1pls01 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the t1pls01 branch. Procedures are:
 - (a) On t1dms02, open the registry GUI by running /usr/ecs/<MODE>/CUSTOM/utilities/EcCsRegistryGUIStart <MODE>. Enter/verify the appropriate .registry database information on the window that pops up and select 'OK.' Select the attribute tree name from the drop-down box that corresponds to the mode being transitioned (when the correct tree name is selected, the mode name will appear in the Attribute Information box in the bottom left corner of the screen).
 - (b) Expand the tree branches under t1pls01 until the CFG branch appears. Highlight the CFG branch by clicking on it. Select the DELETE icon above and click to confirm the deletion when a confirmation box appears. It may take some time for the deletion to complete.
 - (c) Expand the tree branches under t1sps02 until the CFG branch appears. Highlight the CFG branch by clicking on it. Select the COPY icon above and click YES to confirm the copy when a confirmation box appears. It may take a little while for the copy operation to complete. Wait until a "Successfully completed node copy" message appears at the bottom of the window before continuing. If it does not successfully copy, try again!
 - (d) Select the config branch under t1pls01 so that it is highlighted and click on the Paste icon above. It may take a little while for the paste operation to complete. Wait until a "Successfully completed paste operation" message appears at the bottom of the window before continuing.
 - (e) To verify the paste operation, re-select the Attribute Tree Name from the drop-down box and expand the t1pls01 tree branch until the branches under CFG are displayed. Verify that they are the same as those under the t1sps02 CFG branch.
4. On t1pls01, untar the relocation tar file under the /usr/ecs/<MODE>/CUSTOM directory. Edit the

/usr/ecs/<MODE>/CUSTOM/bin/DPS/auto.profile file, changing the values for DSQUERY and sfhost to t1pls01_svr.

5. Using ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/PDPS_DB_temp.rg ypatch registry patch to point to all servers accessing PDPS database to t1pls01_svr. Note that you will need to run mkcfg to modify this value for any servers that may be running from .CFG files instead of the registry. Since this is a temporary configuration, you may wish to modify the .CFG file directly instead of running mkcfg.
 6. Create temporary mount points mounted from t1pls01 (list, TBD).
 7. Create temporary mount points mounted to t1pls01 (t1spg01, t1spg03).
 8. Shut down all DPS and PLS custom servers in the mode being transitioned (on t1ais01, t1pls02, and t1sps02) and Autosys on t1sps02. Shut down all PDPS servers in other modes if Autosys is being transitioned.
 9. Follow steps 5.4.5-5.4.13 in order to make Autosys operational on t1pls01.
 10. Dump PDPS database from t1sps02
 11. Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp out the Logins and Users from t1sps02.
 12. Load PDPS database on t1pls01
 13. Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from t1sps02 into t1pls01.
 14. Start all DPS and PLS custom servers (on t1ais01, t1pls01, and t1pls02) on t1pls01.
 15. Perform checkout of relocated code in the mode being transitioned on t1pls01.
- e. Backup. Back up root and /data1 partitions from t1sps02 to the jump start server.

7.6.3.2 Upgrade Software

Upgrade t1sps02 to Solaris 8 as specified in the Solaris 8 Upgrade Bundle PSR Release Notes document.

Upgrade/install locally installed COTS on t1sps02.

7.6.3.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on t1sps02 for all servers that will run on that platform.

- a. Install Solaris 8 version of the custom code on t1sps02 using EASI to install all of the packages on the host as listed in the .sitemap.
- b. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/PDPS_DB_final.rgypatch registry patch to all values for DBServer currently pointing to t1pls01_svr to point back to the t1sps02_svr and to point all servers to the proper version of Sybase OpenClient (12.0.0) for running under Solaris 8. Run mkcfg for servers running from .CFG files.
- c. Using the registry GUI, copy .CFG entries from the t1pls01 branch to the t1sps02 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the t1sps02 branch. Refer to Section 7.6.3.1 d for more detailed instructions on Registry GUI usage.
- d. Shut down all DPS and PLS servers (on t1ais01, t1pls01, and t1pls02) in the mode being transitioned on t1pls01. Also shut down all PDPS servers running in all modes if Autosys is being transitioned back to t1sps02.
- e. Dump databases (Autosys and PDPS) and transaction logs from t1pls01.
- f. Load Autosys database on t1sps02.
- g. For each mode being transferred:
 - Load PDPS database on t1sps02
 - Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp out the Logins and Users from t1pls01.
 - Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from t1pls01 to t1sps02.
- h. Perform the steps listed in Appendix B, Section B.2, to reconfigure Autosys clients to point back to the t1sps02 instances of Autosys and make the t1sps02 Autosys instances operational again.
- i. Start all DPS and PLS custom servers (on t1ais01, t1pls02, and t1sps02) and Autosys on t1sps02.
- j. Perform checkout of code on t1sps02.
- k. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on t1sps02.
- l. After checkout is successfully completed, place t1sps02 in operation.

7.6.3.4 – Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down all custom servers and COTS running on t1sps02.
- b. Load root and /data1 partitions from backup made in 7.6.3.1.

- c. Reboot machine.
- d. Start custom code servers and perform checkout.

7.6.4 VATC INS Platform (t1ins01)

The t1ins01 transition procedures are as follow: The t1pls01 machine will be used as a temporary host for t1ins01 code.

7.6.4.1 Preparation

- a. Prepare COTS
 1. Make sure Volume Manager 3.0.4, JRE 1.3.1_01 and Java are on the temporary host and t1ins01.
 2. Create database (DMS and IOS) on t1pls01 for each mode being transitioned.
 3. Install Netscape Enterprise Server on the temporary host, e0acs06, and configure instances for JDT and ODFRM in each of the modes being transitioned. Instructions for this installation and JDT configuration are provided in 914-TDA-118 Rev 01.
- b. Modify/Upgrade hardware. Repartition disks as indicated in disk partition document.
- c. Temporary relocation.

Install t1ins01 custom code on t1pls01 and transition mode by mode to t1pls01 under Solaris 2.5.1. For each mode, complete the following procedures to perform the transition:

1. On t1ins01, create a tar file containing all directories under the /usr/ecs/<MODE>/CUSTOM/ directory for each mode being transitioned except for any mounted directories (the /logs directory may also be omitted from the tar file to save disk space)
2. FTP the tar file to t1pls01 and untar it under the /usr/ecs/<MODE>/CUSTOM directory.
3. Using the registry GUI, copy .CFG file entries from the t1ins01 branch to the t1pls01 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the t1pls01 branch. Detailed procedures for doing this are similar to those outlined in section 7.6.1.1.a.3.
4. Using ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/DMS_IOS_DB_tem p.rgypatch registry patch to point to all servers accessing the DMS and IOS DB servers to t1pls01_srvr. Note that you will need to run mkcfg to

modify this value for any servers that may be running from .CFG files instead of the registry.

5. Shut down custom code in the mode being transitioned on t1ins01.
 6. Dump the DMS and IOS databases for the mode being transitioned from t1ins01.
 7. Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp out the Logins and Users from t1ins01.
 8. For each mode being transferred:
 - Load DMS and IOS databases on t1pls01
 - On t1pls01, perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from t1ins01.
 9. Modify any EDG archive.odl files to point to t1pls01 instead of t1ins01. Also modify any firewall rules required to allow access to the servers running on t1pls01 instead of t1ins01.
 10. Start servers and perform checkout of relocated code on t1pls01.
- d. **Backup.** Back up root and /data1 partitions from t1ins01 to the jump start server.

7.6.4.2 Upgrade Software

- a. Upgrade t1ins01 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document. Note, make sure you perform the Volume Manager procedures, noted in the Solaris 8 release notes, before and after execution of the Solaris 8 upgrade procedures.
- b. Install and configure iPlanet as described in the iPlanet PSR Release Notes document. Note that some portions of the iPlanet configuration for a given mode instance cannot be completed until the custom code installation is performed.

7.6.4.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on t1ins01 for all servers that will run on that platform:

- a. Install the Solaris 8 version of custom code packages using EASI to install all packages on the host as listed in the .sitemap.
- b. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/DMS_IOS_DB_final.rgypa tch registry patch to all values for DBServer currently pointing to t1pls01_svr to point back to the t1ins01_svr and to point the Advertising Server to the proper version of Sybase OpenClient (12.0.0) for running under Solaris 8. Run mkcfg for any servers running from .CFG files.

- c. Shut down custom servers in the mode being transitioned on t1pls01.
- d. Dump DMS and IOS databases and transaction logs from t1pls01.
- e. For each mode being transferred:
 - Load DMS and IOS databases on t1ins01
 - Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from t1pls01.
- f. Update any modified archive.odl files to point back to t1ins01. Remove any firewall rules that were temporarily installed to allow access to t1ins01 servers that were temporarily running on t1pls01.
- g. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on t1ins01.
- h. Start servers and perform checkout of relocated code on t1ins01.

7.6.4.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down all custom servers and COTS running on t1ins01.
- b. Load root and /data1 partitions from backup made in step 7.6.4.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.6.5 VATC INS Platform (t1ins02)

The t1ins02 transition procedures are as follow: The t1pls01 machine will be used as a temporary host for t1ins02 code.

7.6.5.1 Preparation

- a. Prepare COTS
 - 1. Make sure Volume Manager 3.0.4 is on the temporary host and t1ins02.
 - 2. Create databases for each mode being transitioned (DMS and IOS) on t1pls01.
- b. Modify/Upgrade hardware. Repartition disks as indicated in disk partition document.
- c. Backup. Backup root and /data1 partition from t1ins02 to the jump start server.
- d. Temporary relocation.

Install t1ins02 custom code on t1pls01 and transition mode by mode to t1pls01 under Solaris 2.5.1.

1. On t1ins02, create a tar file containing all directories under the /usr/ecs/<MODE>/CUSTOM/ directory for each mode being transitioned except for any mounted directories (the /logs directory may also be omitted from the tar file to save disk space)
2. FTP the tar file to t1pls01 and untar it under the /usr/ecs/<MODE>/CUSTOM directory.
3. Using the registry GUI, copy .CFG file entries from the t1ins02 branch to the t1pls01 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the t1pls01 branch. Detailed procedures for doing this are similar to those outlined in section 7.6.1.1.a.3.
4. Using ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/SubServer_DB_Temp.rgypatch registry patch to point to all servers accessing the Subscription Server database to t1pls01_svr. Note that you will need to run mkcfg to modify this value for any servers that may be running from .CFG files instead of the registry.
5. Run newly-created registry patch to move value of DMS and IOS db servers to t1pls01_svr (run mkcfg for any servers running from .CFG files).
6. Shut down custom code servers in the mode being transitioned on t1ins02.
7. Dump the SubServer database and transaction log for the mode being transitioned from t1ins02.
8. Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp out the Logins and Users from t1ins02.
9. For each mode being transferred:
 - Load SubServer database on t1pls01
 - Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from t1ins02 on t1pls01.
10. Start servers and perform checkout of relocated code in the mode being transitioned on t1pls01.

7.6.5.2 Upgrade Software

- a. Execute the Volume Manager upgrade procedure before upgrading machine to Solaris 8.

- b. Upgrade t1ins02 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.
- c. Copy the Volume Manager Patch for Solaris 8 from the JumpStart server and install it. Run Volume Manager upgrade finish script.

7.6.5.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on t1ins02 for all servers that will run on that platform

- a. Install the Solaris 8 version of custom code using EASI to install all packages on the host as listed in the .sitemap.
- b. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/SubServer_DB_final.rgypatch registry patch to modify all values for DBServer currently pointing to t1pls01_svr to point back to the t1ins02_svr and to point the Subscription Server to the proper version of Sybase OpenClient (12.0.0) for running under Solaris 8.
- c. Shut down custom servers in the mode being transitioned on t1pls01.
- d. Dump SubServer database and transaction logs from t1pls01.
- e. For each mode being transferred:
 - Load SubServer database on t1ins02
 - Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp out the Logins and Users from t1pls01.
- f. Start servers and perform checkout of code in the mode being transitioned on t1ins02.
- g. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on t1ins02.
- h. After checkout is successfully completed, place t1ins02 in operation.

7.6.5.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down all custom servers and COTS running on t1ins02.
- b. Load root and /data1 partitions from backup made in step 7.6.5.1
- c. Reboot machine
- d. Start custom code servers and perform checkout.

7.6.6 MSS Platform (t1mss06)

The MSS custom code will be temporarily relocated to t1pls01 so that it can run on that platform while the MSS applications server platform (t1mss06) is upgraded. Once the upgrade is complete, the custom code and database will be returned to t1mss06.

7.6.6.1 Preparation

a. Prepare COTS

1. Make sure Volume Manager 3.0.4 is on the temporary host and t1mss06.
2. Create MSS database on t1pls01 for each mode being transitioned.

b. Modify/Upgrade hardware.

Perform any required hardware upgrades on t1mss06 -- TBD -- root disk repartition.

c. Temporary Relocation

Install t1mss06 custom code on t1pls01 and transition mode by mode to t1pls01. For each mode, complete the following procedures to perform the transition:

1. On t1mss06, create a tar file containing all directories under the /usr/ecs/<MODE>/CUSTOM/ directory for each mode being transitioned **except** for any mounted directories (the /logs directory may also be omitted from the tar file to save disk space)
2. FTP the tar file to t1pls01 and untar it under the /usr/ecs/<MODE>/CUSTOM directory.
3. Using the registry GUI, copy .CFG file entries from the t1mss06 branch to the t1pls01 branch. Do not copy a file entry if the corresponding entry already exists (and is properly configured) on the t1pls01 branch. Detailed procedures for doing this are similar to those outlined in section 7.6.1.1.a.3.
4. Using ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/MSS_DB_Temp.rg ypatch registry patch to point to all servers accessing MSS database to t1pls01_svr. Note that you will need to run mkcfg to modify this value for any servers that may be running from .CFG files instead of the registry.
5. Shut down custom servers running in the mode being transitioned on t1mss06.
6. Shut down replication agents and drop subscription to the User Profile Table.
7. Dump database (MSS) and transaction logs from t1mss06.

8. Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp out the Logins and Users from t1mss06.
 9. For each mode being transferred:
 - Load MSS database on t1pls01
 - Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp in the Logins and Users from t1mss06.
 10. Start servers and perform checkout of relocated code in the mode being transitioned on t1pls01.
- d. Backup. Back up root and /data1 partitions from t1mss06 to the jump start server.

7.6.6.2 Upgrade Software

- a. Execute the Volume Manager upgrade procedure before upgrading machine to Solaris 8.
- b. Upgrade t1mss06 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.
- c. Copy Volume Manager Patch for Solaris 8 from the JumpStart server and install it. Run Volume Manager upgrade finish script.
- d. Install and configure iPlanet as described in the iPlanet PSR Release Notes document. Note that some portions of the iPlanet configuration for a given mode instance cannot be completed until the custom code installation is performed.

7.6.6.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on t1mss06 for all servers that will run on that platform.

- a. Install the Solaris 8 version of custom code on t1mss06 using EASI to install all packages on the host as listed in the .sitemap.
- b. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/MSS_DB_final.rgypatch registry patch to modify all values for DBServer currently pointing to t1pls01_svr to point back to the t1mss06_svr and to point the MSS servers to use the proper version of Sybase OpenClient (12.0.0) for running under Solaris 8. Run mkcfg for any servers running from .CFG files.
- c. Shut down servers in the mode being transitioned on t1pls01.
- d. Dump MSS database and transaction logs from t1pls01.

