

Network Management Station Upgrade Guide

(For Solaris 2.6, Sybase
11.0.3.3, and HP OpenView
5.01)

Ascend Communications, Inc.

Part Number:104-00201-01
Revision 00
November 1998

Copyright © 1998 Ascend Communications, Inc. All Rights Reserved.

This document contains information that is the property of Ascend Communications, Inc. This document may not be copied, reproduced, reduced to any electronic medium or machine readable form, or otherwise duplicated, and the information herein may not be used, disseminated or otherwise disclosed, except with the prior written consent of Ascend Communications, Inc.

ASCEND COMMUNICATIONS, INC. END-USER LICENSE AGREEMENT

ASCEND COMMUNICATIONS, INC. IS WILLING TO LICENSE THE ENCLOSED SOFTWARE AND ACCOMPANYING USER DOCUMENTATION (COLLECTIVELY, THE “PROGRAM”) TO YOU ONLY UPON THE CONDITION THAT YOU ACCEPT ALL OF THE TERMS AND CONDITIONS OF THIS LICENSE AGREEMENT. PLEASE READ THE TERMS AND CONDITIONS OF THIS LICENSE AGREEMENT CAREFULLY BEFORE OPENING THE PACKAGE(S) OR USING THE ASCEND SWITCH(ES) CONTAINING THE SOFTWARE, AND BEFORE USING THE ACCOMPANYING USER DOCUMENTATION. OPENING THE PACKAGE(S) OR USING THE ASCEND SWITCH(ES) CONTAINING THE PROGRAM WILL INDICATE YOUR ACCEPTANCE OF THE TERMS OF THIS LICENSE AGREEMENT. IF YOU ARE NOT WILLING TO BE BOUND BY THE TERMS OF THIS LICENSE AGREEMENT, ASCEND IS UNWILLING TO LICENSE THE PROGRAM TO YOU, IN WHICH EVENT YOU SHOULD RETURN THE PROGRAM WITHIN TEN (10) DAYS FROM SHIPMENT TO THE PLACE FROM WHICH IT WAS ACQUIRED, AND YOUR LICENSE FEE WILL BE REFUNDED. THIS LICENSE AGREEMENT REPRESENTS THE ENTIRE AGREEMENT CONCERNING THE PROGRAM BETWEEN YOU AND ASCEND, AND IT SUPERSEDES ANY PRIOR PROPOSAL, REPRESENTATION OR UNDERSTANDING BETWEEN THE PARTIES.

1. License Grant. Ascend hereby grants to you, and you accept, a non-exclusive, non-transferable license to use the computer software, including all patches, error corrections, updates and revisions thereto in machine-readable, object code form only (the “Software”), and the accompanying User Documentation, only as authorized in this License Agreement. The Software may be used only on a single computer owned, leased, or otherwise controlled by you; or in the event of inoperability of that computer, on a backup computer selected by you. You agree that you will not pledge, lease, rent, or share your rights under this License Agreement, and that you will not, without Ascend’s prior written consent, assign or transfer your rights hereunder. You agree that you may not modify, reverse assemble, reverse compile, or otherwise translate the Software or permit a third party to do so. You may make one copy of the Software and User Documentation for backup purposes. Any such copies of the Software or the User Documentation shall include Ascend’s copyright and other proprietary notices. Except as authorized under this paragraph, no copies of the Program or any portions thereof may be made by you or any person under your authority or control.

2. Ascend’s Rights. You agree that the Software and the User Documentation are proprietary, confidential products of Ascend or Ascend's licensor protected under US copyright law and you will use your best efforts to maintain their confidentiality. You further acknowledge and agree that all right, title and interest in and to the Program, including associated intellectual property rights, are and shall remain with Ascend or Ascend's licensor. This License Agreement does not convey to you an interest in or to the Program, but only a limited right of use revocable in accordance with the terms of this License Agreement.

3. License Fees. The license fees paid by you are paid in consideration of the license granted under this License Agreement.

4. Term. This License Agreement is effective upon your opening of the package(s) or use of the switch(es) containing Software and shall continue until terminated. You may terminate this License Agreement at any time by returning the Program and all copies or portions thereof to Ascend. Ascend may terminate this License Agreement upon the breach by you of any term hereof. Upon such termination by Ascend, you agree to return to Ascend the Program and all copies or portions thereof. Termination of this License Agreement shall not prejudice Ascend's rights to damages or any other available remedy.

5. Limited Warranty. Ascend warrants, for your benefit alone, for a period of 90 days from the date of shipment of the Program by Ascend (the "Warranty Period") that the program diskettes in which the Software is contained are free from defects in material and workmanship. Ascend further warrants, for your benefit alone, that during the Warranty Period the Program shall operate substantially in accordance with the User Documentation. If during the Warranty Period, a defect in the Program appears, you may return the Program to the party from which the Program was acquired for either replacement or, if so elected by such party, refund of amounts paid by you under this License Agreement. You agree that the foregoing constitutes your sole and exclusive remedy for breach by Ascend of any warranties made under this Agreement. EXCEPT FOR THE WARRANTIES SET FORTH ABOVE, THE PROGRAM IS LICENSED "AS IS", AND ASCEND DISCLAIMS ANY AND ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTIES OF NONINFRINGEMENT.

6. Limitation of Liability. Ascend's cumulative liability to you or any other party for any loss or damages resulting from any claims, demands, or actions arising out of or relating to this License Agreement shall not exceed the greater of: (i) ten thousand US dollars (\$10,000) or (ii) the total license fee paid to Ascend for the use of the Program. In no event shall Ascend be liable for any indirect, incidental, consequential, special, punitive or exemplary damages or lost profits, even if Ascend has been advised of the possibility of such damages.

7. Proprietary Rights Indemnification. Ascend shall at its expense defend you against and, subject to the limitations set forth elsewhere herein, pay all costs and damages made in settlement or awarded against you resulting from a claim that the Program as supplied by Ascend infringes a United States copyright or a United States patent, or misappropriates a United States trade secret, provided that you: (a) provide prompt written notice of any such claim, (b) allow Ascend to direct the defense and settlement of the claim, and (c) provide Ascend with the authority, information, and assistance that Ascend deems reasonably necessary for the defense and settlement of the claim. You shall not consent to any judgment or decree or do any other act in compromise of any such claim without first obtaining Ascend's written consent. In any action based on such a claim, Ascend may, at its sole option, either: (1) obtain for you the right to continue using the Program, (2) replace or modify the Program to avoid the claim, or (3) if neither (1) nor (2) can reasonably be effected by Ascend, terminate the license granted hereunder and give you a prorata refund of the license fee paid for such Program, calculated on the basis of straight-line depreciation over a five-year useful life. Notwithstanding the preceding sentence, Ascend will have no liability for any infringement or misappropriation claim of any kind if such claim is based on: (i) the use of other than the current unaltered release of the Program and Ascend has provided or offers to provide such release to you for its then current license fee, or (ii) use or combination of the Program with programs or data not supplied or approved by Ascend to the extent such use or combination caused the claim.

8. Export Control. You agree not to export or disclose to anyone except a United States national any portion of the Program supplied by Ascend without first obtaining the required permits or licenses to do so from the US Office of Export Administration, and any other appropriate government agency.

9. Governing Law. This License Agreement shall be construed and governed in accordance with the laws and under the jurisdiction of the Commonwealth of Massachusetts, USA. Any dispute arising out of this Agreement shall be referred to an arbitration proceeding in Boston, Massachusetts, USA by the American Arbitration Association.

10. Miscellaneous. If any action is brought by either party to this License Agreement against the other party regarding the subject matter hereof, the prevailing party shall be entitled to recover, in addition to any other relief granted, reasonable attorneys' fees and expenses of arbitration. Should any term of this License Agreement be declared void or unenforceable by any court of competent jurisdiction, such declaration shall have no effect on the remaining terms hereof. The failure of either party to enforce any rights granted hereunder or to take action against the other party in the event of any breach hereunder shall not be deemed a waiver by that party as to subsequent enforcement of rights or subsequent actions in the event of future breaches.

Contents

About This Guide

Intended Audience	xiii
What You Need to Know	xiv
Reading Path	xiv
NMS Documentation	xv
Switch Software Documentation	xvi
How to Use This Guide	xvii
Related Documents	xviii
Ascend	xviii
Third Party	xviii
Conventions	xix
Customer Comments	xix
Terminology	xx
Customer Support	xx

Chapter 1

Overview

Upgrade Requirements	1-2
General Requirements	1-2
Hardware Requirements	1-3
Software Requirements	1-4
Solaris Requirements	1-4
Sybase Requirements	1-4
HP OpenView Requirements	1-4
NavisCore Requirements	1-4
New NMS Software	1-5
Solaris Operating System	1-5
Solaris 2.6 Cluster Patch	1-5
Sybase 11.0.3.3 SQL Server	1-5
HP OpenView, Version 5.01	1-6
HP OpenView Patches	1-6
Installation Scripts	1-7
Sybase Script	1-7
HP OpenView Script	1-7
Upgrade Path	1-8

Chapter 2	Upgrading to Solaris 2.6	
	Before You Begin	2-1
	Upgrading to Solaris 2.6	2-2
	Installing the Solaris Cluster Patch	2-8
	Editing the New Solaris 2.6 Inittab File.....	2-9
Chapter 3	Completing Sybase Prerequisite Tasks	
	Before You Begin	3-1
	Checking the Sybase Version	3-2
	Completing the Sybase Upgrade Worksheet	3-3
	Logging Off All Sybase Users	3-3
	Backing Up Your Databases	3-6
	Backing Up and Verifying Your Databases	3-6
	Backing Up to the Local Backup Server the First Time	3-6
	Subsequent Backups to the Local Backup Server.....	3-8
	Running the Disk Check Script.....	3-12
	Using the Disk Check Script Output	3-15
	Checking the Sybase Database Size	3-15
	Checking the File System	3-17
	Validating Database Integrity	3-19
Chapter 4	Upgrading to Sybase 11.0.3.3	
	Before You Begin	4-2
	Running the Upgrade Script.....	4-2
	Backup Procedures.....	4-14
	Backing Up to the Local Backup Server the First Time	4-15
	Subsequent Backups to the Local Backup Server	4-17
	Saving Sybase 11.0.3.3 Databases to Tape	4-20
	Changing the System Administrator (SA) Password	4-21
Chapter 5	Upgrading to HP OpenView 5.01	
	Before You Begin	5-2
	Upgrading to HP OpenView 5.01	5-2
	Disabling IP Discovery	5-8
	Verifying the HP OpenView Installation	5-9
	Installing the HP OpenView Patches	5-11
	Removing the HP OpenView Patches.....	5-14
	Backing Up HP OpenView Databases.....	5-15
Appendix A	IP Discovery	
	Enabling IP Discovery	A-2
	Disabling IP Discovery Mechanism	A-4
Appendix B	HP OpenView 5.01 Upgrade Error Messages	
	Tail Window Error Messages	B-1
	Installation Xterm Window Error Messages	B-2

Appendix C Upgrade Worksheet

Sybase Parameters C-1

Index

List Of Figures

Figure 2-1.	IP Address and Subnet Mask Window	2-2
Figure 2-2.	Solaris Install Console Window	2-3
Figure 2-3.	Solaris Install Console Window	2-5
Figure 3-1.	Showserver Window	3-4
Figure 3-2.	Bulk Copy Output.....	3-11
Figure 3-3.	Check_Sys Script Output.....	3-14
Figure 3-4.	Table 1	3-15
Figure 3-5.	Table 2	3-15
Figure 3-6.	Local System Disk Space Window.....	3-17
Figure 3-7.	Sybase Database Consistency Window	3-19
Figure 4-1.	Tail Window	4-4
Figure 4-2.	Sybase Installation Menu.....	4-5
Figure 4-3.	Sybase Upgrade Parameters.....	4-10
Figure 4-4.	Installation Messages.....	4-12
Figure 4-5.	Bulk Copy Output.....	4-20
Figure 5-1.	NavisCore/UX Installation Menu	5-3
Figure 5-2.	HP OpenView Installation Menu.....	5-4
Figure 5-3.	Installation Messages.....	5-6
Figure 5-4.	HP OpenView 5.01 Window	5-9

List Of Tables

Table 1-1.	SCSI Device Addresses	1-3
Table 1-2.	NMS Upgrade Path.....	1-8
Table 3-1.	Sybase Installation Media Types	3-12
Table 4-1.	Sybase Installation Media Types	4-2
Table 4-2.	Scenario 1	4-7
Table 4-3.	Scenario 2	4-7

About This Guide

This guide describes software installation instructions for upgrading your UNIX Network Management Station (NMS) platform. The *Network Management Station Upgrade Guide* is a task-oriented guide that describes, step-by-step, the process for upgrading the required software (Solaris 2.6, Sybase 11.0.3.3, HP OpenView 5.01) for configuring Ascend switches.

Intended Audience

The *Network Management Station Upgrade Guide* is intended for system administrators responsible for the installation and setup of the NMS.

What You Need to Know

As a reader of this guide, you should be familiar with basic UNIX operating system commands and know how to use a mouse. You should possess a working knowledge of relational database software to properly maintain Sybase. This guide assumes that you have installed the Ascend switch hardware (STDX 6000™, B-STDX 8000/9000™, CBX 500™, and GX 550™). See one of the following hardware installation guides for more information:

- *STDX 6000 Hardware Installation Guide*
- *B-STDX 8000/9000 Hardware Installation Guide*
- *CBX 500 Hardware Installation Guide*
- *GX 550 Hardware Installation Guide*

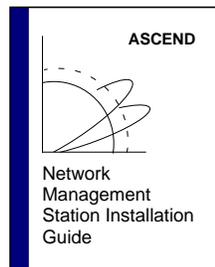
Reading Path

This section describes all of the documents that support the NavisCore™ NMS and Ascend switch software. The documents are grouped as follows:

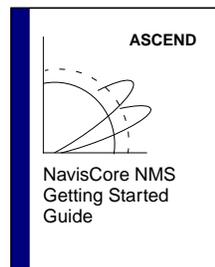
- NMS Documentation
- Switch Software Documentation

NMS Documentation

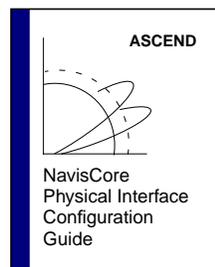
Read the following documents to install and operate NavisCore Release 4.0.