- e. For each mode being transferred:
 - Load MSS database on t1mss06
 - Perform instructions in Appendix A, Section A.1 G, Transitioning Logins and Users, to bcp out the Logins and Users from t1pls01.
- f. Start replication agents and create subscription on User Profile Table.
- g. Start servers and perform checkout of relocated code in the mode being transitioned on t1mss06.
- h. Modify any start scripts and monitoring software (such as Whazzup) to indicate that the servers are running on t1mss06.
- i. After checkout is successfully completed, place t1mss06 in operation.

7.6.6.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down all custom code and COTS running on t1mss06.
- b. Load root and /data1 partitions from backup made in step 1c.
- c. Reboot machine.
- d. Start custom code servers and perform checkout.

7.6.6.5 Post transition activity

N/A

7.6.7 Remaining Sun Platforms

The remaining Sun machines contain no custom code and none contain ECS databases, so the transition strategy will be to simply upgrade them in place wherever possible.

7.6.7.1 t1acs02

The t1acs02 platform hosts the Ingest and SDSRV GUIs. This machine will be upgraded in place. The following procedures will be used to transition the t1acs02 platform:

7.6.7.1.1 Preparation

- a. Backup. Back up root and /data1 partitions from t1acs02 to the jump start server.
- b. Modify/Upgrade hardware.
Perform root disk replacement on t1acs02.

7.6.7.1.2 Upgrade Software

Upgrade t1acs02 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.6.7.1.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on t1acs02 for all packages that will run on that platform.

- a. Install the Solaris 8 version of custom code on t1acs02 using EASI to install all packages on the host as listed in the .sitemap.
- b. Modify l0acs02 configuration parameters to reflect the proper version of Sybase OpenClient for the Solaris 8 baseline:
 1. Using ECS Assistant Subsystem Manager, perform a mkcfg on the EcIn component. Do not change any configuration values -- the mkcfg will automatically insert the correct version of Sybase OpenClient (12.0.0) in the EcInGUI.CFG files that are created.
 2. Populate the registry with the new configuration values by using the EcCoPopulateRegistry tool.
 3. Rename configuration files (as appropriate) from EcInGUIxxx.CFG to EcInGUIxxx.CFG.rgy so that servers start from the registry.
- c. Perform checkout of Solaris 8 custom code on t1acs02.

7.6.7.1.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down all custom code and COTS running on t1acs02.
- b. Load root and /data1 partitions from backup made in step 1b.
- c. Reboot machine.
- d. Start custom code and perform checkout.

7.6.7.2 t1ais01

The t1ais01 platform hosts the DPS SSIT packages. This machine will be upgraded in place. This platform also servers as an xterm server and should not be upgraded at the same time as another VATC xterm server. Transition procedures are as follow:

7.6.7.2.1 Preparation

- a. Backup. Back up root and /data1 partitions from t1ais01 to the jump start server.
- b. Modify/Upgrade hardware.
Perform root disk replacement on t1ais01.

7.6.7.2.2 Upgrade Software

Upgrade t1ais01 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.6.7.2.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on t1ais01 for all packages that will run on that platform.

- a. Install the Solaris 8 version of custom code on t1ais01 using EASI to install all packages on the host as listed in the .sitemap.
- b. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/AITWS.rgypatch registry patch to modify all values Sybase OpenClient to the proper version (12.0.0) for running under Solaris 8 (run mkcfg for any servers running from .CFG files).
- c. Perform checkout of Solaris 8 custom code on t1ais01.

7.6.7.2.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down all custom code and COTS running on t1ais01.
- b. Load root and /data1 partitions from backup made in step 1b.
- c. Reboot machine.
- d. Start custom code and perform checkout.

7.6.7.3 t1ais03

The t1ais03 platform is an xterm server and will be simply upgraded in place. Some VATC xterms will not be available during the upgrade process, but this should not be an issue as long as no more than one xterm server is unavailable at a time. Transition procedures are as follow:

7.6.7.3.1 Preparation

- a. Backup. Back up root and /data1 partitions from t1ais03 to the jump start server.
- b. Modify/Upgrade hardware.
Perform hardware upgrade (TBD) on t1ais03.

7.6.7.3.2 Upgrade Software

Upgrade t1ais03 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.6.7.3.3 Custom Code Installation and Checkout

Perform checkout of t1ais03.

7.6.7.3.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down all COTS running on t1ais03.
- b. Load root and /data1 partitions from backup made in step 7.6.7.3.1.
- c. Reboot machine.
- d. Perform checkout.

7.6.7.4 t1code1

The t1code1 platform is used as a code drop platform and will simply be upgraded in place. Transition procedures are as follow:

7.6.7.4.1 Preparation

- a. Backup. Back up root and /data1 partitions from t1code1 to the jump start server.
- b. Modify/Upgrade hardware.

Perform hardware upgrade (TBD) on t1code1. *Root Disk Replacement.*

7.6.7.4.2 Upgrade Software

Upgrade t1code1 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.6.7.4.3 Custom Code Installation and Checkout

(No Custom Code on t1code1.)

Perform checkout of t1code1.

7.6.7.4.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down all COTS running on t1code1.
- b. Load root and /data1 partitions from backup made in step 7.6.7.4.1.
- c. Reboot machine.
- d. Perform checkout.

7.6.7.5 t1css01

The t1css01 is the CSS Network Server. This platform will be upgraded in place. Transition procedures are as follow:

7.6.7.5.1 Preparation

- a. Backup. Back up root and /data1 partitions from t1css01 to the jump start server.
- b. Rebind t1css02 clients to the secondary NIS machine before taking t1css01 down.
- c. Modify/Upgrade hardware.

Perform hardware upgrade (TBD) on t1css01. *Root Disk Replacement.*

7.6.7.5.2 Upgrade Software

Upgrade t1css01 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.6.7.5.3 Custom Code Installation and Checkout

(No Custom Code on t1css01.)

- a. Rebind the secondary NIS machine's clients to t1css01.
- b. Perform checkout of t1css01.
- c. After checkout is successfully completed, place t1css01 in operation.

7.6.7.5.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down all COTS running on t1css01.
- b. Load root and /data1 partitions from backup made in step 7.6.7.5.1.

{preparation required on other platforms before the css01 platform placed back in operation, (TBD)}
- c. Reboot machine.
- d. Perform checkout.

7.6.7.6 t1dms02

The t1dms02 platform is used to host several custom code GUIs. This platform will be upgraded in place. Transition procedures are as follow:

7.6.7.6.1 Preparation

- a. Backup. Back up root and /data1 partitions from t1dms02 to the jump start server.
- b. Modify/Upgrade hardware.

Perform hardware upgrade (TBD) on t1dms02. *Root Disk Replacement*.

7.6.7.6.2 Upgrade Software

Upgrade t1dms02 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.6.7.6.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on t1dms02 for all packages that will run on that platform.

- a. Install Solaris 8 version of custom code on t1dms02 using EASI to install all packages on the host as listed in the .sitemap.
- b. Perform checkout of upgraded code on t1dms02.

7.6.7.6.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down all custom code and COTS running on t1dms02.
- b. Load root and /data1 partitions from backup made in step 7.6.7.6.1.
- c. Reboot machine.
- d. Start custom code and perform checkout.

7.6.7.7 t1drs02

The t1drs02 platform is the ACSLS workstation. This platform has already been upgraded as part of the ACSLS upgrade. No further work is required for this platform.

7.6.7.8 t1mss02

The t1mss02 platform is the VATC backup server. This platform will be upgraded in place. Transition procedures are as follow:

7.6.7.8.1 Preparation

- a. Backup. Back up root and /data1 partitions from t1mss02 to the jump start server.
- b. Modify/Upgrade hardware.

Perform hardware upgrade (TBD) on t1mss02. *Root Disk Replacement*.

7.6.7.8.2 Upgrade Software

Upgrade t1mss02 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.6.7.8.3 Custom Code Installation and Checkout

(No custom code on t1mss02)

Perform checkout of t1mss02.

7.6.7.8.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down all custom code and COTS running on t1mss02.
- b. Load root and /data1 partitions from backup made in step 7.6.7.8.1.
- c. Reboot machine.
- d. Start custom code and perform checkout.

7.6.7.9 t1mss03

The t1mss03 platform is the MSS CM server. This platform will not be upgraded at the same time as the other Sun platforms due to COTS constraints.

7.6.7.10 t1mss04

The t1mss04 platform is the MSS file server. This will be an in-place upgrade. During the time that this platform is being upgraded, home directories will be unavailable in the VATC. Transition procedures are as follow:

7.6.7.10.1 Preparation

- a. Backup. Back up root and /data1 partitions from t1mss04 to the jump start server.
- b. Modify/Upgrade hardware.

Perform root disk replacement on t1mss04.

7.6.7.10.2 Upgrade Software

Upgrade t1mss04 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.6.7.10.3 Custom Code Installation and Checkout

(No custom code on t1mss04)

Perform checkout of t1mss04.

7.6.7.10.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a. Shut down all COTS running on t1mss04.
- b. Load root and /data1 partitions from backup made in step 7.6.7.10.1.
- c. Reboot machine.
- d. Perform checkout.

7.6.7.11 t1pls02

The pls02 platform is used for several PLS binaries. This will be an in-place upgrade. Transition procedures are as follow:

7.6.7.11.1 Preparation

- a. Backup. Back up root and /data1 partitions from t1pls02 to the jump start server.
- b. Modify/Upgrade hardware.
Perform root disk replacement on t1pls02. Note: this will only be performed during the first VATC transition.

7.6.7.11.2 Upgrade Software

Upgrade t1pls02 to Solaris 8 as specified in the instructions provided in the Solaris 8 Upgrade Bundle PSR Release Notes document.

7.6.7.11.3 Custom Code Installation and Checkout

Install and configure Solaris 8 custom code on t1pls02 for all servers that will run on that platform.

- a. Install the Solaris 8 version of custom code on t1pls02 using EASI to install all packages on the host as listed in the .sitemap
- b. Using the ECS Assist Subsystem Manager, apply the /usr/ecs/<MODE>/CUSTOM/.installed/CSS/Registry/PLNMGTWS.rgypatch registry patch to modify all values Sybase OpenClient to the proper version (12.0.0) for running under Solaris 8 (run mkcfg for any servers running from .CFG files).
- c. Perform checkout of upgraded code on t1pls02.

7.6.7.11.4 Rollback (use only if necessary to restore the machine to Solaris 5 environment)

- a.. Shut down all custom code and COTS running on t1pls02.
- b. Load root and /data1 partitions from backup made in step 7.6.7.11.1.
- c. Reboot machine.
- d. Start custom code and perform checkout.

Appendix A. Sybase Installation

This appendix describes the Sybase databases activity that must be performed during the Solaris 8 transition activity. Those hosts that contain databases and will utilize the Substitution Approach for the Solaris 8 upgrade will require that Sybase be installed on the temporary host and the necessary Sybase device allocations created to support the re-location of databases.

For installation of Sybase on the temporary host, refer to the Sybase 11.9.3 PSR document for installation instructions. After Sybase has been installed, modify the configuration parameters to ensure that the host is able to support all the SUN databases that will be temporarily relocated. Configuration parameters on the temporary host should reflect the following:

Number of Devices: 80

Number of Database = 40

Number of User Connections = 600

Total Memory = 120,000

StackSize=65536

This section contains the detailed steps necessary to set up those device allocations before the formal transition begins.

A.1 Approach

The overall approach for transferring database from the SUN 2.5.1 platform to a temporary host and back to a Solaris 8 transitioned host is as follows:

1. All devices from Sybase Device Baseline for the appropriate databases are allocated and added to Sybase on the temporary host.
2. Database allocations match, in size and order (not device), database allocations on the Sun 2.5.1 machines.
3. Quiesce ECS.
4. Run dbcc checkdb, dbcc checkalloc and dbcc checkcatalog on the sun 2.5.1 databases.
5. Dump databases.
6. Make database dump "visible" to Sybase on the temporary host by placing the dumps in the /home/<mode>/dbdumps directory.
7. Create Sybase logins in same order as created on the original Sybase Server using the bcp command as specified in part G, Transitioning Logins and Users, of this section.

8. Load databases to Sybase on temporary host. Use the bcp command as specified in part G, Transitioning Logins and Users, to bulk copy in the users for each appropriate database.
9. Run dbcc checkdb, dbcc checkalloc, and dbcc checkcatalog on temporary databases
10. Dump temporary host databases.

The device allocations for EDC, GSFC, and LaRC are detailed below for each of the databases currently residing on a SUN 2.5.1 host. These precise device allocations will have to be created on the specified temporary host prior to the actual transition process. This will enable databases to be dumped from the permanent host and loaded onto the temporary host.

A. Create Device Allocations

1. Configure temporary host RAID and install Sybase if not already installed. FTP Sybase server.cfg file located in the \$SYBASE directory from the SUN 2.5.1 host to the temporary host.
2. Create database devices.

EDC

The host e0acs06 has been identified to serve as the temporary host. Ensure the following device allocations are in place on the temporary host prior to database transition activities.

```

disk init name = "master", physname = "/dev/rdisk/c1t3d0s6",
vdevno = <supplied by DBA>, size = 204800
go

disk init name = "sybsecurity", physname = "/dev/rdisk/c1t4d0s6",
vdevno = <supplied by DBA>, size = 768000
go

disk init name = "c1t2d0s6", physname = "/dev/rdisk/c1t2d0s6",
vdevno = <supplied by DBA>, size = 102400
go

disk init name = "c2t4d0s6", physname = "/dev/rdisk/c2t4d0s6",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "c2t3d0s6", physname = "/dev/rdisk/c2t3d0s6",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "c1t2d0s6", physname = "/dev/rdisk/c1t2d0s6",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "dbcc_data_device", physname = "/dev/rdisk/c2t5d0s5",

```

```

vdevno = <supplied by DBA>, size = 512000
go

disk init name = "dbcc_log_device", physname = "/dev/rdisk/c1t3d0s4",
vdevno = <supplied by DBA>, size = 512000
go

disk init name = "master", physname = "/dev/rdisk/c2t3d0s6",
vdevno = <supplied by DBA>, size = 204800
go

disk init name = "sybsecurity", physname = "/dev/rdisk/c2t4d0s6",
vdevno = <supplied by DBA>, size = 768000
go

disk init name = "c0t2d0s7", physname = "/dev/rdisk/c0t2d0s7",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "c0t2d0s6", physname = "/dev/rdisk/c0t2d0s6",
vdevno = <supplied by DBA>, size = 102400
go

disk init name = "c0t3d0s6", physname = "/dev/rdisk/c0t3d0s6",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "c0t4d0s6", physname = "/dev/rdisk/c0t4d0s6",
devno = <supplied by DBA>, size = 102400
go

disk init name = "subsrvdata", physname = "/dev/vx/rdisk/subsrvdat",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "sybsecurity", physname = "/dev/vx/rdisk/sybsecurity",
vdevno = <supplied by DBA>, size = 768000
go

disk init name = "sybsecurityarchive", physname =
"/dev/vx/rdisk/sybsecurityarchive",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "master", physname = "/dev/vx/rdisk/Master_11.5.1",
vdevno = <supplied by DBA>, size = 204800
go

disk init name = "master", physname = "/dev/vx/rdisk/Master_11.5.1",
vdevno = <supplied by DBA>, size = 204800
go

disk init name = "sybsecurity", physname = "/dev/vx/rdisk/sybsecurity",
vdevno = <supplied by DBA>, size = 768000
go