This guide describes prerequisite tasks, hardware and software requirements, and instructions for installing Solaris, HP OpenView, and NavisCore on the NMS.



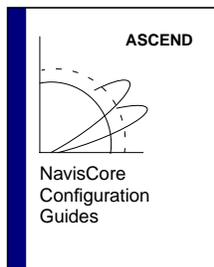
This guide describes how to configure and manage NavisCore, network maps, and Ascend switches.



This guide describes how to configure processor and I/O modules on Ascend switches.

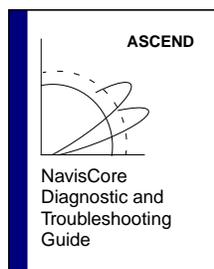
Switch Software Documentation

Read the following documents to configure switch software for B-STDX Release 6.0, CBX Release 3.0, and GX Release 1.0.

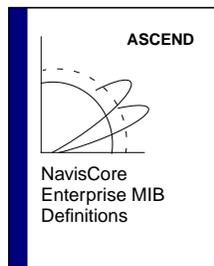


These guides describe how to configure WAN services on the STDX, B-STDX, CBX, and GX switch platforms:

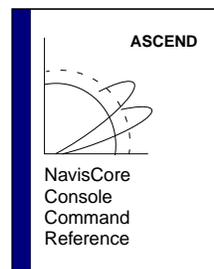
- *NavisCore Frame Relay Configuration Guide*
- *NavisCore ATM Configuration Guide*
- *NavisCore IP Navigator Configuration Guide*
- *NavisCore ISDN Configuration Guide*
- *NavisCore SMDS Configuration Guide*



This guide describes how to diagnose and troubleshoot your NavisCore switch network.



This document gives a brief overview of SNMP and describes the NavisCore Enterprise MIB definitions.



This reference lists and describes the NavisCore switch console commands.

How to Use This Guide

Before you read this guide, read the *Software Release Notice for Network Management Station Installation and Upgrade Sybase Script: 02.00.00.00*, and the *Software Release Notice for Network Management Station Installation and Upgrade HP OpenView Script 02.00.00.00*.

The following table highlights the chapters and contents of this guide.

Read	To Learn About
Chapter 1	Upgrade overview.
Chapter 2	Installing Solaris 2.6.
Chapter 3	Preparing for Sybase 11.0.3.3 upgrade.
Chapter 4	Upgrading to Sybase 11.0.3.3.
Chapter 5	Setting up the system for HP OpenView 5.01 upgrade.
Chapter 5	<ul style="list-style-type: none">• Upgrading to HP OpenView 5.01.• Installing HP OpenView patches.
Appendix A	Installing a remote backup server.
Appendix B	HP OpenView 5.01 upgrade error messages.
Appendix C	Sybase worksheet..

Related Documents

This section lists the related Ascend and third-party documentation that may be useful to reference.

Ascend

- *Network Management Station Installation Guide (80014)*
- *NavisCore Getting Started Guide (80070)*
- *NavisCore Physical Interface Configuration Guide (80080)*
- *NavisCore Frame Relay Configuration Guide (80071)*
- *NavisCore IP Navigator Configuration Guide (80056)*
- *NavisCore ATM Configuration Guide (80072)*
- *NavisCore Diagnostics and Troubleshooting Guide (80074)*
- *Network Management Station Installation Guide (80014)*
- *NavisCore Console Command User's Guide (80075)*

Third Party

- *Solaris 2.6 System Configuration and Installation Guide*
- *HP OpenView 5.01 Network Node Manager Documentation Set*
- *Sybase SQL Server Reference Manual: Volumes 1 and 2*
- *Sybase SQL Server System Administration Guide*

Conventions

This guide uses the following conventions to emphasize certain information, such as user input, screen prompts and output, and menu selections. For example:

Convention	Indicates	Example
Courier Bold	User input on a separate line.	eject cdrom
Courier	Screen or system output.	Please wait...
[<i>bold italics</i>]	Variable parameters to enter.	[<i>your IP address</i>]
<Return>	Press Return or Enter.	<Return>
Boldface	User input and screen options in text.	Type cd install and ... Select None ...
Menu ⇒ Option	Select an option from the menu.	NavisCore ⇒ Logon
Black border surrounding text	Notes and warnings.	See examples below.
<i>Italics</i>	Book titles, new terms, and emphasized text.	<i>Network Management Station Guide</i>



Provides helpful suggestions or reference to materials not contained in this manual.



Cautions notify the reader to proceed carefully to avoid possible equipment damage or data loss.



Warns the reader to proceed carefully in order to avoid personal harm.

Customer Comments

Customer comments are welcome. Please fill out the Customer Comment Form located at the back of this guide and return it to us.

Terminology

Sybase 11.0.3.3 SQL Server is referred to as Sybase 11.0.3.3 in this guide.

Customer Support

To obtain release notes, technical tips, or support, access the Ascend FTP Server or contact the Technical Assistance Center at:

- 1-800-DIAL-WAN (U.S. and Canada)
- 0-800-96-2229 (U.K.)
- 1-978-952-7299 (all other areas)

Overview

The Network Management Station (NMS) for UNIX is a dedicated SunSPARC station on which you run software programs used to configure, monitor, and control an Ascend switch network. This chapter describes the minimum hardware and software requirements needed to upgrade the UNIX NMS.

Upgrade Requirements

General Requirements

Prior to upgrading NMS software, you must:

- Back up your system (for more information, see the *Network Management Station Installation Guide*)
- Have 150 MB of free space in */usr*



If your */usr* file system has 300 MB of total space (that is, the `df -k` command output displays 288 MB in the "kbytes" column for */usr*), call the Ascend Technical Assistance Center (TAC) to discuss upgrade issues. It is important that you consult the TAC because Ascend previously recommended 300 MB of total space for */usr*; however, if you followed this recommendation, 150 MB of free space in */usr* has not been left free for the Solaris 2.6 upgrade.

- Have 512 MB of free space in */opt*

Hardware Requirements

The workstation must be equipped with the following:

- CD-ROM drive
- Tape drive



The tape drive does not need to be directly connected to the NMS. However, you need connectivity between the workstation (with the tape drive) and the NMS.

- SCSI device addresses

Verify that the SCSI device addresses (on the back of each device) are set as follows:

Table 1-1. SCSI Device Addresses

SCSI Device	Address
Tape drive	4
First hard disk	0
Second hard disk	1

Software Requirements

Solaris Requirements

Solaris 2.5.1, Common Desktop Environment (CDE), and the latest Solaris 2.5.1 cluster patch must be installed on your system.

Sybase Requirements

- Sybase 11.0.2 must be installed on your system. Ascend does not support Sybase upgrades from version 4.9.2 to 11.0.3.3. If you are running Sybase 4.9.2, you must upgrade to version 11.0.2, then to 11.0.3.3.

If you are running Sybase 4.9.2, contact the Technical Assistance Center at **1-800-DIAL-WAN**.

- To upgrade from Sybase 11.0.2 to Sybase 11.0.3.3, 2 MB of free space is required.



If you have two-system configuration (Sybase installed on one workstation, HP OpenView and NavisCore installed on another workstation), you must upgrade the Sybase server workstation.



This guide does not provide instructions on upgrading a remote backup server. If you want to upgrade your remote backup server, call the Technical Assistance Center (TAC) at **1-800-DIAL-WAN**. To perform remote backups, see the *Network Management Station Installation Guide*.

HP OpenView Requirements

HP OpenView 4.11 must be installed on your system. Ascend does not support upgrades from HP OpenView 3.3.1 to 5.01. If you are running HP OpenView 3.3.1, you must upgrade to version 4.11 using Ascend's installation scripts, then upgrade to 5.01.

If you are running HP OpenView 3.3.1, contact the Technical Assistance Center at **1-800-DIAL-WAN**.

NavisCore Requirements

See the latest *Software Release Notice for NavisCore Release xx.xx.xx.xx* for the NavisCore version that supports the NMS upgrade.

New NMS Software

This guide requires you to upgrade to the following new software:

- Solaris 2.6 and Common Desktop Environment
- Solaris 2.6 Cluster Patch
- Sybase 11.0.3.3 SQL Server
- HP OpenView 5.01
- HP OpenView patches PSOV_02091 and PSOV_02161

Solaris Operating System

Sun Microsystems SunSoft™ Solaris®2.6 operating environment — Includes the following software: SunOS™ 5.5 operating system, ONC+™/NFS® networking software, OpenWindows™ Version 3.4 windows environment

Common Desktop Environment (CDE) — Provides users with a desktop graphical interface on a Sun workstation running Solaris 2.4 or later. This desktop provides windows, workspaces, controls, menus, and a front panel.

Solaris 2.6 Cluster Patch

Before you install the NMS software programs, obtain the file *2.6_Recommended.tar.Z*. There are several versions of this file (*Patch.0*, *Patch.1*, *Patch.2*, *Patch.3*). Select the latest numerical version.

To get the patch, do one of the following:

- Contact Sun at 1-800-USA-4SUN
- Obtain these files from SunSolve's website at <http://sunsolve.sun.com:80/pub-cgi/patchclusters.pl>

During the installation procedure, you will be prompted to install the cluster patch file (after you install the Solaris operating system).

Sybase 11.0.3.3 SQL Server

Sybase 11.0.3.3 SQL Server is a relational database software program used to store database information and provide backup and recovery of database files.

HP OpenView, Version 5.01

HP OpenView Network Node Manager is a graphical SNMP management application that provides fault, configuration, and performance management for multivendor TCP/IP networks. In addition, HP NNM 5.01:

- Manages custom SNMP devices and objects
- Performs trap formatting and actions
- Performs remote diagnostics and automatic status propagation

HP OpenView Windows is the graphical user interface for Network Node Manager 5.01, which permits extensive customization. This includes the definition of icons, maps, background graphics, symbols, and application representations.

HP OpenView Patches

The PSOV_02091 patch and the PSOV_02161 patch resolve an anomaly that occurs when you run HP OpenView 5.01 on a Solaris 2.6 operating system. If you run HP OpenView 5.01 on Solaris 2.6 without installing these patches and the HP OpenView database is empty, you receive the error message unable to connect to HP OpenView object databases. The patches resolve this problem.

Installation Scripts

Sybase Script

Ascend provides two installation scripts that enable you to upgrade to Sybase 11.0.3.3:

Disk check Script (check_sys):

- Checks the Sybase 11 database size
- Checks the file system size
- Validates database integrity

Sybase upgrade script (install_sybase):

- Installs the Sybase 11.0.3.3 software on the system
- Saves the Sybase 11 software to a tar and compressed image
- Converts all Sybase 11 databases to Sybase 11.0.3.3 format
- Upgrades the backup server

HP OpenView Script

Ascend provides an installation script (install_cvux) that:

- Sets up the system
- Upgrades HP OpenView 4.11 to 5.01
- Installs HP OpenView patches PSOV_02091 and PSOV_02161

Upgrade Path

Table 1-2 lists the ordered sequence in which you upgrade NMS software:

Table 1-2. NMS Upgrade Path

Action	Described In
Upgrade to Solaris 2.6	Chapter 2
Install Solaris 2.6 cluster patches	Chapter 2
Prepare for Sybase 11.0.3.3 upgrade	Chapter 3
Upgrade to Sybase 11.0.3.3	Chapter 4
Upgrade to HP OpenView 5.01	Chapter 5
Install HP OpenView patches	Chapter 5
Upgrade to NavisCore xx.xx.xx.xx	See the latest <i>Software Release Notice for NavisCore Release xx.xx.xx.xx</i> .

Upgrading to Solaris 2.6

When you upgrade your system, the new software merges with local modifications of the existing system.

Before You Begin

Prior to upgrading to Solaris 2.6, verify you:

- Have at least 150 MB of free space in */usr*
- Backed up your system (for more information, see the *Network Management Station Installation Guide*)



If your */usr* file system has 300 MB of *total* space (that is, the **df -k** command output displays 288 MB in the "kbytes" column for */usr*), call the Ascend Technical Assistance Center (TAC) to discuss upgrade issues. It is important that you consult the TAC because Ascend previously recommended 300 MB of total space for */usr*; however, if you followed this recommendation, 150 MB of free space in */usr* has not been left free for the Solaris 2.6 upgrade.



Do not proceed without saving the Sybase and HP OpenView databases. A **ufsdump** will not preserve the Sybase raw device databases.

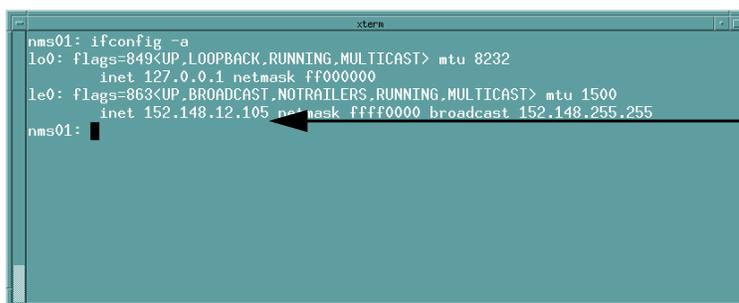
Upgrading to Solaris 2.6

To upgrade to Solaris 2.6:

1. As the root user, enter the following command to display the IP address and subnet mask that you are currently using:

```
ifconfig -a
```

For example:



```
nms01: ifconfig -a
lo0: flags=849<UP,LOOPBACK,RUNNING,MULTICAST> mtu 8232
    inet 127.0.0.1 netmask ff000000
le0: flags=863<UP,BROADCAST,NOTRAILERS,RUNNING,MULTICAST> mtu 1500
    inet 152.148.12.105 netmask ffff0000 broadcast 152.148.255.255
nms01: █
```

In this example, the IP address is 152.148.12.105, and the subnet mask is 152.148

Figure 2-1. IP Address and Subnet Mask Window

2. Make a note of the displayed IP address and subnet mask. You will need this information during the upgrade.

3. Save the contents of the `/etc/hosts` file by entering:

```
cp /etc/hosts /etc/hosts.orig
```

The reason why you are saving this file is because it is overwritten during the upgrade.