```

```

disk init name = "ecdmworking1", physname =
"/dev/vx/rdisk/lof2_8x4gig/ecdmworking1",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "ecdmworking2", physname =
"/dev/vx/rdisk/lof2_8x4gig/ecdmworking2",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "ecdmworking3", physname =
"/dev/vx/rdisk/lof2_8x4gig/ecdmworking3",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "growth3", physname =
"/dev/vx/rdisk/lof2_8x4gig/growth3",
vdevno = <supplied by DBA>, size = 1024000
go

aa. disk init name = "growth4", physname =
"/dev/vx/rdisk/lof2_8x4gig/growth4",
vdevno = <supplied by DBA>, size = 1024000
go

ab. disk init name = "ioadadvservicedata", physname =
"/dev/vx/rdisk/lof2_8x4gig/ioadadvservicedata",
vdevno = <supplied by DBA>, size = 1024000
go

ac. disk init name = "EDB_di_dev1", physname =
"/dev/vx/rdisk/EcsAclStorage_Data",
vdevno = <supplied by DBA>, size = 1024000
go

ad. disk init name = "EDB_di_dev2", physname =
"/dev/vx/rdisk/EcsAclStorage_Index",
vdevno = <supplied by DBA>, size = 1024000
go

ae. disk init name = "di_dev1", physname = "/dev/vx/rdisk/EcsDash1",
vdevno = <supplied by DBA>, size = 1024000
go

af. disk init name = "di_dev2", physname = "/dev/vx/rdisk/EcsDash2",
vdevno = <supplied by DBA>, size = 1024000
go

ag. disk init name = "tempdb_di_dev1", physname = "/dev/vx/rdisk/tempdb",
vdevno = <supplied by DBA>, size = 1024000
go

ah. disk init name = "master", physname = "d_master",
vdevno = <supplied by DBA>, size = 204800
go

```

GSFC

The host, g0acs04, has been identified to serve as the temporary host. Ensure the following device allocations are in place on the temporary host prior to database transition activities.

```
disk init name = "master", physname = "d_master",
vdevno = <supplied by DBA>, size = 256000
go

disk init name = "sybsecurity", physname = "/dev/vx/rdisk/sybsecurity",
vdevno = <supplied by DBA>, size = 768000
go

disk init name = "tempdb", physname = "/dev/dsk/c1t0d0s5",
vdevno = <supplied by DBA>, size = 256000
go

disk init name = "subsrvindex", physname = "/dev/vx/rdisk/subsrvindex",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "subsrvdata", physname = "/dev/vx/rdisk/subsrvdata",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "subsrvlog", physname = "/dev/vx/rdisk/subsrvlog",
vdevno = <supplied by DBA>, size = 1024000
go
disk init name = "master", physname = "d_master",
vdevno = <supplied by DBA>, size = 204800
go

disk init name = "sybsecurity", physname = "/dev/vx/rdisk/sybsecurity",
vdevno = <supplied by DBA>, size = 768000
go

disk init name = "tempdb", physname = "/dev/dsk/c1t0d0s5",
vdevno = <supplied by DBA>, size = 256000
go

disk init name = "ecdmworking1", physname =
"/dev/vx/rdisk/1of2_8x4gig/ecdmworking1",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "ioadadvservicedata", physname =
"/dev/vx/rdisk/1of2_8x4gig/ioadadvservicedata",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "ecdmworking2", physname =
"/dev/vx/rdisk/1of2_8x4gig/ecdmworking2",
vdevno = <supplied by DBA>, size = 1024000
```

```
go

disk init name = "ecdmworking3", physname =
"/dev/vx/rdisk/1of2_8x4gig/ecdmworking3",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "sdsrv_data_log", physname =
"/cots_sybase/sdsrv_data_log.dat",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "ecmdictservice", physname =
"/dev/vx/rdisk/1of2_8x4gig/ecmdictservice",
vdevno = <supplied by DBA>, size = 1024000
go
disk init name = "master", physname =
"/dev/vx/rdisk/2of4_3x9gig/dbcc_log_dev",
vdevno = <supplied by DBA>, size = 204800
go

disk init name = "sybsecurity", physname =
"/dev/vx/rdisk/1of4_3x9gig/sybsecurity",
vdevno = <supplied by DBA>, size = 768000
go

disk init name = "tempdb", physname = "/dev/vx/rdisk/tempdb",
vdevno = <supplied by DBA>, size = 256000
go

disk init name = "EcsAclStorage_Data", physname =
"/dev/vx/rdisk/EcsAclStorage_Data",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "mssdata1", physname = "/dev/vx/rdisk/1of4_3x9gig/mssdata1",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "mssdata2", physname = "/dev/vx/rdisk/1of4_3x9gig/mssdata2",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "mssdata4", physname = "/dev/vx/rdisk/1of4_3x9gig/mssdata4",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "mssdata6", physname = "/dev/vx/rdisk/1of4_3x9gig/mssdata4",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "mssdata7", physname = "/dev/vx/rdisk/1of4_3x9gig/mssdata7",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "mssdata9", physname = "/dev/vx/rdisk/1of4_3x9gig/mssdata9",
vdevno = <supplied by DBA>, size = 1024000
```

```

go

disk init name = "rssd_data", physname =
"/dev/vx/rdisk/3of4_3x9gig/rssd_data",
vdevno = <supplied by DBA>, size = 256000
disk init name = "msslog1", physname = "/dev/vx/rdisk/2of4_3x9gig/msslog1",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "msslog2", physname = "/dev/vx/rdisk/2of4_3x9gig/msslog2",
vdevno = <supplied by DBA>, size = 256000
go

disk init name = "msslog3", physname = "/dev/vx/rdisk/2of4_3x9gig/msslog3",
vdevno = <supplied by DBA>, size = 512000
go

disk init name = "vdb_log_dev", physname =
"/data3/vdb/devices/vdb_log_dev.dat",
vdevno = <supplied by DBA>, size = 512000
go

disk init name = "mssdata10", physname =
"/dev/vx/rdisk/1of4_3x9gig/mssdata10",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "mssdata11", physname =
"/dev/vx/rdisk/1of4_3x9gig/mssdata11",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "mssindex1", physname =
"/dev/vx/rdisk/2of4_3x9gig/mssindex1",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "mssindex2", physname =
"/dev/vx/rdisk/2of4_3x9gig/mssindex2",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "vdb_data_dev", physname =
"/dev/vx/rdisk/3of4_3x9gig/dbcc_data_dev",
vdevno = <supplied by DBA>, size = 256000
go
disk init name = "master", physname = "d_master",
vdevno = <supplied by DBA>, size = 2048000
go

disk init name = "sybsecurity", physname = "/dev/rdisk/clt3d3s",
vdevno = <supplied by DBA>, size = 768000
go

disk init name = "clt0d0s1", physname = "/dev/rdisk/clt0d0s1",
vdevno = <supplied by DBA>, size = 1024000
go

```

```
disk init name = "c1t1d0s1", physname =  
"/dev/vx/rdisk/3of4_3x9gig/dbcc_data_dev",  
vdevno = <supplied by DBA>, size = 1024000  
go  
  
disk init name = "c1t0d3s1", physname = "/dev/rdisk/c1t0d3s1",  
vdevno = <supplied by DBA>, size = 1024000  
go  
  
disk init name = "c1t2d0s1", physname = "/dev/rdisk/c1t2d0s1",  
vdevno = <supplied by DBA>, size = 1024000  
go  
  
disk init name = "c1t2d3s1", physname = "/dev/rdisk/c1t2d3s1",  
vdevno = <supplied by DBA>, size = 256000  
go  
  
disk init name = "c1t3d3s1", physname = "/dev/rdisk/c1t3d3s1",  
vdevno = <supplied by DBA>, size = 1024000  
go  
  
disk init name = "c1t2d0s1", physname = "/dev/rdisk/c1t2d0s1",  
vdevno = <supplied by DBA>, size = 1024000  
go  
  
disk init name = "c1t2d3s3", physname = "/dev/rdisk/c1t2d3s3",  
vdevno = <supplied by DBA>, size = 1024000  
go  
disk init name = "master", physname = "d_master",  
vdevno = <supplied by DBA>, size = 2048000  
go  
  
disk init name = "sybsecurity", physname = "/dev/rdisk/c1t4d0s3",  
vdevno = <supplied by DBA>, size = 768000  
go  
  
disk init name = "c1t0d0s1", physname = "/dev/rdisk/c1t0d0s1",  
vdevno = <supplied by DBA>, size = 1024000  
go  
  
disk init name = "c1t0d2s1", physname = "/dev/rdisk/c1t0d2s1",  
vdevno = <supplied by DBA>, size = 1024000  
go  
  
disk init name = "c1t1d0s1", physname = "/dev/rdisk/c1t1d0s1",  
vdevno = <supplied by DBA>, size = 1024000  
go  
  
disk init name = "c1t2d0s1", physname = "/dev/rdisk/c1t2d0s1",  
vdevno = <supplied by DBA>, size = 1024000  
go  
  
disk init name = "c1t2d2s1", physname = "/dev/rdisk/c1t2d2s1",  
vdevno = <supplied by DBA>, size = 1024000  
go
```

```
disk init name = "clt4d0s1", physname = "/dev/rdisk/clt4d0s1",
vdevno = <supplied by DBA>, size = 1024000
go
```

LARC

The host, l0acs04, has identified to serve as the temporary host. Ensure the following device allocations are in place on the temporary host prior to database transition activities.

```
disk init name = "master", physname = "/dev/vx/rdsk/rootdg/master_1151",
vdevno = <supplied by DBA>, size = 204800
go
```

```
disk init name = "sybsecurity_index", physname =
"/dev/vx/rdsk/sybsecurity_index",
vdevno = <supplied by DBA>, size = 768000
go
```

```
disk init name = "subserver_data", physname = "/dev/vx/rdsk/subserver_data",
vdevno = <supplied by DBA>, size = 1024000
go
```

```
disk init name = "sybsecur_arch", physname = "/dev/vx/rdsk/sybsecur_arch",
vdevno = <supplied by DBA>, size = 1024000
go
```

```
disk init name = "master", physname = "/dev/vx/rdsk/sybsecur_arch",
vdevno = <supplied by DBA>, size = 1024000
go
```

```
disk init name = "sybsecurity_index", physname =
"/dev/vx/rdsk/sybsecurity_index",
vdevno = <supplied by DBA>, size = 768000
go
```

```
disk init name = "loadvsrv", physname = "/dev/vx/rdsk/loadvsrv",
vdevno = <supplied by DBA>, size = 1024000
go
```

```
disk init name = "sybsecur_arch", physname = "/dev/vx/rdsk/sybsecur_arch",
vdevno = <supplied by DBA>, size = 1024000
go
```

```
disk init name = "ecdmwrk", physname = "/dev/vx/rdsk/ecdmwrk",
vdevno = <supplied by DBA>, size = 1024000
go
```

```
disk init name = "ecdmwrk2", physname = "/dev/vx/rdsk/ecdmwrk2",
vdevno = <supplied by DBA>, size = 1024000
go
```

```
disk init name = "ecdmwrk3", physname = "/dev/vx/rdsk/ecdmwrk3",
vdevno = <supplied by DBA>, size = 1024000
go
```

```
disk init name = "tempdb2", physname = "/dev/vx/rdsk/tempdb2",
```

```

vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "", physname = "",
vdevno = <supplied by DBA>, size = 1024000
go
disk init name = "master", physname =
"/dev/vx/rdisk/2of4_3x9gig/master_1151/",
vdevno = <supplied by DBA>, size = 204800
go

disk init name = "sybsecurityarchive", physname =
"/dev/vx/rdisk/3of4_3x9gig/sybsecurityarchive",
vdevno = <supplied by DBA>, size = 768000
go

disk init name = "tempdb", physname = "/dev/vx/rdisk/tempdb",
vdevno = <supplied by DBA>, size = 256000
go

disk init name = "mssdata2", physname = "/dev/vx/rdisk/1of4_3x9gig/mssdata2",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "mssdata4", physname = "/dev/vx/rdisk/1of4_3x9gig/mssdata4",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "mssdata6", physname = "/dev/vx/rdisk/1of4_3x9gig/mssdata6",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "mssdata7", physname = "/dev/vx/rdisk/1of4_3x9gig/mssdata7",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "mssdata9", physname = "/dev/vx/rdisk/1of4_3x9gig/mssdata9",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "mssdata10", physname =
"/dev/vx/rdisk/1of4_3x9gig/mssdata10",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "mssdata11", physname =
"/dev/vx/rdisk/1of4_3x9gig/mssdata11",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "rssd_data", physname =
"/dev/vx/rdisk/3of4_3x9gig/rssd_data",
vdevno = <supplied by DBA>, size = 256000
go

disk init name = "mssindex1", physname =
"/dev/vx/rdisk/2of4_3x9gig/mssIndex1",

```

```

vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "mssindex2", physname =
"/dev/vx/rdisk/2of4_3x9gig/mssIndex2",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "mssdata12", physname =
"/dev/vx/rdisk/1of4_3x9gig/mssdata12",
vdevno = <supplied by DBA>, size = 512000
go

disk init name = "sybsecurity", physname =
"/dev/vx/rdisk/3of4_3x9gig/sybsecurity",
vdevno = <supplied by DBA>, size = 512000
go

disk init name = "mssindex3", physname =
"/dev/vx/rdisk/2of4_3x9gig/mssIndex3",
vdevno = <supplied by DBA>, size = 512000
go

disk init name = "dbccdb_data", physname =
"/dev/vx/rdisk/3of4_3x9gig/dbcc_data_dev",
vdevno = <supplied by DBA>, size = 512000
go

disk init name = "msslog1", physname = "/dev/vx/rdisk/2of4_3x9gig/mssLog1",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "msslog2", physname = "/dev/vx/rdisk/2of4_3x9gig/mssLog2",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "msslog3", physname = "/dev/vx/rdisk/2of4_3x9gig/mssLog3",
vdevno = <supplied by DBA>, size = 512000
go

disk init name = "dbccdb_log", physname =
"/dev/vx/rdisk/2of4_3x9gig/dbcc_log_dev",
vdevno = <supplied by DBA>, size = 512000
go

disk init name = "rssd_log", physname = "/dev/vx/rdisk/3of4_3x9gig/rssd_log",
vdevno = <supplied by DBA>, size = 512000
go
disk init name = "master", physname = "d_master",
vdevno = <supplied by DBA>, size = 204800
go

disk init name = "c1t4d0s1", physname = "/dev/rdisk/c1t4d0s1",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "c0t4d0s1", physname = "/dev/rdisk/c0t4d0s1",

```

```

vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "c0t5d0s1", physname = "/dev/rdisk/c0t5d0s1",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "c0t8d0s1", physname = "/dev/rdisk/c0t8d0s1",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "c0t9d0s1", physname = "/dev/rdisk/c0t9d0s1",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "dbcc_data", physname = "/dev/rdisk/c1t2d0s3",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "dbcc_log", physname = "/dev/rdisk/c0t10d0s3",
vdevno = <supplied by DBA>, size = 1024000
go
disk init name = "master", physname = "d_master",
vdevno = <supplied by DBA>, size = 204800
go

disk init name = "sybsecurity", physname = "/dev/rdisk/c1t9d0s7",
vdevno = <supplied by DBA>, size = 768000
go

disk init name = "tempdbdev", physname = "/dev/rdisk/c1t9d0s5",
vdevno = <supplied by DBA>, size = 256000
go

disk init name = "c1t2d0s1", physname = "/dev/rdisk/c1t2d0s1",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "c1t3d0s1", physname = "/dev/rdisk/c1t3d0s1",
vdevno = <supplied by DBA>, size = 1024000
go

disk init name = "c0t3d0s3", physname = "/dev/rdisk/c0t3d0s3",
vdevno = <supplied by DBA>, size = 512000

```

B. Verify Original databases.

Run dbccs on the SUN 2.5.1 database(s) being transitioned. Ensure no errors are present.

C. Dump Original databases and transaction logs.

D. Creating Temporary Databases.

This section outlines the commands necessary to create the temporary databases on the temporary host to match database allocation on the permanent host.

EDC

```
CREATE DATABASE SubServer ON subsrvdata=1200, sybsecurity=600
      LOG ON sybsecurityarchive=600
FOR LOAD

CREATE DATABASE SubServer_TS1 ON subsrvdata=400, sybsecurity=200
      LOG ON sybsecurityarchive=200
FOR LOAD

CREATE DATABASE SubServer_TS2 ON subsrvdata=400, sybsecurity=200
      LOG ON sybsecurityarchive=200
FOR LOAD

CREATE DATABASE EcDmDictService ON ecdmworking1=480, ecdmworking3=240
      LOG ON ecdmworking2=120
FOR LOAD

CREATE DATABASE EcDmDictService_TS1 ON ecdmworking1=160, ecdmworking3=80
      LOG ON ecdmworking2=40
FOR LOAD

CREATE DATABASE EcDmDictService_TS2 ON ecdmworking1=160, ecdmworking3=80
      LOG ON ecdmworking2=40
FOR LOAD

CREATE DATABASE IoAdAdvService ON ioadadvservicedata=420, ecdmworking3=210
      LOG ON ecdmworking2=120
FOR LOAD

CREATE DATABASE IoAdAdvService_TS1 ON ioadadvservicedata=140, ecdmworking3=70
      LOG ON ecdmworking2=40
FOR LOAD

CREATE DATABASE IoAdAdvService_TS2 ON ioadadvservicedata=140, ecdmworking3=70
      LOG ON ecdmworking2=40
FOR LOAD

CREATE DATABASE ARSystem ON MSSData4=100
      LOG ON MSSLog3=50
FOR LOAD

ALTER DATABASE ARSystem ON MSSData4=50
FOR LOAD

CREATE DATABASE dbccdb ON dbcc_data_device=480
      LOG ON dbcc_log_device=95
FOR LOAD

CREATE DATABASE e0mss21_r_srvr_RSSD ON rssd_data=200
      LOG ON rssd_log=200
FOR LOAD

CREATE DATABASE mss_acct_db ON MSSData6=1200, MSSData7=600
```

```

                LOG ON MSSData8=600
FOR LOAD

CREATE DATABASE mss_acct_db_TS1 ON MSSData6=400, MSSData7=200
                LOG ON MSSData8=200
FOR LOAD

CREATE DATABASE ARSystem ON MSSData4=100
                LOG ON MSSLog3=50
FOR LOAD

ALTER DATABASE ARSystem ON MSSData4=50
FOR LOAD

CREATE DATABASE dbccdb ON dbcc_data_device=480
                LOG ON dbcc_log_device=95
FOR LOAD

CREATE DATABASE e0mss21_r_srvr_RSSD ON rssid_data=200
                LOG ON rssid_log=200
FOR LOAD

CREATE DATABASE mss_acct_db ON MSSData6=1200, MSSData7=600
                LOG ON MSSData8=600
FOR LOAD

CREATE DATABASE mss_acct_db_TS1 ON MSSData6=400, MSSData7=200
                LOG ON MSSData8=200
FOR LOAD

CREATE DATABASE mss_acct_db_TS2 ON MSSData6=400, MSSData7=200
                LOG ON MSSData8=200
FOR LOAD

CREATE DATABASE sybsecurity ON sybsecurity=500
                LOG ON EcsAclStorage_Index=10, EcsAclStorage_Index=190
FOR LOAD

CREATE DATABASE dbccdb ON dbcc_data_device=200
                LOG ON dbcc_log_device=60
FOR LOAD

CREATE DATABASE pdps ON c2t2d0s6=600, c2t3d0s6=300
                LOG ON c2t4d0s6=600
FOR LOAD

CREATE DATABASE pdps_TS1 ON c2t2d0s6=200
                LOG ON c2t3d0s6=100, c2t4d0s6=200
FOR LOAD

CREATE DATABASE pdps_TS2 ON c2t2d0s6=200
                LOG ON c2t3d0s6=100, c2t4d0s6=200
FOR LOAD

CREATE DATABASE mss_acct_db_TS2 ON MSSData6=400, MSSData7=200
                LOG ON MSSData8=200
FOR LOAD

```

```
CREATE DATABASE sybsecurity ON sybsecurity=500
LOG ON EcsAclStorage_Index=10, EcsAclStorage_Index=190
FOR LOAD
```

```
CREATE DATABASE FMR ON c2t2d0s6=200, c2t2d0s7=300, c0t3d0s6=100
LOG ON c2t4d0s6=200
FOR LOAD
```

```
ALTER DATABASE FMR ON c2t2d0s7=300
FOR LOAD
```

GSFC

```
CREATE DATABASE SubServer ON subsrvdata=1200, sybsecurity=600
LOG ON sybsecurityarchive=600
FOR LOAD
```

```
CREATE DATABASE SubServer_TS1 ON subsrvdata=400, sybsecurity=200
LOG ON sybsecurityarchive=200
FOR LOAD
```

```
CREATE DATABASE SubServer_TS2 ON subsrvdata=400, sybsecurity=200
LOG ON sybsecurityarchive=200
FOR LOAD
```

```
CREATE DATABASE EcDmDictService ON ecdmworking1=480, ecdmworking3=240
LOG ON ecdmworking2=120
FOR LOAD
```

```
CREATE DATABASE EcDmDictService_TS1 ON ecdmworking1=160, ecdmworking3=80
LOG ON ecdmworking2=40
FOR LOAD
```

```
CREATE DATABASE EcDmDictService_TS2 ON ecdmworking1=160, ecdmworking3=80
LOG ON ecdmworking2=40
FOR LOAD
```

```
CREATE DATABASE IoAdAdvService ON ioadadvservicedata=420, ecdmworking3=210
LOG ON ecdmworking2=120
FOR LOAD
```

```
CREATE DATABASE IoAdAdvService_TS1 ON ioadadvservicedata=140, ecdmworking3=70
LOG ON ecdmworking2=40
FOR LOAD
```

```
CREATE DATABASE IoAdAdvService_TS2 ON ioadadvservicedata=140, ecdmworking3=70
LOG ON ecdmworking2=40
FOR LOAD
```

```
CREATE DATABASE ARSystem ON mssdata7=100
LOG ON msslog3=50
FOR LOAD
```

```
CREATE DATABASE EcGdPrPlTool ON mssdata1=100
LOG ON msslog1=50
```

```

FOR LOAD

CREATE DATABASE EcGdPrPlTool_TS1 ON mssdata1=50
        LOG ON msslog1=25
FOR LOAD

CREATE DATABASE EcGdPrPlTool_TS2 ON mssdata1=50
        LOG ON msslog1=25
FOR LOAD

CREATE DATABASE dbccdb ON dbcc_data_device=300
        LOG ON dbcc_log_device=50
FOR LOAD

CREATE DATABASE g0mss21_r_srvr_RSSD ON rssid_data=200
        LOG ON rssid_log=200
FOR LOAD

CREATE DATABASE mss_acct_db ON mssdata9=1800
        LOG ON mssdata9=200, mssdata2=400
FOR LOAD

ALTER DATABASE mss_acct_db ON mssdata2=600, mssdata10=1800
        LOG ON mssdata11=600
FOR LOAD

CREATE DATABASE mss_acct_db_TS1 ON mssdata4=600
        LOG ON mssdata4=200
FOR LOAD

ALTER DATABASE mss_acct_db_TS1 ON mssdata4=400, mssindex1=600
        LOG ON msslog1=600
FOR LOAD

CREATE DATABASE mss_acct_db_TS2 ON mssdata6=600
        LOG ON mssdata6=200
FOR LOAD

ALTER DATABASE mss_acct_db_TS2 ON mssdata6=400, mssindex2=6
FOR LOAD

CREATE DATABASE sybsecurity ON sybsecurity=500
FOR LOAD

CREATE DATABASE dbccdb ON c1t2d0s3=200
        LOG ON c1t2d3s3=50
FOR LOAD

ALTER DATABASE dbccdb ON c1t2d0s3=50
FOR LOAD

CREATE DATABASE pdps ON c1t0d0s1=300
        LOG ON c1t0d0s1=200
FOR LOAD

ALTER DATABASE pdps ON c1t0d0s1=100, c1t0d3s1=300
        LOG ON c1t1d0s1=600, c1t3d3s1=100, c1t3d3s1=400, c1t2d3s1=200

```

```

FOR LOAD

CREATE DATABASE pdps_TS1 ON c1t0d0s1=200, c1t0d3s1=100
LOG ON c1t1d0s1=200

FOR LOAD

CREATE DATABASE pdps_TS2 ON c1t0d0s1=200, c1t0d3s1=100
LOG ON c1t1d0s1=200

FOR LOAD

ALTER DATABASE pdps_TS2 ON c1t2d0s1=50
FOR LOAD

CREATE DATABASE FMR ON c1t0d0s1=200, c1t0d2s1=100
LOG ON c1t1d0s1=500

FOR LOAD

```

LARC

```

CREATE DATABASE SubServer ON subserver_data=1200, sybsecurity_index=600
LOG ON sybsecur_arch=600

FOR LOAD

CREATE DATABASE SubServer_TS1 ON subserver_data=400, sybsecurity_index=200
LOG ON sybsecur_arch=200

FOR LOAD

CREATE DATABASE SubServer_TS2 ON subserver_data=400, sybsecurity_index=200
LOG ON sybsecur_arch=200

FOR LOAD

CREATE DATABASE EcDmDictService ON ecdmwrk=480, ecdmwrk3=240
LOG ON ecdmwrk2=120

FOR LOAD

CREATE DATABASE EcDmDictService_TS1 ON ecdmwrk=160, ecdmwrk3=80
LOG ON ecdmwrk2=40

FOR LOAD

CREATE DATABASE EcDmDictService_TS2 ON ecdmwrk=160, ecdmwrk3=80
LOG ON ecdmwrk2=40

FOR LOAD

CREATE DATABASE IoAdAdvService ON loadvsrv=420, ecdmwrk3=210
LOG ON ecdmwrk2=120

FOR LOAD

CREATE DATABASE IoAdAdvService_TS1 ON loadvsrv=140, ecdmwrk3=70
LOG ON ecdmwrk2=40

FOR LOAD

CREATE DATABASE IoAdAdvService_TS2 ON loadvsrv=140, ecdmwrk3=70
LOG ON ecdmwrk2=40

FOR LOAD

CREATE DATABASE sybsecurity ON sybsecurity_index=250

```

```

                LOG ON sybsecur_arch=50
FOR LOAD

CREATE DATABASE ARSystem ON mssdata7=100
                LOG ON msslog3=50
FOR LOAD

CREATE DATABASE EDB ON mssindex3=1000
                LOG ON msslog3=500
FOR LOAD

CREATE DATABASE EDB_TS1 ON mssdata12=400
                LOG ON msslog3=100
FOR LOAD

CREATE DATABASE EDB_TS2 ON mssdata12=400
                LOG ON msslog3=100
FOR LOAD

CREATE DATABASE dbccdb ON dbccdb_data=500
                LOG ON dbccdb_log=100
FOR LOAD

CREATE DATABASE l0mss21_r_srvr_RSSD ON rssid_data=200
                LOG ON rssid_log=200
FOR LOAD

CREATE DATABASE mss_acct_db ON mssdata9=2000, mssdata2=1000, mssdata10=1800
                LOG ON mssdata11=600
FOR LOAD

CREATE DATABASE mss_acct_db_TS1 ON mssdata4=1200, mssindex1=600
                LOG ON msslog1=600
FOR LOAD

CREATE DATABASE mss_acct_db_TS2 ON mssdata6=1200, mssindex2=600
                LOG ON msslog2=600
FOR LOAD

CREATE DATABASE sybsecurity ON sybsecurity=250
                LOG ON sybsecurityarchive=50
FOR LOAD

CREATE DATABASE dbccdb ON dbcc_data=500
                LOG ON dbcc_log=100
FOR LOAD

CREATE DATABASE pdps ON c0t4d0s1=600, c0t5d0s1=300
                LOG ON c0t8d0s1=600
FOR LOAD

CREATE DATABASE pdps_TS1 ON c0t4d0s1=200, c0t5d0s1=100
                LOG ON c0t8d0s1=200
FOR LOAD

CREATE DATABASE pdps_TS2 ON c0t4d0s1=200, c0t5d0s1=100
                LOG ON c0t8d0s1=200

```

```

FOR LOAD

CREATE DATABASE sybsecurity ON c1t4d0s1=250
                        LOG ON c0t9d0s1=50
FOR LOAD

CREATE DATABASE FMR ON c1t2d0s1=200, c1t3d0s1=100
                        LOG ON c0t3d0s3=500
FOR LOAD

CREATE DATABASE sybsecurity ON sybsecurity=250
                        LOG ON sybsecuritylogdev=50
FOR LOAD

```

E. Load original database dumps onto temporary hosts.

F. Verify database allocation.

Verify that the database allocations on the temporary host match exactly the database allocations on original host.

The allocations don't match IF the message "***Caution: You have set up this database to include space on disk %n for both data and the transaction log. This can make recovery impossible if that disk fails.***" or if the command `sp_helpdb {db_name}` shows 'data only' and 'log only' usage on the same device after the load of a database is display after the original database has been loaded onto the temporary host. In this case:

- a. drop the database
- b. Refer to Section A.2 to determine the exact device allocations on the original database and to create those same allocations on the temporary host.

G. Transitioning Logins and Users

The following are instructions for transitioning Logins and Users from the original host to the temporary host

1. Dump the master database and all subsystem databases of all adaptive servers affected by the transition.
2. For each adaptive server affected by the transition, copy out the data from the syslogins and sysloginroles tables in the master database of the original adaptive server:
 - a. `$$SYBASE/bin/bcp master..syslogins out $old_servername.syslogins.dat -c -Usa -P$sa_password -S$old_servername`
 - b. `$$SYBASE/bin/bcp master..sysloginroles out $old_servername.sysloginroles.dat -c -Usa -P$sa_password -S$old_servername`

3. Edit the file `$old_servername.syslogins.dat`, deleting the row having “sa” in the name column. This should be the first row (suid = 1).

4. For each affected subsystem database on the original server, copy out the data from the `sysusers` table:


```
$SYBASE/bin/bcp $dbname..sysusers out $dbname.sysusers.dat -c -Usa -P$sa_password -S$old_servername
```

5. Ensure the temporary host has been configured to allow updates to systems tables prior to performing the following deletes in the master database on the temporary server:
 - a. `sp_configure “allow updates to system tables”,1`
(This command must be executed as the SSO)
 - b. `isql -U sa -P $sa_password -S $new_servername`
 - c. `> delete sysloginroles`
 - d. `> go`
 - e. `> delete syslogins where name != “sa”`
 - f. `> go`
 - g. `> .` e x i t

6. Copy the data from the `syslogins` and `sysloginroles` tables into the master database of the temporary adaptive server(s) and then re-configure the system to disallow updates to the system tables:
 - a. `$SYBASE/bin/bcp master..syslogins in $old_servername.syslogins.dat -c -Usa -P$sa_password -S$new_servername`
 - b. `$SYBASE/bin/bcp master..sysloginroles in $old_servername.sysloginroles.dat -c -Usa -P$sa_password -S$new_servername`
 - c. `sp_configure “allow updates to system tables”,0`
(This command must be executed as the SSO)

7. Perform the following delete in each affected subsystem database on the temporary server
 - a. `isql -U sa -P $sa_password -S $new_servername`
 - b. `> use $dbname`
 - c. `> go`

d. > delete sysusers

e. > go

f. > exit

8. For each affected subsystem database on the new (SOL8) server, copy in the data for the sysusers table:

```
$SYBASE/bin/bcp $dbname..sysusers in $dbname.sysusers.dat -c -Usa -P$sa_password -S$new_servername
```

9. If you made a mistake, restore from the backups created in Step 1 and go back to Step 2.

A.2 Sybase Configuration Notes

I. See 914-TDA-163 for Sybase ASE 11.9.2 for Sun and EBF9741 maintenance upgrade. In page E-5 the device and database sizes for master and sybssystemprocs are listed.