4. If you are using an external CD-ROM drive, verify that the jumper switch, located on the back of the CD-ROM drive, is set to SCSI ID 6.
5. Hold down the Stop key and press the **a** key. The system displays the ok prompt.
6. Insert the Solaris 2.6 CD into the CD-ROM drive.
7. At the ok prompt, enter:

```
boot cdrom
```

The system boots the operating system from the CD-ROM drive. After several minutes, the system displays the following message:

```
Starting open windows...
```

The Solaris logo appears and the Solaris Install Console window displays the following message:

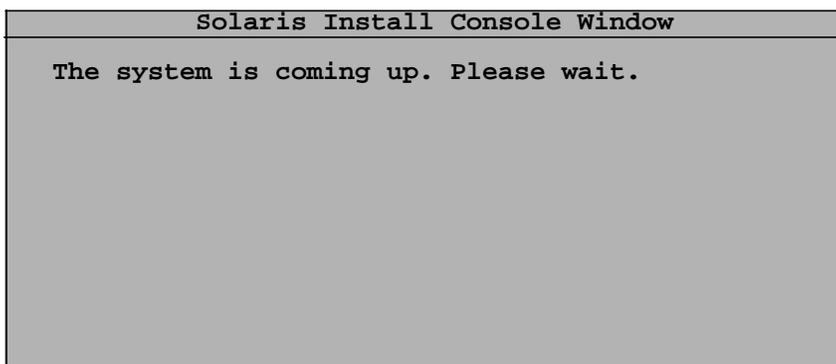


Figure 2-2. Solaris Install Console Window

8. At the Select Language and Locale dialog box, choose Continue.
9. At the Solaris Installation Program dialog box, choose Continue.
10. At the Identify This System dialog box, choose Continue.
11. At the Host Name dialog box, enter [*your host name*] (for example, **nms01**) and choose Continue.
12. At the Network Connectivity dialog box, select **Yes** and choose Continue.
13. At the Internet Protocol (IP) Address dialog box, enter [*your current IP address*] and choose Continue.
14. At the Confirm Information dialog box, confirm the information displayed. If it is correct, choose Continue. To change any information, choose Change.

The Solaris Install Console window displays the following message:

```
Starting remote procedure call (RPC) services: sysidnis
```



Prior to **step 15**, consult your system administrator if you are using a name service. Ascend recommends you select **None** if you are not using a name service.

15. At the Name Service dialog box, select **None** and choose Continue.



If you are running Network Information Services (NIS), consult your System Administrator.

- 16.** At the Confirm Information dialog box, confirm the information displayed. If it is correct, choose Continue. To change any information, choose Change.
- 17.** At the Subnets dialog box, select **Yes** to make this system part of a subnet. Choose Continue.
- 18.** At the Netmask dialog box, enter [*your current subnet mask*] and choose Continue.
- 19.** At the Time Zone dialog box, select **Geographic region** and choose Set.
- 20.** At the Geographic Region dialog box, select a region from the list on the left and a time zone from the list on the right. Choose Continue.
- 21.** At the Date and Time dialog box, accept the default date and time or enter new values. Choose Continue.
- 22.** At the Confirm Information dialog box, confirm the information displayed. If it is correct, choose Continue. To change any information, choose Change.

The Solaris Install Console window displays several messages. For example:

```
Solaris Install Console Window
System Identification is completed.
Starting Solaris installation program...
Executing JumpStart preinstall phase...
Searching for SolStart directory...
Checking rules.ok file...
Using begin script: install_begin
Using finish script: patch_finish
Executing SolStart preinstall phase...
Executing begin script "install_begin"...
Begin script install_begin execution completed.
```

Figure 2-3. Solaris Install Console Window

23. At the Solaris Interactive Installation dialog box, choose **Upgrade**.
24. At the Select Languages dialog box, select the desired language(s) and choose Add and Continue, or choose Continue to only accept the default (English).

The Analyzing System dialog box appears. The Solaris 2.6 software checks if the system can be upgraded. This includes checking for sufficient disk space (*e.g.* 250 MB free space in /usr).
25. At the Customize Existing Software dialog box, choose Customize.
26. At the Customize Software dialog box (under the Software Clusters and Packages section), unselect JavaVM (a blank gray box indicates JavaVM is unselected). Choose OK.
27. At the Customize Software dialog box, choose Continue.
28. At the Profile dialog box, verify the profile you created and choose Begin Upgrade.

The Upgrading Solaris Software - Progress dialog box appears, indicating the progress of the upgrade. When the upgrade completes, the Upgrading Solaris Software - Progress dialog box displays "Upgrade Complete."
29. In the Solaris Install Console dialog box, at the # prompt enter **init 6** to reboot the system.

After system reboot, the following message appears:

```
*****
```

```
This system is configured to conserve energy.  
After 30 minutes without activity, the system state will be  
saved to disk and the system will be powered off  
automatically.
```

```
A system that has been suspended in this way can be restored  
back to exactly where it was by pressing the power key.  
The definition of inactivity and the timeout are user  
configurable. The dtpower (1m) man page has more  
information.
```

```
*****
```

```
Do you wish to accept this default configuration, allowing  
your system to save its state then power off automatically  
when it has been idle for 30 minutes? (If this system is used  
as a server, answer n. By default autoshtutdown is  
enabled.) [y, n, ?]
```

30. Enter **n**.

The following message appears:

Autoshutdown has been disabled.

Should the system save your answer so it won't need to ask
The question again when you next reboot? (By default the
Question will not be asked again.) [y, n, ?] y

31. Enter **y**.

The system displays the console login prompt.

32. At the console login prompt, log in as the root user and enter the root password.
The system returns a # prompt (the default shell prompt for the root user).

33. When the software prompts you for a windowing system, select either Common
Desktop Environment or OpenWindows.

34. Open Xterm window and enter:

```
eject cdrom
```

35. Remove the CD-ROM from the CD-ROM drive.

36. Proceed to [“Installing the Solaris Cluster Patch” on page 2-8.](#)

Installing the Solaris Cluster Patch

You must install the Solaris 2.6 cluster patch file *2.6_Recommended.tar.Z* on your system. There are several versions of the *2.6_Recommended.tar.Z* file (*Patch.0*, *Patch.1*, *Patch.2*, *Patch.3*). Select the latest numerical version.

Perform the following steps to install the Solaris 2.6 cluster patch:

1. Put the Solaris 2.6 cluster patch file in */tmp*.
2. In an Xterm window, enter:

```
cd /tmp
uncompress 2.6_Recommended.tar.z
tar xvf 2.6_Recommended.tar
```



The minimum kernel patch is 103640-12.

3. When the # prompt appears, enter:

```
cd /tmp/2.6_Recommended/
./install_cluster
```

After several lines of output, the following message appears:

```
Are you ready to continue with install? [y/n]:
```

4. Enter **y** to continue.

The installation takes several minutes to complete.

5. When the # prompt appears, enter:

```
init 6
```

6. Proceed to [“Editing the New Solaris 2.6 Inittab File”](#) on page 2-9.

Editing the New Solaris 2.6 Inittab File

When you upgrade to Solaris 2.6, Solaris loads a new version of the `/etc/inittab` file and renames the existing `/etc/inittab` file. As part of the NavisCore installation, you added a line to the `inittab` file so that the system would invoke the Ascend tftp daemon to listen to the default tftp port for requests rather than using `inetd`. You must edit the new version of the `inittab` file to include the line that invokes the Ascend tftp daemon.

Use the following steps to add the line to `inittab`:

1. At the Login prompt, enter `root`. When prompted for root password, enter `[root password]`.

2. At the `#` prompt, enter:

```
vi /etc/inittab
```

3. While holding down the Shift key, type `$G` to go to the end of the file.
4. While holding down the Shift key, type `A` and press Return to append a line onto the file.
5. At the end of the file, type:

```
tf:3:respawn:/opt/CascadeView/bin/tftpserv > /dev/null 2>&1
```

These commands invoke the Ascend tftp daemon to listen to the default tftp port for requests, rather than using `inetd`. No tracing is enabled.

6. Press the Escape key.
7. Type:
8. At the `#` prompt, type the following command:

```
init 0
```

This command instructs the system to read the `inittab` file. The system then starts the Ascend tftp daemon.



You cannot retrieve and display trace and status information if you use Sun Microsystems's tftp daemon. If you use Sun Microsystems's tftp daemon, configure it to run with the command: `in.tftpd/tfpboot`. Do not run TFTP in secure mode (with the `-s` option) or switch-download and configuration-sync operations will fail. Ascend does not support Sun Microsystems's tftp daemon on all Ascend switches.

9. Proceed to [Chapter 3, "Completing Sybase Prerequisite Tasks."](#)

Completing Sybase Prerequisite Tasks

This chapter describes the prerequisite tasks you must complete before upgrading to Sybase 11.0.3.3. Ascend recommends that you perform the following sequential steps:

- Check the Sybase Version
- Complete the Sybase 11.0.3.3 upgrade worksheet
- Log off all Sybase users
- Back up your databases
- Run the disk check script



If you have a two-system configuration (Sybase installed on one workstation, HP OpenView and NavisCore installed on another workstation), you must perform prerequisite tasks and upgrade to Sybase 11.0.3.3 on the Sybase Server workstation.

Before You Begin

Prior to completing prerequisite tasks, verify you:

- Installed Sybase 11.0.2
- Upgraded to Solaris 2.6

Checking the Sybase Version

As stated in the Sybase requirements section, Ascend supports upgrades from Sybase 11.0.2 to Sybase 11.0.3.3. If you are currently running Sybase 11.0.3 or higher, call the Technical Assistance Center at **1-800-DIAL-WAN**.

To check your Sybase version:

1. Initiate an isql session by entering:

```
isql -U sa -P [SA password]
```

For example, superbase.

2. Check the Sybase version that is currently running by entering:

```
1> select @@version  
2> go
```

3. Either of the following messages should display:

```
-----  
SQL Server/11.0.2/P/[Platform]/[Operating System]/SWR "####"  
Rollup/OPT/[Date]
```

Or

```
SQL Server/11.0.2/P/[Platform]/[Operating System]/EBF  
"####"/OPT/[Date]
```

where **[Platform]** is the platform you are running Sybase on, **[Operating System]** is the operating system you are running Sybase on, and **[Date]** is the current date.



If the output shows any SQL Server other than 11.0.2, do not proceed. Call the Technical Assistance Center at **1-800-DIAL-WAN**.

4. Proceed to **“Completing the Sybase Upgrade Worksheet”**.

Completing the Sybase Upgrade Worksheet

Fill out the Sybase upgrade worksheet in [Appendix C](#).

Logging Off All Sybase Users

To log off all Sybase users:

1. From the HP OpenView File menu, choose File ⇒ Exit to exit NavisCore.

2. Log in as the root user by entering:

```
su - root
```

When prompted, enter [*root password*].

3. Shut down HP OpenView services by entering:

```
/usr/OV/bin/ovstop
```

4. Log in as the sybase user:

```
su - sybase
```

When prompted, enter [*sybase password*].

5. Verify the Sybase 11 Server is running by entering:

```
showserver
```

The following window appears:



```

$ showserver
      UID  PID  PPID  C  STIME  TTY  TIME  COMD
sybase  728   727   80  Aug 13  pts/1  30:09 /opt/sybase/bin/dataserver
-d/dev/rdisk/c0t1d0s4 -e/opt/sybase/install/errorlog_
$

```

Figure 3-1. Showserver Window

If the server is not running, proceed to [Step 8 on page 3-5](#).

6. Log into isql by entering:

```
isql -U sa -P [SA password]
```

For example, superbases.

7. Shut down the Sybase 11 Server by entering:

```
1> shutdown
2> go
```

The following message appears:

```
Server SHUTDOWN by request
The SQL Server is terminating this process.
DB-LIBRARY error:
    Unexpected EOF from SQL Server.
```

8. Change to the install directory by entering:

```
cd install
```

9. Restart the Sybase 11 Server by entering either:

- `startserver -f RUN_CASCADE`
- `RUN_[Sybase server name]`

The screen displays several lines of output, ending with the line:

```
'iso_1' (ID = 1)
```

10. Proceed to **“Backing Up Your Databases”**.

Backing Up Your Databases

The primary method of backing up your Sybase database is the Sybase `isql dump` command.

Backing Up and Verifying Your Databases

You must back up your databases before performing the upgrade. This enables you to restore Sybase 11.0.2 if necessary. In addition, you must verify the integrity of your databases before performing the upgrade.

There are two procedures for backing up your databases:

- If this is your *first* database backup, follow the instructions in “[Backing Up to the Local Backup Server the First Time.](#)”



Your first database backup should have been performed already since this is an upgrade.

- If this is not your *first* backup, follow the instructions in “[Subsequent Backups to the Local Backup Server.](#)”



Ascend recommends customers periodically test the integrity of Sybase and HP OpenView backups by loading the backups on a separate test SunSPARC workstation.

Backing Up to the Local Backup Server the First Time

To back up the Sybase 11.0.2 Server to the Local Backup Server the *first* time:

1. Log in as the Sybase user by entering:

```
su - sybase
```

If you have a two-system configuration, Sybase on one workstation, HP/NavisCore on another, log on to either the Sybase or HP/NavisCore server workstation.

2. Create a backup directory by entering:

```
mkdir backup
```

3. Enter the following command:

```
script /opt/sybase/backup/sybck.out
```

The script command saves any database output from the `dbcc checkdb` command (Step 5) and places it in the `sybck.out` file. In addition, output is displayed on screen.

4. Initiate an `isql` session by entering:

```
isql -U sa -P [SA password]
```

For example, `superbase`.

5. Check for database errors by entering:

```
1> dbcc checkdb(master)
2> go

1> dbcc checkdb(cascview)
2> go

1> dbcc checkalloc(master)
2> go

1> dbcc checkalloc(cascview)
2> go

1> dbcc checkcatalog(master)
2> go

1> dbcc checkcatalog(cascview)
2> go

1> quit
```

The following message is normal and should be disregarded:

```
*** NOTICE: Notification of log space used/free cannot be
reported because the log segment is not on its own device.
```



If you encounter errors when you perform the `dbcc checkdb` command, do not proceed any further and call the Technical Assistance Center:
1-800-DIAL-WAN (1-800-342-5296) for the United States and Canada
0-800-96-2229 (in the United Kingdom)
1-978-952-7299 (outside the U.S., Canada, and the United Kingdom)

6. Stop the script command by holding down the `<Ctrl>` button, then pressing the `d` button.
7. Check for errors in the `/opt/sybase/backup/sybck.out` file.

8. Initiate an isql session by entering:

```
isql -U sa -P [SA password]
```

For example, superbase.

9. If there are no dbcc errors, save the master and cascvie databases by entering:

```
1> dump database master to  
"/opt/sybase/backup/masterbackup.[Date]"  
2> go
```

```
1> dump database cascvie to  
"/opt/sybase/backup/cascbackup.[Date]"  
2> go
```

```
1> quit
```

The *[Date]* refers to today's date in MM-DD-YY format.

10. Proceed to ["Running the Disk Check Script."](#)

Subsequent Backups to the Local Backup Server

Use these steps to back up the Sybase 11 Server to the Local Backup Server on a daily basis.



The Ascend Technical Assistance Center strongly recommends that you back up the Sybase Server daily.

1. Log in as the Sybase user by entering:

```
su - sybase
```

If you have a two-system configuration, Sybase on one workstation, HP/NavisCore on another, log on to either the Sybase or HP/NavisCore server workstation.

2. Enter:

```
script /opt/sybase/backup/sybck.out
```

The script command saves any database output from the dbcc checkdb command ([Step 4](#)) and places it in the *sybck.out* file. In addition, the output is displayed on screen.

3. Initiate an isql session by entering:

```
isql -U sa -P [SA password]
```

For example, superbase.

4. To check the consistency of the database, enter:

```
1> dbcc checkdb(master)
2> go

1> dbcc checkdb(cascview)
2> go

1> dbcc checkalloc(master)
2> go

1> dbcc checkalloc(cascview)
2> go

1> dbcc checkcatalog(master)
2> go

1> dbcc checkcatalog(cascview)
2> go

1> quit
```

The following message is normal and should be disregarded:

```
*** NOTICE: Notification of log space used/free cannot be
reported because the log segment is not on its own device.
```



If you encounter errors when you perform the `dbcc checkdb` command, do not proceed any further and call the Technical Assistance Center:
1-800-DIAL-WAN (1-800-342-5296) for the United States and Canada
0-800-96-2229 (in the United Kingdom)
1-978-952-7299 (outside the U.S., Canada, and the United Kingdom)

5. Stop the script command by holding down the <Ctrl> button, then pressing the **d** button.
6. Check for errors in the file `/opt/sybase/backup/sybck.out`
7. Initiate an isql session by entering:

```
isql -U sa -P [SA password]
```

For example, superbase.

8. Save the transaction log by entering:

```
1> dump transaction cascview to
"/opt/sybase/backup/transbackup.[Date]"
2> go
```

The `[Date]` refers to today's date in MM-DD-YY format.

9. Save the master and cascview databases by entering:

```
1> dump database master to  
"/opt/sybase/backup/masterbackup.[Date]"  
2> go
```

```
1> dump database cascview to  
"/opt/sybase/backup/cascbackup.[Date]"  
2> go
```

```
1> quit
```

The *[Date]* refers to today's date in MM-DD-YY format.

The backup procedures now require you to bulk copy out your Sybase database.

10. If you do not have a directory to save the bulk copy files, create a directory by entering:

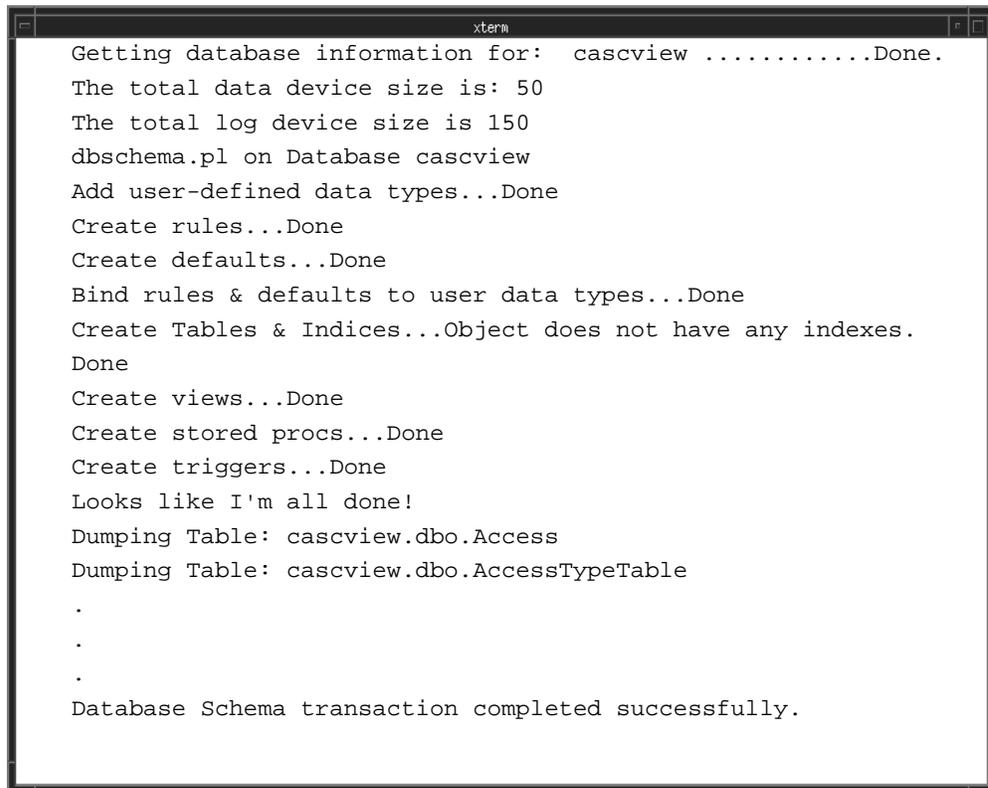
```
mkdir /opt/sybase/backup/storedb
```

11. Bulk copy the database to the storedb directory by entering:

```
/opt/CascadeView/bin/cv-copydb.sh out cascview  
[SA user password] /opt/sybase/backup/storedb
```

For example, *[SA user password]* could be superbase.

Below is sample output. Tables vary with each NavisCore release.



```
xterm
Getting database information for:  cascview .....Done.
The total data device size is: 50
The total log device size is 150
dbschema.pl on Database cascview
Add user-defined data types...Done
Create rules...Done
Create defaults...Done
Bind rules & defaults to user data types...Done
Create Tables & Indices...Object does not have any indexes.
Done
Create views...Done
Create stored procs...Done
Create triggers...Done
Looks like I'm all done!
Dumping Table: cascview.dbo.Access
Dumping Table: cascview.dbo.AccessTypeTable
.
.
.
Database Schema transaction completed successfully.
```

Figure 3-2. Bulk Copy Output

A file called CVCOPY_cascview_data.tar is created in the */opt/sybase/backups/storedb* directory.

12. Proceed to **“Running the Disk Check Script.”**

Running the Disk Check Script



You must run the disk check script prior to upgrading to Sybase 11.0.3.3. The script checks critical information about your databases.

To run the disk check script:

1. Log in as root by entering:

```
su - root
```
2. Use either procedure in [Table 3-1](#) to run the Sybase installation script:



See the Sybase 11.0.3.3 worksheet in [Appendix C](#) for your media type.

Table 3-1. Sybase Installation Media Types

Media Type	Procedure
CD-ROM	<ol style="list-style-type: none">1. Insert the CD-ROM into the CD-ROM drive.2. In an Xterm window, change to the <i>cv_scripts</i> directory by entering: <pre>cd /cdrom/cdrom0/cv_scripts</pre>3. Run the Sybase installation script by entering: <pre>./check_sys</pre>
From Ascend's FTP Server	<ol style="list-style-type: none">1. Put the Sybase tar file in the <i>/opt</i> directory.2. In an Xterm window, enter: <pre>cd /opt</pre>3. Extract only the scripts from the Sybase tar file by entering: <pre>tar xvf /opt/syb_install.02.00.00.00 cv_scripts</pre>4. Change to the <i>cv_scripts</i> directory by entering: <pre>cd cv_scripts</pre>5. Run the Sybase installation script by entering: <pre>./checksys</pre>

See your Sybase 11.0.3.3 Upgrade Worksheet to complete the following steps.

6. At the “What is your Sybase Home Directory [default=/opt/sybase]” prompt, do one of the following:
 - Press Return to accept the default of /opt/sybase.
 - Enter [*Sybase release path*].
7. At the “What is the Database Server Name [default=CASCADE]” prompt, do one of the following:
 - Press Return to accept the default of CASCADE.
 - Enter [*Existing Database Server Name*].
8. At the “What is your Sybase SA Passwd” prompt, enter [*database SA Password*].
9. At the “Do you wish to run the database consistency utility (e.g. dbcc) [Y]” prompt, press Return.
10. At the “Where would you like to save the output to [default=/tmp/check_sys.21105]” prompt, do one of the following:
 - Press Return to accept the default of /tmp/check_sys.21105.
At the end of the filename, the script appends a unique number specific to the output, for example “21105.”
 - Enter [*filename*].



The output is also saved to an additional file, which is a filename with a **.cascade** extension. For example, if you save the output to the default file, the filename is **check_sys.21105.cascade**.

The script begins checking the system and the following lines appear:

This may take a few minutes

.....
.....
.....

After several minutes, the Sybase configuration information appears, which can be several hundred lines of text.

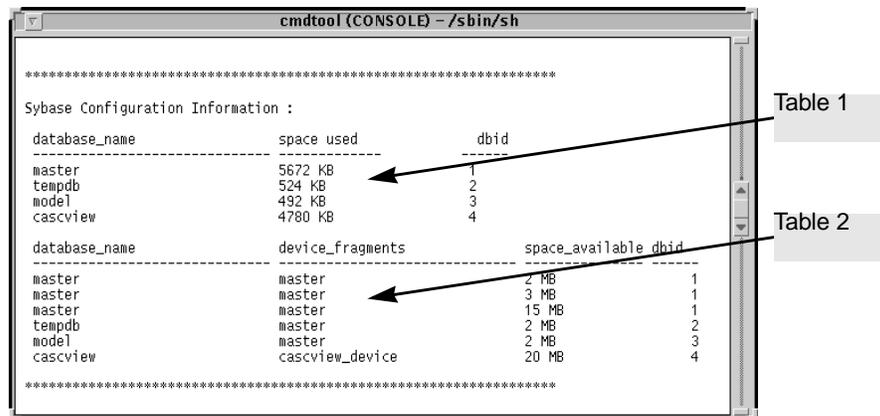


Figure 3-3. Check_Sys Script Output

When the output is complete, the check_sys script has finished. Proceed to the following sections to interpret the results and validate the condition of the databases.

Using the Disk Check Script Output

When the check_sys script completes, see [Figure 3-3](#) and use the table information to calculate and verify Sybase database sizes, file system sizes, and database integrity.

Checking the Sybase Database Size

1. In Table 1 (see [Figure 3-4](#)), find the space used for each database. Make note of this number, rounding to the next highest whole integer. In the example below, the space used for the master database is 5672 KB.

database_name	space used	dbid
master	5672KB	1
tempdb	524KB	2
model	492KB	3
caserview	4780KB	4

Figure 3-4. Table 1

2. Convert the space used to megabytes by dividing by 1000, rounding to the next highest whole integer. Make note of this number. In the example above, the converted space used for the master database is 6 MB ($5672/1000 = 5.672$ or 6).
3. In Table 2 (see [Figure 3-5](#)), to calculate the total space available for each database, add the sizes of the individual device fragments listed in the “space_available” column. Add only those fragments that have the same database ID (in the “dbid” column). Make note of the total space available. In the example below, the total space available for the master database is 20 MB ($2 + 3 + 15$).

database_name	device_fragments	space_available	dbid
master	master	2MB	1
master	master	3MB	1
master	master	15MB	1
tempdb	master	2MB	2
model	master	2MB	3
caserview	caserview_device	20MB	4

Figure 3-5. Table 2

Completing Sybase Prerequisite Tasks

Running the Disk Check Script

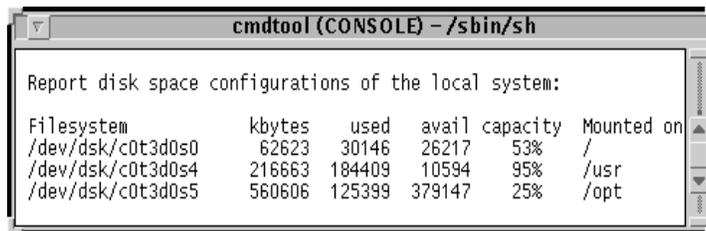
4. To upgrade from Sybase 11.0.2 to Sybase 11.0.3.3, the Sybase databases require 2 MB of free space. Verify each Sybase database has at least 2 MB of free space available using the tables above.



If each database (cascview, master) passes the space test, proceed to the next step. If any database fails this test, delete the transaction log by using the **dump transaction with truncate_only** command in each database (see the Sybase Administrator manuals for more information) and re-run the test. If any database fails again, increase the size of your database before you proceed.