II. DBCC database 'dbccdb' Configuration Instructions and Examples

```
=====
Run sp_plan_dbccdb to get a plan for dbccdb configuration
2> go
```

```
=====
1> sp_plan_dbccdb
2> go
```

Recommended size for dbccdb database is 72MB (data = 70MB, log = 2MB).

dbccdb database already exists with size 150MB.

Recommended values for workspace size, cache size and process count are:

dbname	scan ws	text ws	cache	process count
master	864K	224K	640K	1
tempdb	1264K	320K	1280K	2
model	64K	48K	640K	1
sybssystemprocs	1264K	320K	1280K	2
pdps	22128K	5536K	5533K	2
pdps_TS1	7376K	1856K	1847K	2
pdps_TS2	7376K	1856K	1847K	2
sybssystemdb	80K	48K	640K	1
dbccdb	1856K	480K	1280K	2
sybsecurity	3696K	928K	1280K	2

```
pdps_TS5          7376K   1856K   1847K   2
pdps_TS6          7376K   1856K   1847K   2
```

```
(return status = 0)
1>
```

Choose the largest values of "scan ws", "text ws", and "cache", for this example is 'pdps' database:

```
pdps              22128K   5536K   5533K   2
```

After the dbccdb database is created, each database will be configured using the following commands:

```
use dbccdb
go

exec sp_dbcc_updateconfig <db_name>,"max worker processes","2"
exec sp_dbcc_updateconfig <db_name>,"dbcc named cache","dbcc_cache","5533K"
exec sp_dbcc_updateconfig <db_name>,"scan workspace", scan_ws
exec sp_dbcc_updateconfig <db_name>,"text workspace", text_ws
go
```

=====

THE COMPLETE STEPS ARE LISTED BELOW:

=====

If the dbccdb database has not been created, create it now using the following:

```
CREATE DATABASE dbccdb ON <dbccdb_data_device_name>=500
LOG ON <dbccdb_log_device_name>=100
go
```

```
use dbccdb
go
```

```
sp_addsegment scanseg, dbccdb, <dbccdb_data_device_name>
go
sp_addsegment textseg, dbccdb, <dbccdb_data_device_name>
go
```

```
isql -Usa -i $$YBASE/scripts/installdbccdb -e installdbccdb_out
```

```
use dbccdb
go
```

```
sp_dbcc_createws dbccdb, scanseg, scan_ws, scan, "22128K"
go
sp_dbcc_createws dbccdb, textseg, text_ws, text, "5536K"
```

```
go
```

Workspace scan_ws of 22128KB size has been created successfully in dbccdb database.

```
(return status = 0)
```

Workspace text_ws of 5536KB size has been created successfully in dbccdb database.

```
(return status = 0)
```

```
=====
Configure named cache for dbccdb, "dbcc_cache":
```

```
exec sp_cacheconfig "dbcc_cache","5533K"
```

```
go
```

```
=====
-- REBOOT: shutdown and restart ASE
-- See SA Guide Page 15-15:
-- You must restart ASE after creating caches in order to bind
-- objects to them. Bindings take effect immediately and do NOT
-- require a restart.
```

```
-- Bind Cache
```

```
=====
use master
go
sp_dboption dbccdb, single, true
go
use dbccdb
go
checkpoint
go
use master
go
sp_bindcache dbcc_cache, dbccdb
go
sp_dboption dbccdb, single, false
go
use dbccdb
go
checkpoint
go
```

```
-- 16K Pool 85% of 5533K = 4704K
```

```
use dbccdb
go
sp_poolconfig "dbcc_cache", "4704K", "16K"
go
```

```

exec sp_dbcc_updateconfig master,"max worker processes","2"
exec sp_dbcc_updateconfig master,"dbcc named cache","dbcc_cache","5533K"
exec sp_dbcc_updateconfig master,"scan workspace", scan_ws
exec sp_dbcc_updateconfig master,"text workspace", text_ws
go
exec sp_dbcc_updateconfig sybsystemdb,"max worker processes","2"
exec sp_dbcc_updateconfig sybsystemdb,"dbcc named cache","dbcc_cache","5533K"
exec sp_dbcc_updateconfig sybsystemdb,"scan workspace", scan_ws
exec sp_dbcc_updateconfig sybsystemdb,"text workspace", text_ws
go
exec sp_dbcc_updateconfig sybsystemprocs,"max worker processes","2"
exec sp_dbcc_updateconfig sybsystemprocs,"dbcc named cache","dbcc_cache","5533K"
exec sp_dbcc_updateconfig sybsystemprocs,"scan workspace", scan_ws
exec sp_dbcc_updateconfig sybsystemprocs,"text workspace", text_ws
go
exec sp_dbcc_updateconfig pdps,"max worker processes","2"
exec sp_dbcc_updateconfig pdps,"dbcc named cache","dbcc_cache","5533K"
exec sp_dbcc_updateconfig pdps,"scan workspace", scan_ws
exec sp_dbcc_updateconfig pdps,"text workspace", text_ws
go
exec sp_dbcc_updateconfig pdps_TS1,"max worker processes","2"
exec sp_dbcc_updateconfig pdps_TS1,"dbcc named cache","dbcc_cache","5533K"
exec sp_dbcc_updateconfig pdps_TS1,"scan workspace", scan_ws
exec sp_dbcc_updateconfig pdps_TS1,"text workspace", text_ws
go
exec sp_dbcc_updateconfig pdps_TS2,"max worker processes","2"
exec sp_dbcc_updateconfig pdps_TS2,"dbcc named cache","dbcc_cache","5533K"
exec sp_dbcc_updateconfig pdps_TS2,"scan workspace", scan_ws
exec sp_dbcc_updateconfig pdps_TS2,"text workspace", text_ws
go
exec sp_dbcc_updateconfig pdps_TS5,"max worker processes","2"
exec sp_dbcc_updateconfig pdps_TS5,"dbcc named cache","dbcc_cache","5533K"
exec sp_dbcc_updateconfig pdps_TS5,"scan workspace", scan_ws
exec sp_dbcc_updateconfig pdps_TS5,"text workspace", text_ws
go
exec sp_dbcc_updateconfig pdps_TS6,"max worker processes","2"
exec sp_dbcc_updateconfig pdps_TS6,"dbcc named cache","dbcc_cache","5533K"
exec sp_dbcc_updateconfig pdps_TS6,"scan workspace", scan_ws
exec sp_dbcc_updateconfig pdps_TS6,"text workspace", text_ws
go

```

```

=====
-- to run dbcc report after dbccdb configured

```

```

USE dbccdb

```

```

go

```

```

EXEC sp_dbcc_configreport

```

```

go

```

```

=====
1> use dbccdb

```

```

2> go

```

```
1> sp_dbcc_configreport
2> go
```

Reporting configuration information of database master.

Parameter Name	Value	Size
database name	master	71680K
dbcc named cache	dbcc_cache	5533K
text workspace	text_ws (id = 544004969)	5536K
scan workspace	scan_ws (id = 512004855)	22128K
max worker processes	2	
operation sequence number	88	

Reporting configuration information of database pdps.

Parameter Name	Value	Size
database name	pdps	1843200K
dbcc named cache	dbcc_cache	5533K
text workspace	text_ws (id = 544004969)	5536K
scan workspace	scan_ws (id = 512004855)	22128K
max worker processes	2	
operation sequence number	68	

Reporting configuration information of database pdps_TS1.

Parameter Name	Value	Size
database name	pdps_TS1	614400K
dbcc named cache	dbcc_cache	5533K
text workspace	text_ws (id = 544004969)	5536K
scan workspace	scan_ws (id = 512004855)	22128K
max worker processes	2	
operation sequence number	67	

Reporting configuration information of database pdps_TS2.

Parameter Name	Value	Size
database name	pdps_TS2	614400K
dbcc named cache	dbcc_cache	5533K
text workspace	text_ws (id = 544004969)	5536K
scan workspace	scan_ws (id = 512004855)	22128K
max worker processes	2	
operation sequence number	66	

Reporting configuration information of database dbccdb.

Parameter Name	Value	Size
database name	dbccdb	153600K
dbcc named cache	dbcc_cache	5533K
text workspace	text_ws (id = 544004969)	5536K
scan workspace	scan_ws (id = 512004855)	22128K
max worker processes	2	
operation sequence number	0	

(return status = 0)

=====

To run dbcc checkstorage and get fault report

=====

```
use <database_name, e.g., pdps>
go
```

```
dbcc checkstorage
go
```

```
USE dbccdb
```

```
go
EXEC sp_dbcc_faultreport "long", "<database_name, e.g., pdps>"
go
```

III. Verification of Database/Device Allocations

=====

(1) Login to sybase server using isql and query each database for device fragments:

Display a list of databases and their dbid by exec **sp_helpdb**. Or

```
select dbid, name from master..sysdatabases
go
```

and list the database device allocations, issue the following command:

```
select dbid, convert(varchar(6), segmap) segmap,
       convert(varchar(20), name) device_name,
       size/512.0 "size/512.0", lstart
from master..sysusages u, master..sysdevices d
where u.vstart between d.low and d.high
order by dbid, lstart
go
```

dbid	segmap	device_name	size/512.0	lstart
1 7	master		3.000000	0
1 7	tapedump1		3.000000	0

1 7	tapedump2	3.000000	0
1 7	master	45.000000	1536
1 7	tapedump1	45.000000	1536
1 7	tapedump2	45.000000	1536
1 7	master	22.000000	24576
2 7	master	2.000000	0
2 7	tapedump1	2.000000	0
2 7	tapedump2	2.000000	0
2 7	tempdb_dev	98.000000	1024
3 7	master	2.000000	0
3 7	tapedump1	2.000000	0
3 7	tapedump2	2.000000	0
3 7	master	1.000000	1024
4 7	sysprocsdev	101.000000	0
5 3	sybasedata	120.000000	0
5 4	sybaselog	60.000000	61440
5 3	sybasedata	60.000000	92160
5 4	sybaselog	60.000000	122880
5 3	sybasedata	100.000000	153600
5 4	sybaselog	60.000000	204800
6 3	sybasedata	40.000000	0
6 3	sybasedata	80.000000	20480
6 4	sybaselog	20.000000	61440
6 4	sybaselog	40.000000	71680
6 3	sybasedata	60.000000	92160
6 4	sybaselog	60.000000	122880
6 3	sybasedata	100.000000	153600
6 4	sybaselog	60.000000	204800
7 3	sybasedata	40.000000	0
7 4	sybaselog	20.000000	20480
8 3	sybasedata	40.000000	0
8 4	sybaselog	20.000000	20480
9 3	sybasedata	40.000000	0
9 4	sybaselog	20.000000	20480
10 7	sybasedata	5.000000	0
11 3	auditdev	800.000000	0
11 4	auditlog	50.000000	409600

(39 rows affected)

1>

1> select dbid, name from master..sysdatabases

2> go

dbid name

5 SubServer
6 SubServer_TS1
7 SubServer_TS2
8 SubServer_TS5
9 SubServer_TS6
1 master
3 model
11 sybsecurity

10 sybssystemdb
4 sybssystemprocs
2 tempdb

(11 rows affected)
1>

(2) Based upon the database/device allocations above generate the database creation commands:

```
CREATE DATABASE SubServer ON subsrvdata=120
    LOG ON sybaselog=60
ALTER DATABASE SubServer ON subsrvdata=60
    LOG ON sybaselog=60
ALTER DATABASE SubServer ON subsrvdata=100
    LOG ON sybaselog=60
```

(3) Create the database on the temporary server (assumed the sybase server has been created, is running, and devices have been created)

(4) Run the dbcc and dump database commands or scripts on the target server to be upgraded. And transfer the dumps to the temporary server.

(5) Load the dumps to the databases on the temporary server. Verify that there is no error. If there is an error like below, drop the database, go back to step (1), revise database creation commands, create database, and reload the database.

....

Backup Server: 4.58.1.1: Database relbdss_OPS: 36393560 kilobytes LOADED.

Backup Server: 4.58.1.1: Database relbdss_OPS: 36764402 kilobytes LOADED.

Backup Server: 4.58.1.1: Database relbdss_OPS: 36764998 kilobytes LOADED.

Backup Server: 3.42.1.1: LOAD is complete (database relbdss_OPS).

Caution: You have set up this database to include space on disk 49 for both data and the transaction log. This can make recovery impossible if that disk fails.

Caution: You have set up this database to include space on disk 56 for both data and the transaction log. This can make recovery impossible if that disk fails.

Redo pass: 6000 records done (60%); 3876 records left.

Redo pass of recovery has processed 401 committed and 0 aborted transactions.

Use the ONLINE DATABASE command to bring this database online; SQL Server will not bring it online automatically.

(6) Special notes for mss21 servers:

At SMC:

The replication will be quiesced by suspend the routes after the custom codes are shut down and before the upgrade. The routes will be resumed after the Solaris 8 is upgraded and Sybase ASE is started and before starting the application codes.

At DAACs:

After application codes shutdown and before database dump, **stop the rep agents** on the mss_acct_db databases for all modes so that the order tracking tables on SMC will **not** be replicated, and **drop subscription** of the user profile table.

After the upgrade, **start the rep agents** on the mss_acct_db databases for all modes so that the order tracking tables on SMC will be replicated, and **create subscription** of the user profile table.

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Appendix B. Autosys Installation

This appendix describes the Autosys related activity that must be performed during the Solaris 8 transition activity. Autosys must be installed on the temporary host to facilitate Autosys functions while the PLS/SPS consolidation/transition is taking place.

B.1 Autosys Installation on Temporary Host

B.1.1 Temporary license key Installation

For each existing Autosys database, remove the existing permanent (host-based) license key and install a temporary license key obtained from the vendor. Autosys licenses are based on a machine's host Id and a particular instance name provided to the vendor. An Autosys instance is defined as an Event Server/Database pair. Replace all references to <Instance_Name> with the AutoSys instance name(s) for your particular site. Listed below are the Autosys instance names for each DAAC site.

Table B-1. Autosys Instances Names

EDC Instances: FMR
GSFC Instances: FMR, LOU, CAR, SPG
LARC Instances: FMR
NSIDC Instances: FMR
VATC Instances: VAT, VT2
PVC Instances: AS2, FMR

This license gets inserted into the database. With transition activities, Autosys will not work if it's database is moved from the original machine to a temporary machine because workstation host Ids are unique. Contact Robin Castle, License Manager at 301-925-0726 or Jan Fisher at 301-925-0718 or email at rcastle@eos.hitc.com or jfisher@eos.hitc.com to obtain a temporary license. If the permanent host is identified for where Autosys will reside after transition, it is

recommended that this license be requested at the same time the temporary license is requested. Not acquiring the proper licenses key information at this time may result in major downtime for the DAAC site because license information takes time to get processed from the vendor. Because of the length of time to acquire licenses, ECS requires that both the temporary and (in the case of a new SPS host) permanent keys be requested at the same time.