Checking the File System

The information shown in [Figure 3-6](#) lists the disk space used on your local file systems. This information includes file system name, size in kbytes, space used, space available, capacity, and mounted on information.



```
Report disk space configurations of the local system:

Filesystem      kbytes  used  avail capacity  Mounted on
/dev/dsk/c0t3d0s0  62623  30146  26217   53%      /
/dev/dsk/c0t3d0s4 216663 184409 10594   95%     /usr
/dev/dsk/c0t3d0s5 560606 125399 379147  25%     /opt
```

Figure 3-6. Local System Disk Space Window

The Sybase upgrade requires you to have enough space in certain filesystems. This space requirement varies according to your upgrade scenario:

Scenario 1

If you receive the Sybase media from Ascend's FTP server, you need 512 MB of free space in */opt* for the following reasons:

- The Sybase 11.0.3.3 tar file is approximately 184 MB, so you need to store it temporarily in a directory in */opt* that has 184 MB free.
- Once you store the tar file in the temporary directory, you need to extract the tar file to another temporary directory in */opt*.
- During the upgrade, the 40 MB Sybase 11.0.2 file (*/opt/sybase*) is overwritten by the 184 MB Sybase 11.0.3.3 file. Therefore, you need an additional 144 MB of free space in */opt/sybase*.

When you perform a final calculation, you need 512 MB of free space in */opt*.

Scenario 2

If you receive the Sybase media on CD, you need 328 MB of free space in */opt* for the following reasons:

- You need to extract the 184 MB Sybase 11.0.3.3 tar file from the CD-ROM device to a temporary directory in */opt* (*/opt/tmp*).
- During the upgrade, the 40 MB Sybase 11.0.2 directory (*/opt/sybase*) is overwritten by the 184 MB Sybase 11.0.3.3 file. Therefore, you need an additional 144 MB of free space in */opt/sybase*.

Scenario 3

If you receive the Sybase media from Ascend's FTP server or on CD ROM, and you store the 184 MB tar file in a temporary directory not in */opt*, you need 184 MB of free space in the filesystem where you temporarily store the file, and */opt* needs 328 MB free space for the following reasons:

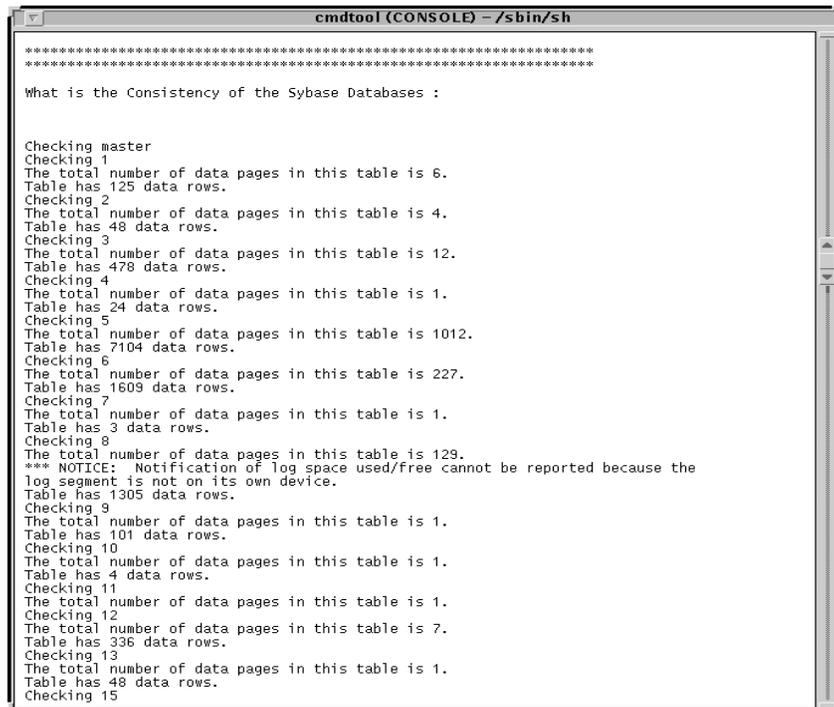
- You need to extract the 184 MB Sybase 11.0.3.3 tar file to a temporary directory in */opt*.
- During the upgrade, the 40 MB Sybase 11.0.2 file (*/opt/sybase*) is overwritten by the 184 MB Sybase 11.0.3.3 file. Therefore, you need an additional 144 MB of free space in */opt/sybase*.



If you have disk space questions, contact the Technical Assistance Center at:
1-800-DIAL-WAN (1-800-342-5296) for the United States and Canada
0-800-96-2229 (in the United Kingdom)
1-978-952-7299 (outside the U.S., Canada, and the United Kingdom)

Validating Database Integrity

In the information shown in [Figure 3-7](#), the system reports the size of each table. This indicates the databases are in good condition. However, if any databases are marked “suspect” or “read only,” the database integrity is not suitable for the upgrade.



```
cmdtool (CONSOLE) - /sbin/sh
*****
*****
What is the Consistency of the Sybase Databases :

Checking master
Checking 1
The total number of data pages in this table is 6.
Table has 125 data rows.
Checking 2
The total number of data pages in this table is 4.
Table has 48 data rows.
Checking 3
The total number of data pages in this table is 12.
Table has 478 data rows.
Checking 4
The total number of data pages in this table is 1.
Table has 24 data rows.
Checking 5
The total number of data pages in this table is 1012.
Table has 7104 data rows.
Checking 6
The total number of data pages in this table is 227.
Table has 1609 data rows.
Checking 7
The total number of data pages in this table is 1.
Table has 3 data rows.
Checking 8
The total number of data pages in this table is 129.
*** NOTICE: Notification of log space used/free cannot be reported because the
log segment is not on its own device.
Table has 1305 data rows.
Checking 9
The total number of data pages in this table is 1.
Table has 101 data rows.
Checking 10
The total number of data pages in this table is 1.
Table has 4 data rows.
Checking 11
The total number of data pages in this table is 1.
Checking 12
The total number of data pages in this table is 7.
Table has 336 data rows.
Checking 13
The total number of data pages in this table is 1.
Table has 48 data rows.
Checking 15
```

Figure 3-7. Sybase Database Consistency Window

Proceed to [Chapter 4, “Upgrading to Sybase 11.0.3.3.”](#)

Upgrading to Sybase 11.0.3.3

This chapter provides instructions on upgrading Sybase 11.0.2 to Sybase 11.0.3.3. The upgrade process requires you to:

- Upgrade to Sybase 11.0.3.3
- Upgrade local backup server
- Back up Sybase 11.0.3.3 databases

Before You Begin

Prior to upgrade, verify you completed the prerequisite tasks in [Chapter 3](#).

Running the Upgrade Script

The upgrade script:

- Installs the Sybase 11.0.3.3 software on the system.
- Saves the Sybase 11.0.2 software in a tar and compressed image.
- Converts all Sybase 11.0.2 databases to Sybase 11.0.3.3 format.
- Upgrades local backup server.

To run the upgrade script:

1. Log in as root by entering:

```
su - root
```

When prompted, enter *[root password]*.

2. Use either procedure in [Table 4-1](#) to run the Sybase installation script:



See the Sybase 11.0.3.3 worksheet in [Appendix C](#) for your media type.

Table 4-1. Sybase Installation Media Types

Media Type	Procedure
CD-ROM	<ol style="list-style-type: none">1. Insert the Sybase CD-ROM into the CD-ROM drive.2. In an Xterm window, change to the <i>cv_scripts</i> directory by entering: <code>cd /cdrom/cdrom0/cv_scripts</code>3. Run the Sybase installation script by entering: <code>./install_sybase</code>

Table 4-1. Sybase Installation Media Types (Continued)

Media Type	Procedure
From Ascend's FTP Server	<ol style="list-style-type: none">1. In an Xterm window, change to the <i>cv_scripts</i> directory by entering: cd /opt/cv_scripts This step assumes you already extracted the scripts from the Sybase tar file and put them in <i>/opt/cv_scripts</i>.2. Run the Sybase installation script by entering: ./install_sybase

The following message appears:

```
Verifying super user privileges...
```

```
Would you like to view (tail -f) the install log (default=y)?
```

The tail window allows users to view a log of the installation process.

3. Press Return.



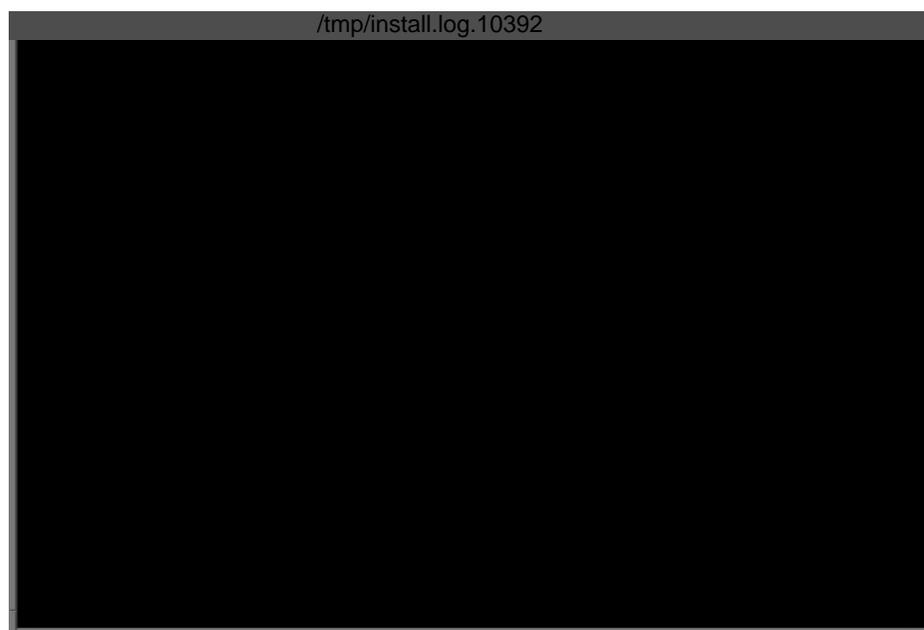
In a new Xterm window on the local system, run `xhost +` as the user who controls the system console. Executing this command enables you to display the installation log on the local system.

The following message appears:

What display should the install log xterm go to
(default:0.0)?

4. Press Return or enter **[local hostname]:0.0**.

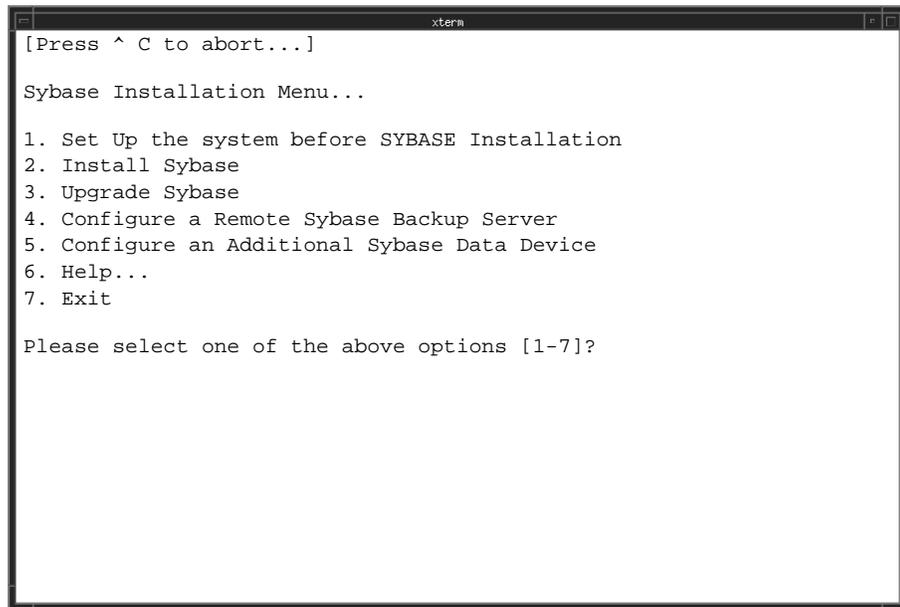
The tail window appears (Figure 4-1).



The pathname in the Xterm title
indicates where the installation

Figure 4-1. Tail Window

The Sybase Installation menu appears:

A terminal window titled 'xterm' showing the Sybase Installation Menu. The menu text is as follows:

```
[Press ^ C to abort...]  
Sybase Installation Menu...  
  
1. Set Up the system before SYBASE Installation  
2. Install Sybase  
3. Upgrade Sybase  
4. Configure a Remote Sybase Backup Server  
5. Configure an Additional Sybase Data Device  
6. Help...  
7. Exit  
  
Please select one of the above options [1-7]?
```

Figure 4-2. Sybase Installation Menu

5. At the Sybase Installation menu, enter **3**.

The following message appears:

```
Complete all upgrade prerequisites before continuing. See  
Sybase Upgrade Documentation.
```

```
Do you wish to continue? <y|n> [default=y]
```

6. Press Return to continue.

The following message appears:

```
Sybase Upgrade Information Request  
*****
```



See [Appendix C](#) to complete [step 7](#) through [step 12](#).

7. At the “Enter the Old Sybase release path (default=/opt/sybase)” prompt, do one of the following:
 - Press Return to accept the default of /opt/sybase.
 - Enter [*Sybase 11.0.2 release path*].
8. At the “Enter the New Sybase install path (default=/opt/sybase_new)” prompt, do one of the following:
 - Press Return to accept the default of /opt/sybase_new.
 - Enter [*Sybase 11.0.3.3 install path*].
9. At the “Enter the Database Server Name (default=CASCADE)” prompt, do one of the following:
 - Press Return to accept the default of CASCADE.
 - Enter [*Existing Database Server Name*].
10. At the “Enter the name for the error log (default=CENTRAL_err.log)” prompt, do one of the following:
 - Press Return to accept the default of CENTRAL_err.log.
 - Enter [*Sybase 11.0.3.3 Error log pathname*].
11. At the “Enter name for the Local Backup Server (default=SYB_BACKUP)?do one of the following:
 - Press Return to accept the default of SYB_BACKUP.
 - Enter [*Sybase 11.0.3.3 Local Backup Server name*].

- 12.** At the “Enter the Database SA Password” prompt, enter [*database SA Password*]. When prompted, re-enter the password and press Return.

The script verifies your password. If the password fails, the script exits. Restart the script using the procedures in “[Running the Upgrade Script](#)” on page 4-2.

- 13.** The script searches the `/etc/services` file to locate the TCP socket number. The installation messages vary according to your TCP socket configuration. Use either [Table 4-2](#) or [Table 4-3](#) to perform the appropriate step:

Table 4-2. Scenario 1

Message	Action
<p>If the script locates the TCP socket number in <code>/etc/services</code>, it displays the following message:</p> <pre>Setting TCP Socket device for Sybase ----- The Socket Number for SYBASE is 1025 The Socket Number for SYBASE BACKUP is 1026 Do you wish to continue? <y n> [default=y]</pre>	<p>Verify the TCP socket number is correct and press Return.</p>

Table 4-3. Scenario 2

Message	Action
<p>If the script locates the TCP number in the Sybase interfaces file, it displays the message:</p> <pre>Searching for the TCP Socket Numbers under /opt/sybase/ interfaces. It's possible that multiple entries exist. You will need to enter the current selection. I've found the following TCP Socket Numbers. 1025 1026 Enter the correct TCP Socket Number from the list above :</pre>	<p>1. Enter: [<i>the TCP socket number of Sybase</i>].</p>

Table 4-3. Scenario 2 (Continued)

Message	Action
<p>After you enter the TCP socket number, the script enters it in the <i>/etc/services</i> file. The following message appears:</p> <pre>Setting TCP Socket device for Sybase ----- The Socket Number for SYBASE is 1025 The Socket Number for SYBASE BACKUP is 1026 Do you wish to continue? <y n> [default=y]</pre>	<p>2. Verify the TCP socket number is correct and press Return.</p>



The TCP socket numbers for Sybase and Backup server in [Table 4-2](#) and [Table 4-3](#) are examples.

After performing the appropriate step, the following message appears:

```
Getting the Master Device currently being upgraded  
-----
```

The script searches for the partition on which the Master device is mounted. If it cannot locate the Master device, the script prompts you for the correct path.



The Master Partition Device may be different from the example below.

The system displays the following:

```
Searching.....Found.  
Master Partition Device=/opt/databases/master.dat  
Do you wish to continue? <y|n> [default=y]:
```

3. Press Return to continue.

The following message appears:

```
Finding Sybase System Procs Device, Please wait
```

The system displays the parameters you entered (**Figure 4-3** displays File System File parameters):

```
Sybase Upgrade Installation Parameters
*****

Parameter                                     Value
*****

0. Done Editing

1. SYBASE                                     /opt/sybase_new

1a. SYBASEOLD                                 /opt/sybase

2. DSQUERY                                    CENTRAL

3. HOSTNAME                                   central

4. BACKUP_HOSTNAME                           central

5. SYB_TCP_Sock                              1025

6. SYB_BACKUP_TCP_Sock                       1026

7. SA_USER                                   sa

8. SYB_ERR_LOG                               /opt/sybase_new/install/CENTRAL.log

9. SYB_MASTER_Dev                            /opt/databases/master.dat

10. SYB_Procs                                /opt/databases/sysprocsdev.dat

11. SYB_Procs_Size                           /opt/databses/sysprocsdev.dat

Enter the number of the paramter you wish to alter
```

Figure 4-3. Sybase Upgrade Parameters

- To change any device parameters, enter the number of the parameter and make the appropriate changes.
- Once you have made your changes, enter **0** and press Return to continue.

The following message appears:

```
Do you wish to extract Sybase Installation media 'y | n '
(default = 'y')?
```

- Press Return.

The following message appears:

```
Install the media in your local device now.
*****
```

Enter the full path of the media device:

7. Use one of the following examples:

- For CD ROM drives, enter:
`/cdrom/cdrom0/syb_install1.02.00.00.00`
- For files from Ascend's FTP server, enter:
`/opt/syb_install1.02.00.00.00`

See your Sybase 11.0.3.3 Upgrade Worksheet for the name of the media device.
The following message appears:

```
The device was found and is ready for extraction.  
Press Return to Continue...
```

8. Press Return.



Do not interrupt this process. The upgrade time varies according to your databases sizes. Call the Ascend Technical Assistance Center at one of the following numbers if the upgrade fails:
1-800-DIAL-WAN (1-800-342-5296) for the United States and Canada
0-800-96-2229 (in the United Kingdom)
1-978-952-7299 (outside the U.S., Canada, and the United Kingdom)

The system displays the following:

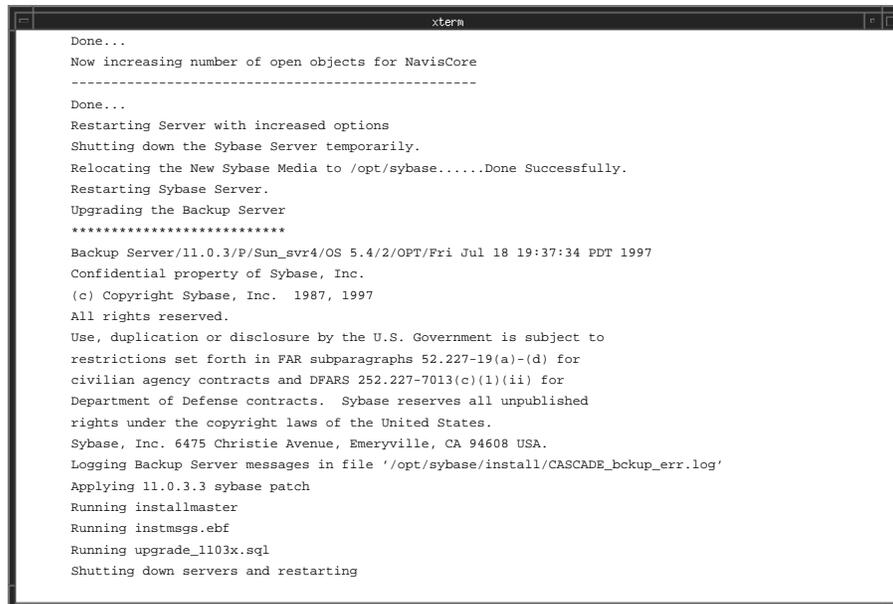
```
xterm
Extracting Sybase Installation Media from the device ...Done.
Running 'sybinit' and creating the sybase server...Install Sybase
Successful...
Increasing the Memory allocations to 20480 for improve performance ...
Increasing the Number of Remote Users
-----
By Default, the Sybase installation sets the number of user connections to
25. If you need to increase the total connections above 25 then enter the
number of connections you require.
Enter the number of user connections [default=25] ?
```

9. Do one of the following:

- Press Return to accept the default of 25.
- Enter [*Number of remote users*].

10. Press Return to continue.

The following messages appear:



```
xterm
Done...
Now increasing number of open objects for NavisCore
-----
Done...
Restarting Server with increased options
Shutting down the Sybase Server temporarily.
Relocating the New Sybase Media to /opt/sybase.....Done Successfully.
Restarting Sybase Server.
Upgrading the Backup Server
*****
Backup Server/11.0.3/P/Sun_svr4/OS 5.4/2/OPT/Fri Jul 18 19:37:34 PDT 1997
Confidential property of Sybase, Inc.
(c) Copyright Sybase, Inc. 1987, 1997
All rights reserved.
Use, duplication or disclosure by the U.S. Government is subject to
restrictions set forth in FAR subparagraphs 52.227-19(a)-(d) for
civilian agency contracts and DFARS 252.227-7013(c)(1)(ii) for
Department of Defense contracts. Sybase reserves all unpublished
rights under the copyright laws of the United States.
Sybase, Inc. 6475 Christie Avenue, Emeryville, CA 94608 USA.
Logging Backup Server messages in file '/opt/sybase/install/CASCADE_backup_err.log'
Applying 11.0.3.3 sybase patch
Running installmaster
Running instmsgs.ebf
Running upgrade_1103x.sql
Shutting down servers and restarting
```

Figure 4-4. Installation Messages



When the upgrade completes, the following occurs:

- The old Sybase directory is copied over by the new Sybase directory.
- The script saves the user-entered parameters (Figure 4-3) in the file *saveparams.[PID]*, where PID is the process ID. This number increments every time you run the upgrade script.



This guide does not provide instructions on upgrading a remote backup server. If you want to upgrade your remote backup server, call the Technical Assistance Center (TAC) at **1-800-DIAL-WAN**. To perform remote Sybase backups, see the *Network Management Station Installation Guide*.

11. Press Return.

The Sybase Installation Menu appears.

12. At the Sybase Installation Menu, enter **7** to exit.

13. Initiate an isql session by entering:

```
isql -U sa -P [SA password]
```

For example, superbase.

14. Check the Sybase version that is currently running by entering:

```
1> select @@version  
2> go
```

The following output should display:

```
-----  
SQL Server/11.0.3.3/P/Sun_srv4/OS 5.4/SWR 7934  
Rollup/OPT/Sun May 31 23:28:44 PDT 1998
```

15. If the correct output ([step 13](#)) is displayed, delete the `/opt/sybase1103.tar` file by entering:

```
rm /opt/sybase1103.tar
```

16. Proceed to [“Backing Up to the Local Backup Server the First Time”](#) on page 4-15

Backup Procedures

This section describes how to:

- Back up the Sybase 11.0.3.3 Server to the Local Backup Server the first time
- Perform subsequent Sybase 11.0.3.3 backups to the Local Backup Server
- Save Sybase 11.0.3.3 database to tape
- Change the SA password

The Technical Assistance Center recommends that you perform daily backups of the Sybase 11.0.3.3 Server. For more information on Sybase 11.0.3.3 backup procedures, see the *Sybase SQL Server System Administrator's Guide* and the *Sybase SQL Reference manual, Volumes 1 and 2*.



If you need to recover switch data in the cascvie database, contact the Technical Assistance Center for specific instructions. Do not attempt to restore this database without Ascend's help. You can contact the Technical Assistance Center at one of the following numbers:
1-800-DIAL-WAN (1-800-342-5296) for the United States and Canada
0-800-96-2229 (in the United Kingdom)
1-978-952-7299 (outside the U.S., Canada, and the United Kingdom)

Ascend recommends customers periodically test the integrity of Sybase and HP OpenView backups by loading the backups on a separate test SPARC workstation.



You can script the backup procedures to perform backups automatically. However, Ascend does not provide these scripts. These scripts are left to the customer's discretion.

Backing Up to the Local Backup Server the First Time

To back up the Sybase 11.0.3.3 Server to the Local Backup Server the *first* time:

1. Log in as the Sybase user by entering:

```
su - sybase
```

If you have a two-system configuration, Sybase on one workstation, HP/NavisCore on another, log on to either the Sybase or HP/NavisCore server workstation.

2. Create a backup directory by entering:

```
mkdir backup
```

3. Enter the following command:

```
script /opt/sybase/backup/sybck.out
```

The script command saves any database output from the dbcc checkdb command (step 5) and places it in the *sybck.out* file. In addition, output is displayed on screen.

4. Initiate an isql session by entering:

```
isql -U sa -P [SA password]
```

For example, superbase.

5. Check for database errors by entering:

```
1> dbcc checkdb(master)
```

```
2> go
```

```
1> dbcc checkdb(cascview)
```

```
2> go
```

```
1> dbcc checkalloc(master)
```

```
2> go
```

```
1> dbcc checkalloc(cascview)
```

```
2> go
```

```
1> dbcc checkcatalog(master)
```

```
2> go
```

```
1> dbcc checkcatalog(cascview)
```

```
2> go
```

```
1> quit
```

The following message is normal and should be disregarded:

```
*** NOTICE: Notification of log space used/free cannot be
reported because the log segment is not on its own device.
```



In addition, if you encounter errors when you perform the `dbcc checkdb` command, do not proceed any further and call the Technical Assistance Center: **1-800-DIAL-WAN** (1-800-342-5296) for the United States and Canada **0-800-96-2229** (in the United Kingdom) **1-978-952-7299** (outside the U.S., Canada, and the United Kingdom)

6. Stop the script command by holding down the `<Ctrl>` button, then pressing the `d` button.
7. Check for errors in the `/opt/sybase/backup/sybck.out` file.
8. Initiate an isql session by entering:

```
isql -U sa -P [SA password]
```

For example, superbase.
9. If there are no dbcc errors, save the master and cascvie databases by entering:

```
1> dump database master to
"/opt/sybase/backup/masterbackup.[Date]"
2> go

1> dump database cascvie to
"/opt/sybase/backup/cascbackup.[Date]"
2> go

1> quit
```

The `[Date]` refers to today's date in MM-DD-YY format.
10. Once you perform your first backup, proceed to [“Upgrading to HP OpenView 5.01.”](#)

Subsequent Backups to the Local Backup Server

Use these steps to back up the Sybase 11.0.3.3 Server to the Local Backup Server on a daily basis.



The Ascend Technical Assistance Center strongly recommends that you back up the Sybase Server daily.

1. Log in as the Sybase user by entering:

```
su - sybase
```

If you have a two-system configuration, Sybase on one workstation, HP/NavisCore on another, log on to either the Sybase or HP/NavisCore server workstation.

2. Enter the following command:

```
script /opt/sybase/backup/sybck.out
```

The script command saves any database output from the dbcc checkdb command (step 4) and places it in the *sybck.out* file. In addition, the output is displayed on screen.

3. Initiate an isql session by entering:

```
isql -U sa -P [SA password]
```

For example, superbase.