- a. Login to the existing Autosys Server machine as root.
- b. Make sure the root login is using a Cshell environment.

```
# csh
```

- c. Source in the Autosys environment.

```
# cd /usr/ecs/OPS/COTS/autotreeb/autouser
```

```
# source {INSTANCE}.autosys.csh.{HOSTNAME}
```

The *{INSTANCE}* name is the name of the particular Autosys instance. If a site has multiple Autosys instances, then steps "D" – "H" must be performed for each instance. The *{HOSTNAME}* is the name of the host which provides Autosys server functions. The example below is taken from the ECS EDF environment.

```
# source IDG.autosys.csh.miami
```

- d. Back up the existing Autosys license if Autosys will be re-installed on the original machine to an NFS automounted directory (NFS_DIR). The information in this file will be required in the next section regarding re-installation of Autosys onto the original host after the Solaris 8 upgrade is complete. This step is not applicable for host that are being replaced with new hardware.

```
# script /NFS_DIR/autosys_license_<Instance_Name>.bak
# source <Instance_Name>.autosys.csh.<hostname>
# gatekeeper
```

Utility to Add/Delete or Print KEYS.

Add (A) or Delete (D) or Print (P) ? Type: **P**

Hostname (Expiration Date)	Hostid	Type	AUTOSERV	KEY
Infinity	EDS_ECS	c	ALL	EIVJKIMQBNVFLKNOB
Infinity	EDS-EOS	p	ALL	ECONTLPGQIQIOHSHQTALMJOME
Infinity	80824db6	t	ALL	HFJLOCKLPHDQBHAJVDRHJMGJB
miami	80824db6	s	IDG	CFKNLJMDTTLJTGIUJ

Type: **CTRL-D**

A message similar to the one below will be displayed. This message confirms the above information displayed on the screen is also captured into the “autosys_license.bak” file.

“script done file is /NFS_DIR/autosys_license.IDG.bak”

- e. Delete the Permanent Autosys license keys on the original host machine.

gatekeeper

Utility to Add/Delete or Print KEYS.

Add (A) or Delete (D) or Print (P) ? **d**

KEY Type: [(c)lient, (s)erver, (t)ime, (x)pert]: **c**

Hostname: ***Infinity***

Hostid: **EDS_ECS**

***** KEY Deleted! *****

KEY Type: [(c)lient, (s)erver, (t)ime, (x)pert]: **X**

***** KEY Deleted! *****

KEY Type: [(c)lient, (s)erver, (t)ime, (x)pert]: **t**

***** KEY Deleted! *****

KEY Type: [(c)lient, (s)erver, (t)ime, (x)pert]: **S**

This Server Key is for \$AUTOSERV='IDG'

Hostname: **miami**

Hostid: **80824db6**

***** KEY Deleted! *****

KEY Type: [(c)lient, (s)erver, (t)ime, (x)pert]: **↵**

- f. Verify that the Permanent Autosys licenses are deleted. Once the command below is executed there should not be any licenses displayed to the screen.

```
# gatekeeper
```

```
Utility to Add/Delete or Print KEYS.
```

```
Add (A) or Delete (D) or Print (P) ? p
```

Hostname	Hostid	Type	AUTOSERV	KEY
(Expiration Date)				

- g. Add the temporary Autosys license. The license shown below is an example. Please replace the Date/Time and actual “KEY” with the license string acquired from ECS License Management.

```
# gatekeeper
```

```
Utility to Add/Delete or Print KEYS.
```

```
Add (A) or Delete (D) or Print (P) ? a
```

```
KEY Type: [(c)lient, (s)erver, (t)ime, (x)pert ]: t
```

```
Expiration Date: ('*Infinity*' for ever) 05/10/2002
```

```
Hostid: temp
```

```
KEY: DKICNOCCUORKDOVKL
```

```
***** New Key ADDED! *****
```

```
KEY Type: [(c)lient, (s)erver, (t)ime, (x)pert ]: ↵
```

- h. Verify that the temporary Autosys license is installed.

```
# gatekeeper
```

```
Utility to Add/Delete or Print KEYS.
```

Add (A) or Delete (D) or Print (P) ? **P**

Hostname (Expiration Date)	Hostid	Type	AUTOSERV	KEY
05/10/2002	temp	t	ALL	DKICNOCCUORKDOVKL

#

B.1.2 Sybase Device Creation

Create Sybase devices on the temporary box for the Autosys databases. Refer to Section A.1, subsection A, Appendix A for Sybase device creation information.

B.1.3 Autosys Database Creation

Create Autosys databases on the temporary box for each Autosys instance. Create this database with the naming convention <Instance_Name>_TEMP. (ie. FMR_TEMP) Make this database identical to the original database for the particular Autosys instance with the exception of the database name change.

B.1.4 Temporary Autosys Installation

Perform an installation of Autosys on the temporary box. A separate Autosys instances should be created on the temporary box. Further details on this installation are available in the most recent Autosys PSR document, although one environment variable must be changed to reflect the fact that this is a new installation instead of an upgrade.

System Requirements for Autosys

Listed below are the minimum requires for the AutoSys version 3.5 product.

Memory: 32MB Minimum

Disk: 95MB for Unbundled AutoSys option.

Database: 50 – 100MB

B.1.4.1 Modification of NIS Map

In order to allow each DAAC to transition incrementally via modes, Autosys will need to have a temporary entry added to the NIS “services” map. The addition of this temporary service entry will allow the site to move TS1 and TS2 modes without impacting OPS. Since the Autosys product is mode independent, the only way to provide this functionality is via a separate license and separate internet service. Listed below are the steps to modifying the NIS “services” map. Due to license restrictions, only 2 instances of Autosys are being configured. This temporary

instances is for use in order to transition the TS1 and TS2 modes prior to moving the OPS mode. For sites with multiple instances of Autosys, ECS recommends that each mode per instances be moved one at a time until the OPS mode for the instances has been promoted onto the temporary host. Once all modes are transitioned for a particular instance, the site should then move TS1, TS2 and finally OPS modes for all other Autosys instances.

a. Login in as root to the NIS Master host (*See* table B-2 for the NIS master host at a particular DAAC site):

Table B-2 NIS/NFS Hosts

Site	NIS Master	NFS Server	NIS Slave
EDC	e0css02	e0mss01	e0ins02
GSFC	g0css02	g0mss10	g0ins02
LaRC	l0css02	l0mss10	l0ins02
NSIDC	n0css02	n0mss01	n0ins02
VATC	t1css01	t1mss04	t1ins02
SMC	m0mss02	m0mss02	m0mss04
PVC	p0css02	p0mss10	p0ins02

b. Verify if Autosys service entries exist in the NIS services map. Type the commands in boldface type listed below. Responses follow each command.

ypcat services | grep auto &

The output below is sample output of the above command. This entry should exist as a minimum. Additional entries may exist. The TCP port that will be added for the Autosys transition is TCP port 5281. This entry is reserved in document “910-TDA-002 Rev:08 “ECS Software Port Mapping Baseline.” If an entry for port “5281” exist then use the next available port number. (ie. 5282, 5283, ...).

```
auto_remote      5280/tcp          #Autosys
```

c. Preserve and edit the services file.

cd /etc &

```
# cp services services.bak &
```

```
# vi services &
```

Search for the entry “auto_remote”.

Add the new line for the new temporary TCP service (as shown in the example) below the existing Autosys TCP port entry.

```
auto_remotei          5281/tcp          #Autosys
```

d. Rebuild the auto.tools NIS map.

```
# cd /var/yp &
```

```
# ./ypmake &
```

e. Verify that the NIS map has been pushed by executing the following command on any other host:

```
# ypcat services | grep auto &
```

The results shown below should be displayed.

```
auto_remote          5280/tcp          #Autosys  
auto_remotei        5281/tcp          #Autosys
```

B.1.4.2 Installation Instructions

Substitute all *bold/italics* typeface references in this document with site specific information. *Italic* typeface shows examples of information that will be displayed to the screen during the installation process. Replace all references to <Instance_Name> with the AutoSys instance name(s) for your particular site.

a. Login to the original Autosys Server host machine as root.

If running multiple instances of AutoSys, capture the information below for each instance.

- b. Print output of TCP port information (per Autosys Instance).

```
# cd /usr/ecs/OPS/COTS/autotreeb/autosys/install  
# lp <autosys_log_file>
```

The <autosys_log_file> is site specific but should be named using the following conventions.

<Instance_Name>.auto_install.log.35

View the log file hardcopy(s) and identify the information listed below. You will be prompted later for this information during the re-installation of Autosys on the original host after the Solaris 8 upgrade.

1. The AutoSys Instance Name.

Capture the information from the log file for the prompt “Enter the letter name for this instance of AutoSys (\$AUTOSERV)”

2. The “auto_remote” agent name. The default is “auto_remote”.

Capture the information from the log file for the prompt “Enter the name of the auto_remote service. <auto_remote>”

If there is no name shown next to the prompt, then the default “auto_remote” was used.

3. The TCP port used for the “auto_remote” agent.

Capture the information from the log file for the prompt “Enter a port number for auto_remote. [5280]>”

If there is not a number shown next to the prompt, then the default “5280” was used.

- c. Tar the Autosys Directory to an NFS automounted directory <NFS_DIR>.

```
# cd /usr/ecs/OPS/COTS
```

```
# tar -cvpf <NFS_DIR/autosys_35.tar> ./autotreeb /etc/init.d/autosys.???
```

- d. Login to the temporary Autosys host server machine as root.

- e. Extract the Autosys tar file.

```
# cd /usr/ecs/OPS/COTS
```

```
# tar -xvpf <NFS_DIR/autosys_35.tar>
```

```
# chown -R autosys:sys autotreeb
```

- f. Set SYBASE environments variables for upgrade:

```
SYBASE=/tools/sybOCv11.1.1EBF
```

```
export SYBASE
```

For C shell use the following syntax to set the environment variables.

```
setenv SYBASE /tools/sybOCv11.1.1EBF
```

- g. Execute the AutoSys installation script.

Perform the server installation for each AutoSys instance installed. If more than one AutoSys instance exists, execute the command below for each AutoSys instance changing the database and AutoSys instance name where applicable.

```
# cd /usr/ecs/OPS/COTS/autotreeb/autosys/install
```

```
# ./auto_install -f `pwd`/Instance_Name.auto_install.log.35
```

AutoSys Version 3.5 Installation

Choose the type of installation.

(1) Server installation

(2) Client installation

[1]> 1

Choose the source of your system (passwd, services) files.

(1) local /etc/passwd and /etc/services

(2) NIS

(3) NIS+

[1]> 2

Since you are using NIS, the services file must be edited on the

YP master, remade, and pushed out to the YP clients.

Have you done this? ([y]|n)> y

Will you be using a color monitor? ([y]|n)> y

This is the AutoSys installation you have specified:

Installation type: server

Dataserver: Sybase

Bundled: no

System files source: NIS

Monitor type: color

Is this correct? ([y]|n)> **y**

What user will 'own' the AutoSys software? [autosys]> **autosys**

Enter the three letter name for this instance of AutoSys (\$AUTOSERV). □

[ACE]> **Instance_Name**

NOTE: Refer to the Table listed below for your site-specific temporary instance name. The naming convention listed in the table below reflects what the temporary Autosys instance name should be. Autosys requires the instances name to be 3 characters.

Table B-3. Temporary Autosys Instances Names

EDC Instances: TMR
GSFC Instances: TMR, TOU, TAR, TPG
LARC Instances: TMR
NSIDC Instances: TMR
VATC Instances: TAT, TT2
PVC Instances: TS2, TMR

Enter the value for (\$AUTOUSER).

[/data/ecs/OPS/COTS/autotreeb/autouser]> **/usr/ecs/OPS/COTS/autotreeb/autouser**

This is the AutoSys configuration information you specified:

AutoSys owner: **autosys**

\$AUTOUSER: **/usr/ecs/OPS/COTS/autotreeb/autouser**

\$AUTOSERV: **<Instance_Name>**

Is this correct? ([y]|n)> **y**

Installing AutoSys with an existing Sybase RDBMS.

What is the name of the dataserver (\$DSQUERY)
that contains the AutoSys database? [AUTOSYSDB] > **Sybase_SQL_Server**

What is the name of the database on <Sybase_SQL_Server> that
will contain the AutoSys database objects? [autosys] > **Autosys_Database_name**

Enter a user granted the System Administrator and System Security Officer
roles in <Sybase_SQL_Server> (SQL Server System 10), or the sa user
(SQL Server 4.9.2). [sa] > **sa**

What is the password for sa in <Sybase_SQL_Server>
(this will not be echoed)? > **sa_password**

Enter the full pathname to the directory containing the Sybase
interfaces file (\$SYBASE).
[/usr/ecs/OPS/COTS/sybase] > **/tools/sybOCv11.1.1EBF**

/tools/sybOCv12.0.0/interfaces already exists and contains
<Sybase_SQL_Server>.

This is the dataserver information you have specified:
\$SYBASE: /tools/sybOCv11.1.1
Dataserver name: <Sybase_SQL_Server>
Database name: AutoSys_Database_Name
User granted SA & SSO roles: sa
Is this correct? ([y]|n) > **y**

Enter the directory to contain the auto_remote executable.
[/data/ecs/OPS/COTS/autotreeb/autosys/bin] >
/usr/ecs/OPS/COTS/autotreeb/autosys/bin

Enter the location of the inetd configuration file.
[/etc/inetd.conf] > **etc/inetd.conf**

Enter the name of the auto_remote service.
[auto_remote] > **auto_remotei** (Refer to section B.1.4.1 Modification of NIS Map for
specific service if a name other than auto_remote is used.)

Enter a port number for auto_remote. [5280] > **5281** (Refer to section B.1.4.1
Modification of NIS Map for specific TCP port if a port number other than 5281 is
used.)

Do you wish to update the auto_remote with the current service name
and port number, or do you wish to leave the inetd unmodified?
(1) Update the auto_remote with version 3.5.
(2) Leave the inetd unmodified.

[1]> 1

This is the inetd information you specified:

auto_remote location: /usr/ecs/OPS/COTS/autotreeb/autosys/bin

inetd config file: /etc/inetd.conf

auto_remote service: auto_remote

auto_remote port number: 5280

Update the auto_remote with version 3.5.

Is this correct? ([y]|n)> y

All the information needed to install AutoSys has been collected. □

*We are about to begin editing system files, upgrading database □
objects, etc. □*

Do you wish to proceed? ([y]|n)> y

Continuing installation... □

*Information similar to the italics font listing
below will be displayed during installation. Ignore
the warning messages. These messages may occur if
there is a existing AutoSys databases.*

auto_dbobj: Configuring the server type... □

auto_dbobj: Adding intcodes □

auto_dbobj: Adding timezones □

auto_dbobj: Adding user: anyone. □

Msg 17262, Level 16, State 1, Procedure 'sp_addlogin', Line 118 □

A user with the specified login name already exists. □

Msg 17330, Level 16, State 1, Procedure 'sp_adduser', Line 178 □

A user with the same name already exists in the database. □

auto_dbobj: Initializing AutoSys password. □

auto_dbobj: Initializing AutoSys remote authentication method. □

auto_dbobj: DONE! □

Sybase is configured. □

Configuring AutoSys. □

Creating \$AUTOUSER. □

/usr/ecs/OPS/COTS/autotreeb/autouser already exists, we will use it. □

Creating the files □

/usr/ecs/OPS/COTS/autotreeb/autouser/autosys.csh.clydes (C shell) □

/usr/ecs/OPS/COTS/autotreeb/autouser/autosys.sh.clydes (Bourne shell) □

/usr/ecs/OPS/COTS/autotreeb/autouser/autosys.csh.clydes (C shell) □

/usr/ecs/OPS/COTS/autotreeb/autouser/autosys.sh.clydes (Bourne shell) □

/usr/ecs/OPS/COTS/autotreeb/autouser/autosys.ksh.clydes (Korn Shell) □

to be sourced at login to set the environment variables and certain □

useful aliases. □

Generating the configuration file: /usr/ecs/OPS/COTS/autotreeb/autouser/config. I □

DG. □

```

Setting ownership and permissions on the AutoSys files...
Installing the default remote agent profile: /etc/auto.profile.
Configuring Unix for AutoSys.
Configuring the internet daemon.
Editing /etc/inetd.conf.
Copying the existing /etc/inetd.conf to /etc/inetd.conf.auto_install.
inetd (pid: 123) was sent a SIGHUP.
Updating the app-defaults files for AutoSys screens.
Installing the app-defaults files for AutoSys screens.
Copying app-defaults files into /usr/lib/X11/app-defaults.
Copying app-defaults files into /usr/openwin/lib/app-defaults.
Solstice_register Autosys succeeded

AutoSys installation is complete.