4. To check the consistency of the database, enter:

```
1> dbcc checkdb(master)
2> go

1> dbcc checkdb(cascview)
2> go

1> dbcc checkalloc(master)
2> go

1> dbcc checkalloc(cascview)
2> go

1> dbcc checkcatalog(master)
2> go

1> dbcc checkcatalog(cascview)
2> go

1> quit
```

The following message is normal and should be disregarded:

```
*** NOTICE: Notification of log space used/free cannot be
reported because the log segment is not on its own device.
```



In addition, if you encounter errors when you perform the `dbcc checkdb` command, do not proceed any further and call the Technical Assistance Center:
1-800-DIAL-WAN (1-800-342-5296) for the United States and Canada
0-800-96-2229 (in the United Kingdom)
1-978-952-7299 (outside the U.S., Canada, and the United Kingdom)

5. Stop the script command by holding down the `<Ctrl>` button, then pressing the `d` button.
6. Check for errors in the file `/opt/sybase/backup/sybck.out`.
7. Initiate an isql session by entering:

```
isql -U sa -P [SA password]
```

For example, superbase.

8. Save the transaction log by entering:

```
1> dump transaction cascview to
"/opt/sybase/backup/transbackup.[Date]"
2> go
```

The *[Date]* refers to today's date in MM-DD-YY format.

9. Save the master and cascview databases by entering:

```
1> dump database master to
"/opt/sybase/backup/masterbackup.[Date]"
2> go
```

```
1> dump database cascview to
"/opt/sybase/backup/cascbackup.[Date]"
2> go
```

```
1> quit
```

The *[Date]* refers to today's date in MM-DD-YY format.

The backup procedures now require you to bulk copy out your Sybase database.

10. If you do not have a directory to save the bulk copy files, create a directory by entering:

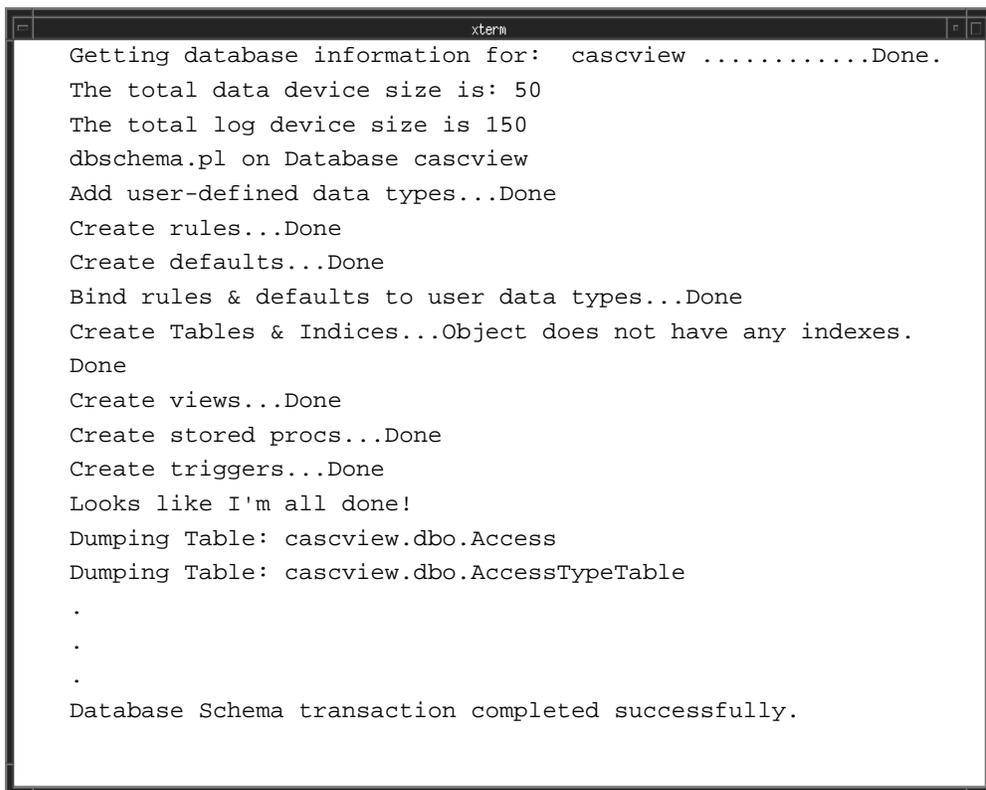
```
mkdir /opt/sybase/backup/storedb
```

11. Bulk copy the database to the storedb directory by entering:

```
/opt/CascadeView/bin/cv-copydb.sh out cascview
[SA user password] /opt/sybase/backup/storedb
```

For example, *[SA user password]* could be superbase.

Below is sample output. Tables vary with each NavisCore release.



```
xterm
Getting database information for:  cascvie . . . . .Done.
The total data device size is: 50
The total log device size is 150
dbschema.pl on Database cascvie
Add user-defined data types...Done
Create rules...Done
Create defaults...Done
Bind rules & defaults to user data types...Done
Create Tables & Indices...Object does not have any indexes.
Done
Create views...Done
Create stored procs...Done
Create triggers...Done
Looks like I'm all done!
Dumping Table: cascvie.dbo.Access
Dumping Table: cascvie.dbo.AccessTypeTable
.
.
.
Database Schema transaction completed successfully.
```

Figure 4-5. Bulk Copy Output

A file called CVCOPY_cascvie_data.tar is created in the */opt/sybase/backups/storedb* directory.

Saving Sybase 11.0.3.3 Databases to Tape

To back up the Sybase 11.0.3.3 databases to tape:

1. Back up the */opt/sybase/backup* directory to tape. For example, as the root user, enter:

```
tar cvf /dev/rmt/0 /opt/sybase/backup
```

If you have a two-system configuration (Sybase on one workstation, HP and NavisCore on another), you must log on to the HP/NavisCore workstation to save the Sybase and HP OV databases to tape.



Ascend recommends daily backups. The preceding steps create multiple backups because the date extension changes daily. Keep at least one weeks worth of backups.

Changing the System Administrator (SA) Password

For security purposes, Ascend recommends you change the default password (superbase) to one you define yourself. This password is similar to the UNIX root password. If you lose the SA password, you cannot log in as the system administrator.

To change the Sybase password:

1. At the # prompt, enter:

```
su - sybase
```

When prompted, enter [*Sybase password*].

2. Initiate an isql session by entering:

```
isql -U sa -P [SA user password]
```

For example, superbase.

3. At the prompts, enter:

```
1> sp_password [old SA user password],  
[new SA user password]  
2> go  
1> quit
```



Do not forget the SA password. You need the SA password to initiate an isql session.

4. Log in as root by entering **su - root**. When prompted, enter [*root password*].
5. To change the ownership of the */etc/rc0.d/K01sybase* file so only root can read it, enter:

```
chmod 444 /etc/rc0.d/K01sybase
```
6. If necessary, vi the file and change the default SA password to the password you defined above.

Upgrading to HP OpenView 5.01

Ascend provides an installation script (install_cvux) that:

- Upgrades HP OpenView 4.11 to 5.01
- Installs HP OpenView patches PSOV_02091 and PSOV_02161

Before You Begin

Before upgrading to HP OpenView 5.01, verify you:

- Installed HP OpenView 4.11
- Upgraded to Solaris 2.6
- Upgraded to Sybase 11.0.3.3

Upgrading to HP OpenView 5.01

This section requires you to:

- Load the Ascend-supplied HP OpenView media
- Extract the installation script from the media
- Run the installation script
- Verify */opt* file system has 75 MB of free space



You do not have to run HP OpenView when you upgrade to version 5.01.

To set up the system:

1. Verify you are logged in as root user. You should see a # prompt in the Xterm window.

If you are not logged in as root, enter:

```
su - root
```

When prompted, enter [*root password*].

2. Insert the HP OpenView CD-ROM into the CD-ROM drive.

3. Change to the scripts directory by entering:

```
cd /cdrom/cdrom0/cv_scripts
```

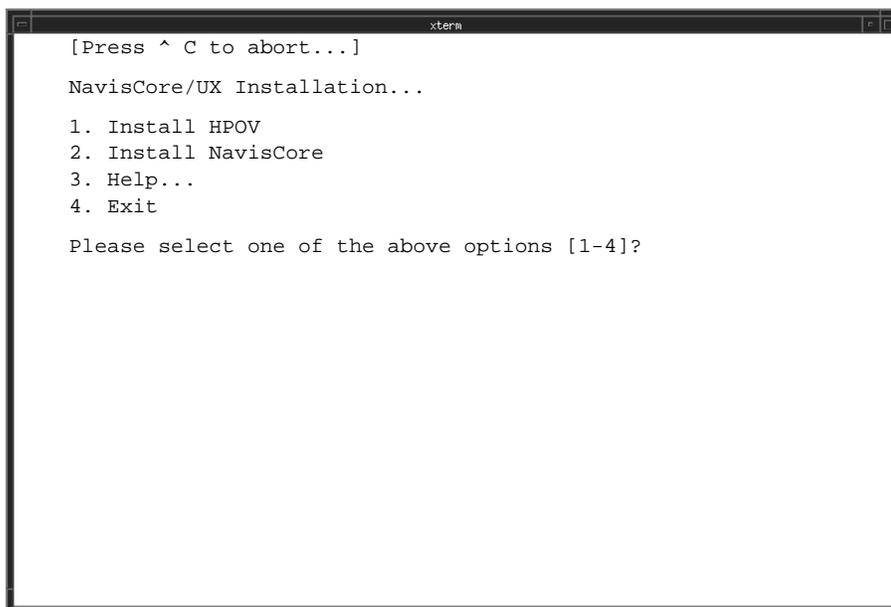
4. Run the HP OpenView installation script by entering:

```
./install_cvux
```

The following message appears:

```
Verifying superuser privileges.....
```

The NavisCore/UX Installation menu appears.

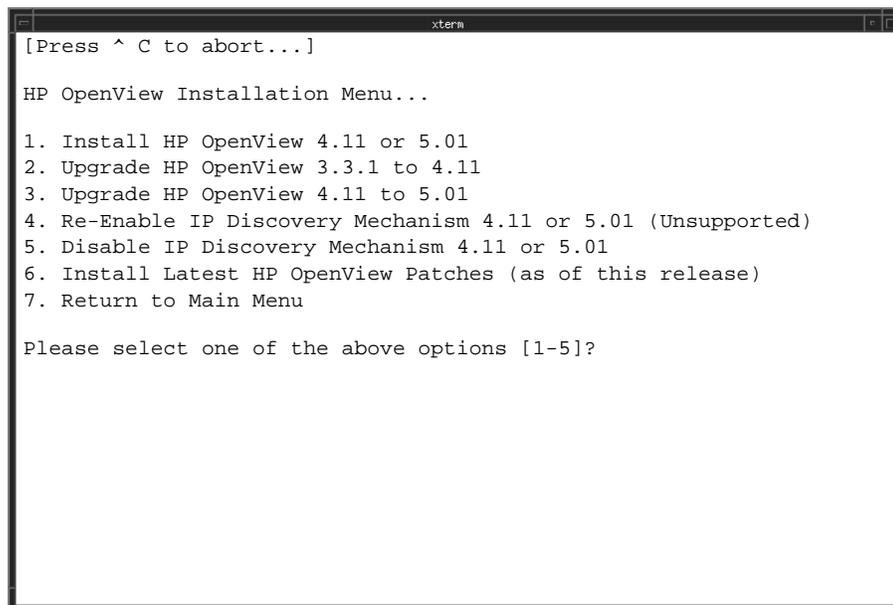


```
xterm
[Press ^ C to abort...]
NavisCore/UX Installation...
1. Install HPOV
2. Install NavisCore
3. Help...
4. Exit
Please select one of the above options [1-4]?
```

Figure 5-1. NavisCore/UX Installation Menu

5. At the NavisCore/UX Installation menu, enter **1** to view the HP OpenView Installation menu.

The HP OpenView Installation menu appears.



```
xterm
[Press ^ C to abort...]

HP OpenView Installation Menu...

1. Install HP OpenView 4.11 or 5.01
2. Upgrade HP OpenView 3.3.1 to 4.11
3. Upgrade HP OpenView 4.11 to 5.01
4. Re-Enable IP Discovery Mechanism 4.11 or 5.01 (Unsupported)
5. Disable IP Discovery Mechanism 4.11 or 5.01
6. Install Latest HP OpenView Patches (as of this release)
7. Return to Main Menu

Please select one of the above options [1-5]?
```

Figure 5-2. HP OpenView Installation Menu

6. At the HP OpenView Installation menu, enter **3** to set up the system for upgrade.

The following message appears:

```
Would you like to view (tail -f) the install log (default=y)?
```

The Tail window allows users to view the log of the installation. To see an example of a tail window, see [Figure 4-1 on page 4-4](#).

7. Press Return.



In a new Xterm window on the local system, run `xhost +` as the user who controls the system console. Executing this command enables you to display the installation log on the local system.

The following message appears:

```
What display should the install log xterm go to
(default:0.0)?
```

8. Press Return or enter **[local hostname]:0.0**.

The Tail window appears and the system displays:

Note: In order to restore back to the original state of your HP OpenView installation, it is recommended that you back up your system before continuing with this procedure.

Complete all prerequisites before continuing.