```

WAIT until you see "AutoSys installation is complete."

h. After AutoSys Server is upgraded do the following (On Server Machine only):

1. Remove the source files configured for the original host.

```

# csh
# cd /usr/ecs/OPS/COTS/autotreeb/autouser
# rm Instance_Name.autosys.csh.Original Machine_Name
# rm Instance_Name.autosys.env.Original Machine_Name
# rm Instance_Name.autosys.ksh.Original Machine_Name
# rm Instance_Name.autosys.sh.Original Machine_Name

```

2. Copy the source files to *Instance_Name.autosys.*.Machine_Name*

```

# cd /usr/ecs/OPS/COTS/autotreeb/autouser

# cp autosys.csh.Machine_Name Instance_Name.autosys.csh.Temporary
Machine_Name
# cp autosys.env.Machine_Name Instance_Name.autosys.env.Temporary
Machine_Name
# cp autosys.ksh.Machine_Name Instance_Name.autosys.env.Temporary
Machine_Name
# cp autosys.sh.Machine_Name Instance_Name.autosys.sh.Temporary
Machine_Name

```

```
# source autosys.csh.<temporary machine hostname>
```

3. Source AutoSys environment variables into Unix environment.

```
# source ./Instance_Name.autosys.csh.TemporaryMachine_Name
```

4. Configure AutoSys license information.

- (a) Add the temporary Autosys license. The license shown below is an example. Please replace the Date/Time and actual "KEY" with the license string acquired from ECS License Management.

```
# gatekeeper
```

```
Utility to Add/Delete or Print KEYS.
```

```
Add (A) or Delete (D) or Print (P) ? a
```

```
KEY Type: [(c)lient, (s)erver, (t)ime, (x)pert ]: t
```

```
Expiration Date: ('*Infinity*' for ever) 05/10/2002
```

```
Hostid: temp
```

```
KEY: DKICNOCCUORKDOVKL
```

```
***** New Key ADDED! *****
```

```
KEY Type: [(c)lient, (s)erver, (t)ime, (x)pert ]: ↵
```

- (b.) Verify that the temporary Autosys license is installed.

```
# gatekeeper
```

```
Utility to Add/Delete or Print KEYS.
```

```
Add (A) or Delete (D) or Print (P) ? p
```

Hostname	Hostid	Type	AUTOSERV	KEY
(Expiration Date)				

5. Configure AutoSys for the EDIT and EXEC super users.

To make the Unix startup/shutdown scripts work correctly starting and stopping the AutoSys event demon, the EXEC & EDIT users should be the "autosys" user.

```
cd $AUTOSYS/bin  
autosys_secure
```

NOTES: If the "autosys_secure" program has been run on a previous Install/Upgrade, then only options 4-7 are shown. If only options 4-7 are displayed, do not perform the rest of this step. Continue with step 6.

AutoSys Security Utility

Please select an action to perform:

- [1] Change AutoSys EDIT and EXEC superusers.
- [2] Change AutoSys database password.
- [3] Change AutoSys remote authentication method.
- [4] Create AutoSys User@Host or Domain password.
- [5] Change AutoSys User@Host or Domain password.
- [6] Delete AutoSys User@Host or Domain password.
- [7] Exit autosys_secure.

> **1**

Changing AutoSys EDIT and EXEC superusers:

AutoSys EDIT superuser: **autosys**
...changed.

AutoSys EXEC superuser: **autosys**
...changed.

Please select an action to perform:

- [1] Change AutoSys EDIT and EXEC superusers.
- [2] Change AutoSys database password.
- [3] Change AutoSys remote authentication method.
- [4] Create AutoSys User@Host or Domain password.
- [5] Change AutoSys User@Host or Domain password.
- [6] Delete AutoSys User@Host or Domain password.
- [7] Exit autosys_secure.

> **7**

6. Change Unix permission on the Autosys Startup Script.

```
# cd /etc/init.d
# mv autosys.<Original Instance Name> autosys.<Temporary Instance Name>
```

```
# chmod 755 /etc/init.d/autosys
```

OR

```
# chmod 755 /etc/init.d/autosys.<Temporary Instance Name>
```

7. Make sure the Primary Server is up and running.

chk_auto_up

The output from this command should look similar to the example listed below.

```
Attempting (1) to Connect with Database: clydes_srvr:autosys
*** Have Connected successfully with Database: clydes_srvr:autosys. ***
```

```
Connected with Event Server: clydes_srvr:autosys
```

```
Checking Machine: clydes
Primary Event Processor is RUNNING on machine: clydes
```

8. Make sure the AutoSys server is pingable and successful.

autoping -m <AutoSys Server HostName> -A -D

The output from this command should look similar to the example listed below.

```
clydes# autoping -m clydes -A -D

AutoPinging Machine [clydes] AND checking the Remote Agent's DB
Access.
AutoPing WAS SUCCESSFUL!
```

B.1.5 PDPS Server Shutdown

This step is only necessary when transitioning the Autosys database for OPS. Quiesce the system so that no changes are made to the PDPS database and no jobs are created/modified in the Autosys instance databases. Shut down all PDPS servers that access the Autosys database.

B.1.6 Autosys Database Dump

Dump all Autosys database instances on the original ASE Server that are being transitioned. ECS recommends that one mode is performed at a time. Refer to Appendix A for Sybase database dump information.

B.1.7 Set up Autosys database on temporary box

For each Autosys database on the temporary box, perform the following steps:

- a. Load the Autosys database on the temporary box.
- b. Execute Sp_Addlogin command to add the Autosys login to the temporary host.
- c. Use Autosys database.
- d. Execute Sp_Adduser to add the Autosys users.
- e. Grant “Select” permission to the user,” anyone” on the Alamode table.

Refer to Appendix A for Sybase database procedural guidance.

B.1.8 Autosys Client Configuration

Reconfigure Autosys clients on the xxspgxx boxes to point to the new Autosys database.

Table B-2 below identifies the Autosys Server and Client host. Planning Workstations and Science Processors are Autosys client machines. All machines at each site that are listed in one of these two categories will need to be modified to work with the newly configured Autosys temporary Server.

Table B-2. Autosys Servers and Client Hosts

	Queuing Server	DPS	Planning Workstation	PLS	Science Processors	DPS
EDC Instances: FMR	e0sps04	X	e0pls01 e0pls02	X	e0spg01 e0spg05	X
GSFC Instances: FMR, LOU, CAR, SPG	g0sps06	X	g0pls02 g0pls03	X	g0spg01 g0spg07 g0spg10	X
LARC Instances: FMR	l0sps03	X	l0pls02 l0ais09	X	l0spg01 l0spg05 l0spg06 l0spg10	X
NSIDC Instances: FMR	n0sps08	X	n0pls02 n0pls03	X	n0spg03 n0ais01	X
VATC Instances: VAT, VT2	t1sps02	X	t1pls01 t1pls02	X	t1spg01 t1spg03	X
PVC Instances: AS2, FMR	p0sps06				p0spg01 p0spg07	

a. Login as root on each “Planning Workstation and Science Processor” host shown above for a particular site and perform the following steps.

b. Make sure the root login is using a Cshell environment. Back up the existing Autosys environment files on the client prior to the client installation. This step is critical because the default “autosys.csh.<Machine Name>” file will be overwritten by the installation.

```
# csh
```

```
# cd /usr/ecs/OPS/COTS/autotreeb/autouser
```

```
# cp autosys.csh.Machine_Name Original_Instance_Name.autosys.csh.Machine_Name
# cp autosys.env.Machine_Name Original_Instance_Name.autosys.env.Machine_Name
# cp autosys.ksh.Machine_Name Original_Instance_Name.autosys.env.Machine_Name
# cp autosys.sh.Machine_Name Original_Instance_Name.autosys.sh.Machine_Name
```

c. Set SYBASE environment variable for upgrade:

```
SYBASE=/tools/sybOCv11.1.1EBF - For Solaris
```

or

```
SYBASE=/tools/sybOCv12.0.0 - For SGI  
Export SYBASE
```

d. For Cshell set the environment variables as follows:

```
setenv SYBASE /tools/sybOCv11.1.1EBF - For Solaris
```

or

```
setenv SYBASE /tools/sybOCv12.0.0 - For SGI
```

e. Execute the AutoSys installation script.

Perform the remote agent installation for each AutoSys instance installed. If more than one AutoSys instance exists, perform this installation for each instance changing the database and AutoSys instance name where applicable.

```
# cd /usr/ecs/OPS/COTS/autosys/install  
./auto_install -f `pwd` /install/Temporary Instance_Name.auto_install.log.35
```

AutoSys Version 3.5 Installation

Choose the type of installation.

(1) Server installation

(2) Client installation

[1]> 2

Choose the type of client installation.

(1) All clients.

(2) Jobs only.

[1]> 1

Choose the Sybase dataserver configuration

- (1) Bundled
 - (2) Unbundled
- [1]> 2

Choose the source of your system (passwd, services) files.

- (1) local /etc/passwd and /etc/services
 - (2) NIS
 - (3) NIS+
- [1]> 2

Since you are using NIS, the services file must be edited on the YP master, remade, and pushed out to the YP clients.

Have you done this? ([y]|n)> y

Will you be using a color monitor? ([y]|n)> y

This is the AutoSys upgrade you have specified:

Installation type: client
Client installation: all clients
System files source: NIS
Monitor type: color

Is this correct? ([y]|n)> y

What user will 'own' the AutoSys software? [autosys]> **autosys**

Enter the three letter name for this instance of AutoSys (\$AUTOSERV).

[ACE]> **Instance_Name**

NOTE: Refer to Table B-3 for your site-specific temporary instance name. The naming convention listed in the table reflects what the temporary Autosys instance name should be. Autosys requires the instances name to be 3 characters.

Enter the value for (\$AUTOUSER).

[/data/autotreeb/autouser]> **/usr/ecs/OPS/COTS/autotreeb/autouser**

AutoSys environment files for <hostname> already exist in /usr/ecs/OPS/COTS/autotreeb/autouser.

If we proceed, they will be updated with new information.

Do you wish to proceed? ([y]|n)> y

Do you wish to update the `auto_remote` with the current service name and port number, or do you wish to leave the `inetd` unmodified?

(1) Update the `auto_remote` with version 3.5.

(2) Leave the `inetd` unmodified.

[1]> 1

This is the `inetd` information you specified:

`auto_remote location:` /usr/ecs/OPS/COTS/autotreeb/autosys/bin

`inetd config file:` /etc/inetd.conf

`auto_remote service:` auto_remotei

`auto_remote port number:` 5281

Update the `auto_remote` with version 3.5.

Is this correct? ([y]|n)> y

All the information needed to upgrade AutoSys has been collected.

We are about to begin editing system files, upgrading database objects etc.

Do you wish to proceed? ([y]|n)> y

Continuing upgrade...

WAIT until you see "AutoSys installation is complete."

After AutoSys Remote Agent is upgraded do the following (On Client Machine only)

1) Copy the source files to `Instance_Name.autosys.*.Machine_Name`

cd /usr/ecs/OPS/COTS/autotreeb/autouser

cp autosys.csh.Machine_Name Temporary_Instance_Name.autosys.csh.Machine_Name

cp autosys.env.Machine_Name Temporary_Instance_Name.autosys.env.Machine_Name

cp autosys.ksh.Machine_Name Temporary_Instance_Name.autosys.ksh.Machine_Name

cp autosys.sh.Machine_Name Temporary_Instance_Name.autosys.sh.Machine_Name

2) Source AutoSys environment variables into Unix environment.

./Temporary_Instance_Name.autosys.csh.Machine_Name

3) Make sure the AutoSys server is pingable and successful.

```
autoping -m <AutoSys Server HostName> -A -D
```

4) Make sure all clients are pingable and successful.

```
autoping -m <AutoSys Client HostName> -A -D
```

B.2 Autosys Installation on Original Host upgraded to Solaris 8

This section describes the Autosys related activity that must be performed after Solaris 8 has been installed on the original host. Autosys must be re-installed on the original host.

B.2.1 Sybase Device Creation

Create Sybase devices on the permanent box for the Autosys databases. (Refer to Appendix A for Sybase device creation information.)

B.2.2 Autosys Database Creation

Create Autosys databases on the permanent box. (Refer to Appendix A for Sybase database creation information.)

B.2.3 Autosys Installation on SPS host.

Perform an installation of Autosys on the permanent box after the operating system has been upgraded to Solaris 8. The same instances should be created as exist on the temporary box. Further details on this installation are available in the most recent Autosys PSR document, although one environment variable must be changed to reflect the fact that this is a new installation instead of an upgrade.

Substitute all ***bold/italics*** typeface references in this document with site specific information. *Italic* typeface shows examples of information that will be displayed to the screen during the installation process. Replace all references to **<Instance_Name>** with the AutoSys instance name(s) for your particular site.

- a. Login to the Temporary Autosys Server machine as root.

- b. Make sure the root login is using a Cshell environment.

```
# csh
```

- c. Tar the Autosys Directory to an NFS automounted directory <NFS_DIR>.

```
# cd /usr/ecs/OPS/COTS
```

```
# tar -cvpf <NFS_DIR/autosys_35.tar> ./autotreeb /etc/init.d/autosys.???
```

- d. Login to the Original Autosys host server machine as root.

- e. Extract the Autosys tar file.

```
# cd /usr/ecs/OPS/COTS
```

```
# tar -xvpf <NFS_DIR/autosys_35.tar>
```

```
# chown -R autosys:sys autotreeb
```

- f. Set SYBASE environments variables for upgrade:

```
SYBASE=/tools/sybOCv12.0.0
```

```
export SYBASE
```

For C shell use the following syntax to set the environment variables.

```
setenv SYBASE /tools/sybOCv12.0.0
```

- g. Execute the AutoSys installation script.

Perform the server installation for each AutoSys instance installed. If more than one AutoSys instance exists, execute the command below for each AutoSys instance changing the database and AutoSys instance name where applicable.

```
# cd /usr/ecs/OPS/COTS/autotreeb/autosys/install
```

```
# ./auto_install -f `pwd`/install/Instance_Name.auto_install.log.35
```

AutoSys Version 3.5 Installation

Choose the type of installation.

(1) Server installation

(2) Client installation

```
[1]> 1
```

Choose the source of your system (passwd, services) files.

(1) local /etc/passwd and /etc/services

(2) NIS

(3) NIS+

```
[1]> 2
```

Since you are using NIS, the services file must be edited on the YP master, remade, and pushed out to the YP clients.

Have you done this? ([y]|n)> **y**

Will you be using a color monitor? ([y]|n)> **y**

This is the AutoSys installation you have specified:

Installation type: *server*

Dataserver: *Sybase*

Bundled: *no*

System files source: *NIS*

Monitor type: *color*

Is this correct? ([y]|n)> **y**

What user will 'own' the AutoSys software? [autosys]> **autosys**

Enter the three letter name for this instance of AutoSys (\$AUTOSERV).

[ACE]> **Instance_Name**

NOTE: Refer to the Table B-1 for your site-specific instance name.

Enter the value for (\$AUTOUSER).

[/data/ecs/OPS/COTS/autotreeb/autouser]> **/usr/ecs/OPS/COTS/autotreeb/autouser**

This is the AutoSys configuration information you specified:

AutoSys owner: *autosys*

\$AUTOUSER: */usr/ecs/OPS/COTS/autotreeb/autouser*

\$AUTOSERV: *<Instance_Name>*

Is this correct? ([y]|n)> **y**

Installing AutoSys with an existing Sybase RDBMS.

What is the name of the dataserver (\$DSQUERY)

that contains the AutoSys database? [AUTOSYSDB] > **Sybase_SQL_Server**

What is the name of the database on <Sybase_SQL_Server> that

will contain the AutoSys database objects? [autosys]> **Autosys_Database_name**

Enter a user granted the System Administrator and System Security Officer roles in <Sybase_SQL_Server> (SQL Server System 10), or the sa user (SQL Server 4.9.2). [sa] > **sa**

What is the password for sa in <Sybase_SQL_Server>

(this will not be echoed)? > **sa_password**

Enter the full pathname to the directory containing the Sybase interfaces file (\$SYBASE).

`[/usr/ecs/OPS/COTS/sybase]> /tools/sybOCv12.0.0`

`/tools/sybOCv12.0.0/interfaces` already exists and contains `<Sybase_SQL_Server>`.

This is the dataserver information you have specified:

`$SYBASE:` `/tools/sybOCv11.1.1`
`Dataserver name:` `<Sybase_SQL_Server>`
`Database name:` `AutoSys_Database_Name`
`User granted SA & SSO roles:` `sa`

Is this correct? ([y]|n)> **y**

Enter the directory to contain the auto_remote executable.

`[/data/ecs/OPS/COTS/autotreeb/autosys/bin]>`
`/usr/ecs/OPS/COTS/autotreeb/autosys/bin`

Enter the location of the inetd configuration file.

`[/etc/inetd.conf]> /etc/inetd.conf`

Enter the name of the auto_remote service.

`[auto_remote]> auto_remote_name`

(Refer to the hardcopy print(s) out of the `<Instance_Name>.auto_install.log.35` file.)

Enter a port number for auto_remote. [5280]> **`port_#_for_auto_remote_name`**
(Refer to the hardcopy print(s) out of the `<Instance_Name>.auto_install.log.35` file.)

Do you wish to update the auto_remote with the current service name and port number, or do you wish to leave the inetd unmodified?

(1) Update the auto_remote with version 3.5.

(2) Leave the inetd unmodified.

[1]> **1**

This is the inetd information you specified:

`auto_remote location:` `/usr/ecs/OPS/COTS/autotreeb/autosys/bin`
`inetd config file:` `/etc/inetd.conf`
`auto_remote service:` `auto_remote`
`auto_remote port number:` `5280`
Update the auto_remote with version 3.5.

Is this correct? ([y]|n)> y

*All the information needed to install AutoSys has been collected.
We are about to begin editing system files, upgrading database
objects, etc.*

*Do you wish to proceed? ([y]|n)> y
Continuing installation...*

*Information similar to the italics font listing
below will be displayed during installation. Ignore
the warning messages. These messages may occur if
there is a existing AutoSys databases.*

```
auto_dbobj: Configuring the server type...  
auto_dbobj: Adding intcodes  
auto_dbobj: Adding timezones  
auto_dbobj: Adding user: anyone.  
Msg 17262, Level 16, State 1, Procedure 'sp_addlogin', Line 118  
A user with the specified login name already exists.  
Msg 17330, Level 16, State 1, Procedure 'sp_adduser', Line 178  
A user with the same name already exists in the database.  
auto_dbobj: Initializing AutoSys password.  
auto_dbobj: Initializing AutoSys remote authentication method.  
auto_dbobj: DONE!  
  
Sybase is configured.  
  
Configuring AutoSys.  
  
Creating $AUTOUSER.  
  
/usr/ecs/OPS/COTS/autotreeb/autouser already exists, we will use it.  
  
Creating the files  
/usr/ecs/OPS/COTS/autotreeb/autouser/autosys.csh.clydes (C shell)  
/usr/ecs/OPS/COTS/autotreeb/autouser/autosys.sh.clydes (Bourne shell)  
/usr/ecs/OPS/COTS/autotreeb/autouser/autosys.csh.clydes (C shell)  
/usr/ecs/OPS/COTS/autotreeb/autouser/autosys.sh.clydes (Bourne shell)  
/usr/ecs/OPS/COTS/autotreeb/autouser/autosys.ksh.clydes (Korn Shell)  
to be sourced at login to set the environment variables and certain  
useful aliases.  
  
Generating the configuration file: /usr/ecs/OPS/COTS/autotreeb/autouser/config.I  
DG.  
Setting ownership and permissions on the AutoSys files...  
  
Installing the default remote agent profile: /etc/auto.profile.  
  
Configuring Unix for AutoSys.  
  
Configuring the internet daemon.  
  
Editing /etc/inetd.conf.  
  
Copying the existing /etc/inetd.conf to /etc/inetd.conf.auto_install.
```

```
inetd (pid: 123) was sent a SIGHUP.
Updating the app-defaults files for AutoSys screens.
Installing the app-defaults files for AutoSys screens.
Copying app-defaults files into /usr/lib/X11/app-defaults.
Copying app-defaults files into /usr/openwin/lib/app-defaults.
Solstice_register Autosys succeeded
AutoSys installation is complete.
```

WAIT until you see "AutoSys installation is complete."

h. After AutoSys Server is upgraded do the following (On Server Machine only):

1. Remove the source files configured for the temporary host.

```
# csh
# cd /usr/ecs/OPS/COTS/autotreeb/autouser
# rm TemporaryInstance_Name.autosys.csh.Temporary_Machine_Name
# rm Instance_Name.autosys.env. Temporary_Machine_Name
# rm Instance_Name.autosys.ksh. Temporary_Machine_Name
# rm Instance_Name.autosys.sh. Temporary_Machine_Name
# rm config.<Temporary_Instance_Name>
```

2. Copy the source files to *Instance_Name.autosys.*.Machine_Name*

```
# cd /usr/ecs/OPS/COTS/autotreeb/autouser
# source autosys.csh.Machine_Name>
# cp autosys.csh.Machine_Name Instance_Name.autosys.csh.Machine_Name
# cp autosys.env.Machine_Name Instance_Name.autosys.env.Machine_Name
# cp autosys.ksh.Machine_Name Instance_Name.autosys.ksh.Machine_Name
# cp autosys.sh.Machine_Name Instance_Name.autosys.sh.Machine_Name
```

3. Source AutoSys environment variables into Unix environment.

```
# source ./Instance_Name.autosys.csh.Machine_Name
```

4. Configure AutoSys for the EDIT and EXEC super users.

To make the Unix startup/shutdown scripts to work correctly starting and stopping the AutoSys event demon, the EXEC & EDIT users should be the "autosys" user.

```
cd $AUTOSYS/bin  
autosys_secure
```

NOTES: If the "autosys_secure" program has been run on a previous Install/Upgrade, then only options 4-7 are shown. If only options 4-7 are displayed, do not perform the rest of this step. Continue with step 5.

AutoSys Security Utility

```
Please select an action to perform:  
[1] Change AutoSys EDIT and EXEC superusers.  
[2] Change AutoSys database password.  
[3] Change AutoSys remote authentication method.  
[4] Create AutoSys User@Host or Domain password.  
[5] Change AutoSys User@Host or Domain password.  
[6] Delete AutoSys User@Host or Domain password.  
[7] Exit autosys_secure.  
> 1
```

Changing AutoSys EDIT and EXEC superusers:

```
AutoSys EDIT superuser: autosys  
...changed.
```

```
AutoSys EXEC superuser: autosys  
...changed.
```

```
Please select an action to perform:  
[1] Change AutoSys EDIT and EXEC superusers.  
[2] Change AutoSys database password.  
[3] Change AutoSys remote authentication method.  
[4] Create AutoSys User@Host or Domain password.  
[5] Change AutoSys User@Host or Domain password.  
[6] Delete AutoSys User@Host or Domain password.  
[7] Exit autosys_secure.  
> 7
```

5. Change Unix permission on the Autosys Startup Script.

```
# cd /etc/init.d  
# mv autosys.<Temporary_Instance_Name> autosys.<Original_Instance_Name>
```

```
# chmod 755 /etc/init.d/autosys
```

OR

```
# chmod 755 /etc/init.d/autosys.<Instance_Name>
```

6. Make sure the Primary Server is up and running.

chk_auto_up

The output from this command should look similar to the example listed below.

```
Attempting (1) to Connect with Database: clydes_srvr:autosys
*** Have Connected successfully with Database: clydes_srvr:autosys. ***
```

```
Connected with Event Server: clydes_srvr:autosys
```

```
Checking Machine: clydes
Primary Event Processor is RUNNING on machine: clydes
```

7. Make sure the AutoSys server is pingable and successful.

autoping -m <AutoSys Server HostName> -A -D

The output from this command should look similar to the example listed below.

```
clydes# autoping -m clydes -A -D

AutoPinging Machine [clydes] AND checking the Remote Agent's DB
Access.
  AutoPing WAS SUCCESSFUL!
```

B.2.4 PDPS Server Shutdown

Quiesce the system so that no changes are made to the PDPS database and no jobs are created/modified in the Autosys instance databases. Shut down all PDPS servers that access the Autosys database.

B.2.5 Autosys Database Dump

Dump all Autosys database instances on the temporary ASE Server that are being transitioned back to the original host. (Refer to Appendix A for Sybase database dump information.)

B.2.6 Syslogins and Sysloginroles Dump

Dump the syslogins and sysloginroles from the temporary Autosys ASE Server master database and load into the original ASE Server master database on the original box (only needs to be done once, not once per database). (Refer to Appendix A for Sybase database syslogins information.)

B.2.7 Set up Autosys database on the permanent box.

- a. Load the Autosys database on the permanent box.
- b. Drop and re-create the users on the newly transitioned Autosys database on the permanent box.
- c. Grant “Select” permission to anyone for the alamode Autosys table.

(Refer to Appendix A for Sybase database information.)

B.2.8 Install Autosys Permanent Licenses

Install the permanent license keys on the original Autosys machine.

- a. Login to the original host running the Autosys Server as root.
- b. Make sure the root login is using a Cshell environment.

```
# csh
```

- c. Source in the Autosys environment.

```
# cd /usr/ecs/OPS/COTS/autotreeb/autouser  
# source {INSTANCE}.autosys.csh.{HOSTNAME}
```

The *{INSTANCE}* name is the name of the particular Autosys instance. If a site has multiple Autosys instances, then steps “D” and “E” must be performed for each instance. The *{HOSTNAME}* is the name of the host which provides Autosys server functions. The example below is taken from the ECS EDF environment.

```
# source IDG.autosys.csh.miami
```

- d. Add the permanent Autosys license. The example shown below is from the EDF in Landover MD. The xpert key “x” and client key “c” are site specific and can be used for your site right from the example in this sample. The “time” and “server” keys must be provided from the backed up copy of the original autosys license file. If this file does not exist, contact Robin Castle, License Manager at 301-925-0726 or Jan Fisher at 301-925-0718 or email at rcastle@eos.hitc.com or jfisher@eos.hitc.com to obtain a permanent license.

gatekeeper

Utility to Add/Delete or Print KEYs.

Add (A) or Delete (D) or Print (P) ? **a**

KEY Type: [(c)lient, (s)erver, (t)ime, (x)pert]: **c**

Hostname: ***Infinity***

Hostid: **EDS_ECS**

KEY: **EIVJKIMQBNVFLKNOB**

***** New Key ADDED! *****

KEY Type: [(c)lient, (s)erver, (t)ime, (x)pert]: **x**

Expiration Date: (*Infinity* for ever) ***Infinity***

Hostid: **EDS-EOS**

KEY: **ECONTLPGQIQIOHSHQTALMJOME**

***** New Key ADDED! *****

KEY Type: [(c)lient, (s)erver, (t)ime, (x)pert]: **t**

Expiration Date: (*Infinity* for ever) ***Infinity***

Hostid: **80824db6**

KEY: **HFJLOCKLPHDQBHAJVDRHFMBGJBHJMGJB**

***** New Key ADDED! *****

KEY Type: [(c)lient, (s)erver, (t)ime, (x)pert]: **s**

This Server Key is for \$AUTOSERV='IDG'

Hostname: **miami**

Hostid: **80824db6**

KEY: CFKNLJMDTTLJTGIUJ

***** New Key ADDED! *****

KEY Type: [(c)lient, (s)erver, (t)ime, (x)pert]: ↵
#

- e. Verify that the permanent Autosys license is installed. The information below is an example. The site license key information will differ.

gatekeeper

Utility to Add/Delete or Print KEYS.

Add (A) or Delete (D) or Print (P) ? **p**

Hostname (Expiration Date)	Hostid	Type	AUTOSERV	KEY
Infinity	EDS_ECS	c	ALL	EIVJKIMQBNVFLKNOB
Infinity	EDS-EOS	p	ALL	ECONTLPGQIQIOHSHQTALMJOME
Infinity	80824db6	t	ALL	HFJLOCKLPHDQBHAJVDRHJMGJB
miami	80824db6	s	IDG	CFKNLJMDTTLJTGIUJ

#

B.2.9 Autosys Client Verification

Verify the Autosys clients installed on the host can communicate with the original Autosys instance.

Table B-4 identifies the Autosys Server and Client hosts for each site. Planning Workstations and Science Processors, listed in the table, are Autosys client machines. All machines at each site that are listed in one of these two categories will need to be verified to work with the newly configured Autosys Server on the original host machine.

Login as root on the original machine running the Autosys Server. Make sure the AutoSys server is pingable from each client machines shown above in the table for a particular site and perform the following command.

autoping -m <AutoSys Server HostName> -A -D

```
Checking Machine: clydes
Primary Event Processor is RUNNING on machine: clydes
```

```
clydes# autoping -m clydes -A -D
```

```
AutoPinging Machine [clydes] AND checking the Remote Agent's DB Access.
AutoPing WAS SUCCESSFUL!
```

The results of the command should display “successful.”

B.2.10 Remove Autosys Software from Temporary Host

Make sure all Instances at the DAAC site and all modes per Autosys instance has been transitioned back to the original host. Do not continue with this section if transition activities for Autosys are not completed for all instances and all modes.

- a. Login to the temporary host machine as root.
- b. Make sure the root login is using a Cshell environment.

```
# csh
```

- c. Source in the Autosys environment.

```
# cd /usr/ecs/OPS/COTS/autotreeb/autouser
```

```
# source { INSTANCE } . autosys.csh. { HOSTNAME }
```

- d. Stop the AutoSys Event Processor.

```
/etc/init.d/autosys stop
```

or

```
/etc/init.d/autosys.<Instance_Name> stop
```

- e. Remove the AutoSys Ver. 3.5 binaries.

```
cd /usr/ecs/OPS/COTS
```

```
/bin/rm -r autotreeb
```