Do you wish to continue? <y|n> [default=y]:

9. Press Return to continue.

The following message appears:

```
Install the media in your device now.  
*****  
  
What is the path on the Local Host :
```

10. Enter [*media pathname*].

The following message appears:

```
The CD Installation media was found!  
  
[Hit Return to continue with the installation.]
```

11. Press Return.

The following message appear:

```
The following languages are supported by software in this  
depot:  
1) English  
2) Japanese  
Enter the number corresponding to the preferred language:
```

12. Enter 1.

The following message appears:

```
You could have purchased either the full or entry NNM  
product. Look at the product name on the Entitlement  
Certificate or the Update Letter that was shipped to you with  
NNM to determine which of the products to choose.
```

```
1) Network Node Manager Full product  
2) Network Node Manager 250 product
```

Enter the number corresponding to the product you purchased:

13. Enter 1 or 2.

The following message appears:

Do you want to install the manpages? (y|n):

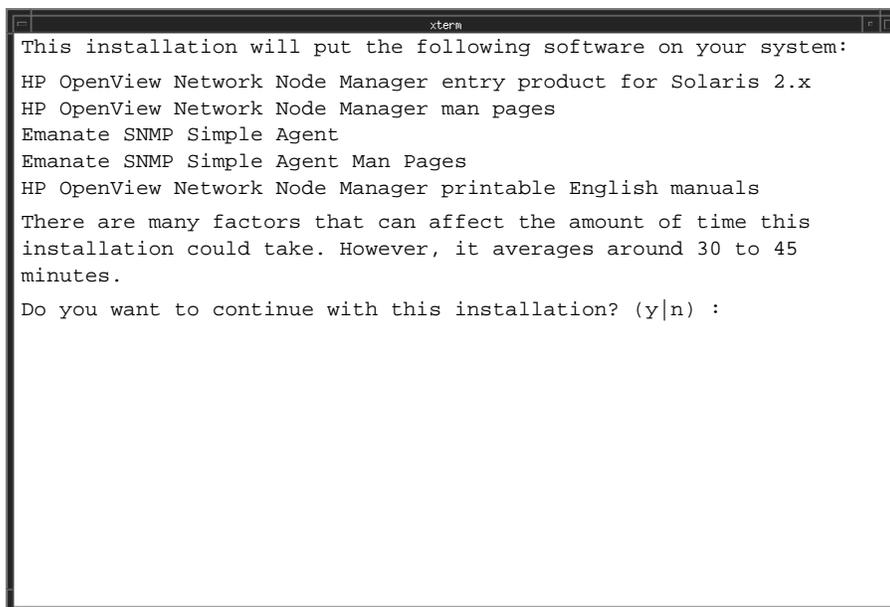
14. Enter y or n.

The following message appears:

Do you want to install printable manuals (y|n):

15. Enter y or n.

The following messages appear:

A screenshot of a terminal window titled 'xterm'. The text inside the terminal reads: 'This installation will put the following software on your system: HP OpenView Network Node Manager entry product for Solaris 2.x HP OpenView Network Node Manager man pages Emanate SNMP Simple Agent Emanate SNMP Simple Agent Man Pages HP OpenView Network Node Manager printable English manuals There are many factors that can affect the amount of time this installation could take. However, it averages around 30 to 45 minutes. Do you want to continue with this installation? (y|n) :'.

```
xterm
This installation will put the following software on your system:
HP OpenView Network Node Manager entry product for Solaris 2.x
HP OpenView Network Node Manager man pages
Emanate SNMP Simple Agent
Emanate SNMP Simple Agent Man Pages
HP OpenView Network Node Manager printable English manuals
There are many factors that can affect the amount of time this
installation could take. However, it averages around 30 to 45
minutes.
Do you want to continue with this installation? (y|n) :
```

Figure 5-3. Installation Messages

16. Enter y to continue. The installation process takes approximately 30 to 45 minutes.

The following messages appear during the upgrade:

```
xterm
The installation should complete without further interaction.
WARNING: do NOT use the kill command or Control-C to get out
of this installation because that could leave your system in
a corrupt state.
If you want to closely track the progress of the installation,
open a separate terminal window and give the command:
    tail -f /var/adm/sw/swagent.log
Notes and warnings will be written to this log as well as
indications of the installation's progress.
===== 09/28/98 14:18:36 EDT BEGIN swinstall SESSION (setup mode)
    * Target connection succeeded for "/".
    * Analysis phase succeeded for "/".
ERROR: Execution phase for "/" had errors.
    * More information may be found in the agent logfile (location
    is /var/adm/sw/swagent.log).
===== 09/28/98 14:33:00 EDT END swinstall SESSION (setup mode)
*****
* Errors have been encountered in your installation. *
*
* Please look at the log file (/var/adm/sw/swagent.log) ← For details, review
* for more information. You will need to look at the * the installation log.
* last session in that file. Each session is marked *
* with the starting date and time. *
*****
Hit the Return Key to Continue...
```



During the installation, the Tail and Xterm installation windows display error messages. For example, in the Tail window:

```
ERROR: OV - move_files: cpio failed
ERROR: OV - move_files: cpio failed
```

You can ignore the cpio error(s) because these errors are caused by the HP OpenView 5.01 installation/upgrade process not being aware of the custom directory locations Ascend used for the HP OpenView 4.11 installation. The upgrade to HP OpenView 5.01 will complete successfully regardless of the error messages. To see the exact error messages, see [Appendix B](#)

17. When the upgrade completes, review the installation log for details (*/var/adm/sw/swagent*).

18. At the “Hit Return to Continue” prompt, press Return.

The following message appears:

```
HP Openview Network Node Manager Configuration
*****

Setting up Symbolic Links....
```

Disabling IP Discovery

IP Discovery finds all IP-addressable nodes on your network and creates an object for each discovered node. Ascend switches do not respond to IP Discovery. Therefore the script disables it. Refer to [Appendix A, “IP Discovery”](#) for information about this feature.

The screen displays the following:



ASCEND DOES NOT SUPPORT IP DISCOVERY. ENABLING THIS FEATURE SEVERELY AFFECTS THE PERFORMANCE OF YOUR NMS SERVER.

```
Disabling HP OpenView IP Configuration
*****

Stopping the OV Platform...Done.
Removing netmon...Done.
Removing ovrepld...Done.
Removing ovtopmd...Done.
Removing snmpcollect...Done.
Removing ipmap...Done.
Disabling XNmevents for netmon and snmpCollect...Done.
The disabling of IP Map discovery is complete.
Starting the HP OpenView object database...Done.
Processing field registration entries...Done.

Do you wish to continue? <y|n> [default=y]:
```

1. Press Return to continue.

The following message appears:

```
Verifying the HPOV installation
-----

The HP OpenView Window and the Events Category dialog box
will appear. Choose Map=> Exit from HP OpenView to end the
verification.
```

Verifying the HP OpenView Installation

The upgrade successfully completes when you see the HP OpenView window, Event Categories window, and NavisCore icon.

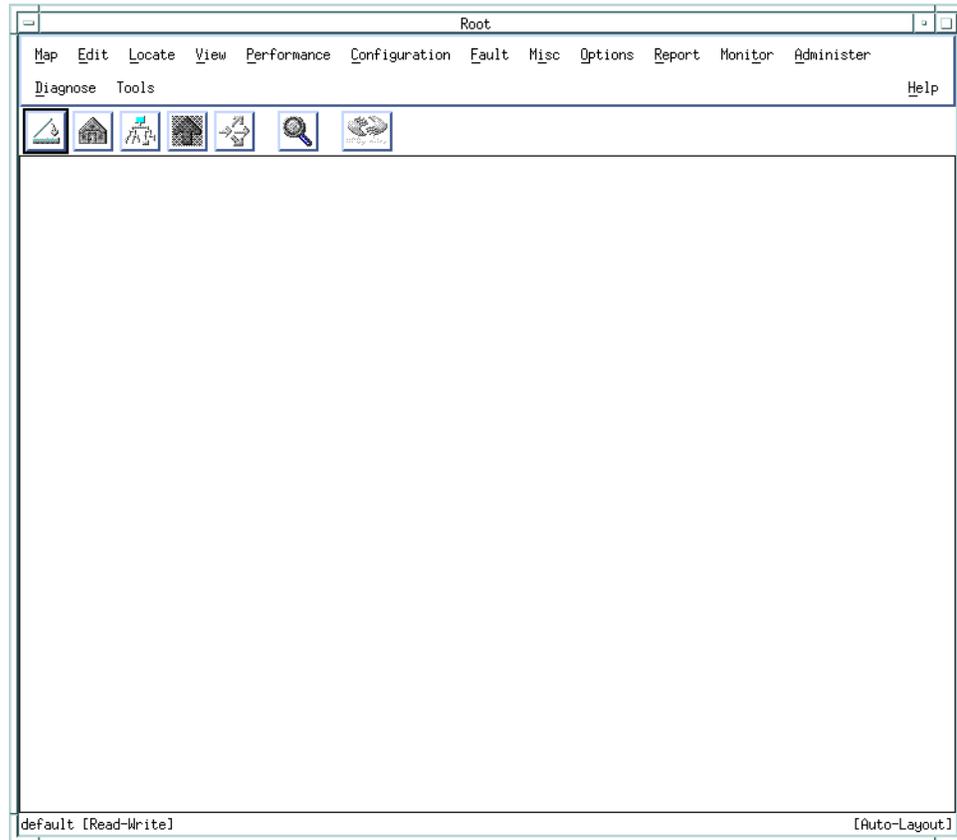


Figure 5-4. HP OpenView 5.01 Window

Complete the installation by performing the following steps:

1. Exit the HP OpenView window and Event Categories window by selecting Map ⇒ Exit.

2. At the OpenView windows WARNING dialog box, choose OK.

The HP OpenView window and Event Categories window disappears.

3. At the HP OpenView Installation menu, enter **7** to exit.

4. At the NavisCore/UX Installation Menu, enter **4** to exit.

The following message appears:

```
Cleaning up temporary files.....Done.
```

```
Exiting Installation script.
```

5. Close the Tail window by placing the mouse pointer in the window, holding down the <Ctrl> button, then pressing the **c** button.

The upgrade to HP OpenView 5.01 is complete.

6. Proceed to **“Installing the HP OpenView Patches.”**

Installing the HP OpenView Patches

The PSOV_02091 patch and the PSOV_02161 patch resolve an anomaly that occurs when you run HP OpenView 5.01 on a Solaris 2.6 operating system. If you run HP OpenView 5.01 on Solaris 2.6 without installing these patches and the HP OpenView database is empty, you receive the error message `unable to connect to HP OpenView object databases`. The patches resolve this problem.

To install the HP OpenView patches PSOV_02091 and PSOV_02161:

1. In the Xterm window, enter `su - root`. When prompted, enter `[root password]`.

2. Change to the `cv_scripts` directory by entering:

```
cd /cdrom/cdrom0/cv_scripts
```

3. Start the HP OpenView installation script by entering

```
./install_cvux
```

The following message appears:

```
Verifying superuser privileges...
```

The NavisCore/UX Installation menu appears (Figure 5-1).

4. At the NavisCore/UX Installation menu, enter **1** to view the HP OpenView Installation menu.

The HP OpenView Installation menu appears (Figure 5-2).

5. Enter **6**.

The following message appears:

```
would you like to view (tail -f) the install log (default=y)?
```

The Tail window allows users to view the log of the installation.

6. Press Return.



In a new Xterm window on the local system, run `xhost +` as the user who controls the system console. Executing this command enables you to display the installation log on the local system.

The following message appears:

```
What display should the install log xterm go to  
(default:0.0)?
```

7. Press Return or enter **[local hostname]:0.0**.

The following message appears:

```
Enter a temporary working directory with at least 170 MBytes  
for the patch installation [default=/tmp/HP_PATCH]?
```

8. Press Return or enter **[patch installation directory]**.

The following message appears:

```
Enter a directory with at least 160 MBytes for the patch  
uninstall save files [default=/system/]? /tmp
```

9. Press Return or enter **[patch uninstall save files directory]**.

The following message appears:

```
Beginning Patch Installation...  
Patch installation complete.
```

```
Disabling HP OpenView IP Configuration  
*****
```

```
Stopping the OV Platform...Done.  
Removing netmon...Done.  
Removing ovrepId...Done.  
Removing ovtopmd...Done.  
Removing snmpcollect...Done.  
Removing ipmap...Done.  
Disabling XNmevents for netmon and snmpCollect...Done.
```

```
The disabling of IP Map discovery is complete.  
Starting the HP OpenView object database...Done.  
Processing field registration entries...Done.
```



Two possible scenarios occur if the patch installation fails:

Scenario 1

If your workstation does not have enough space in the patch installation directory, the following message appears:

```
There is insufficient space in /tmp/HP_PATCH.  
The Patch Installation requires at least 170 MBytes of free  
space, you only have xx MBytes. Try again when more space is  
available. Exiting....
```

where xx is the free space you have.

Scenario 2

If your workstation does not have enough space in the patch uninstall directory, the following message appears:

```
There is insufficient space in /system/[Patch Directory].  
The Uninstall Directory requires at least 160 MBytes of  
free space you only have xx MBytes. Try again when there is  
more space. Exiting....
```

where xx is the free space you have. **Note:** The final uninstall tar file takes up approximately 98 MB of space.

Resolving either scenario

If you do not have enough space for either directories, free up space in the directory, (for example, shown in bold in the error messages above) and install the patch files again.

10. When the patch installation completes, press Return.
11. At the HP OpenView Installation Menu, exit by entering **7**.
12. At the NavisCore/UX Installation Menu, exit by entering **4**.
13. In the Xterm window, enter:

```
eject cdrom
```
14. Remove the media from the media device.
15. Proceed to **“Backing Up HP OpenView Databases.”**



If you need to remove the patches, see “[Removing the HP OpenView Patches](#)” on page 5-14.

Removing the HP OpenView Patches

When you install the PSOV_02091 and PSOV_02161 patches, the PSOV_02091.save.tar and PSOV_02161.save.tar files are created and placed in the uninstall save files directory (e.g., /system/PSOV_02091 and /system/PSOV_02161). These files enable you to remove the patches if you need to.

To remove PSOV_02091:

1. Log in as root.
2. Extract the PSOV_02091.save.tar file by entering:

```
tar -xvf PSOV_02091.save.tar
```
3. To start the deinstall program, enter:

```
deinstall_patch
```

To remove PSOV_02161:

1. Log in as root.
2. Extract the PSOV_02161.save.tar file by entering:

```
tar -xvf PSOV_02161.save.tar
```
3. To start the deinstall program, enter:

```
deinstall_patch
```

Backing Up HP OpenView Databases

Use the following procedures to back up HP OpenView databases by saving the `/opt/OV/databases/openview` directory.

1. In an Xterm, log in as root by entering:

```
su - root
```

When the system prompts you for the root password, enter:

```
[root password]
```

If you have a two-system configuration (Sybase on one workstation, HP and NavisCore on another), you must log on to the HP/NavisCore workstation to perform HP OV backups.

2. Shut down all NavisCore sessions. Verify all NavisCore sessions are shut down by entering:

```
ps -ef | grep ovw
```

If all NavisCore sessions are shut down, the only process you should see running is `ovwdb`.

3. Shut down HP OpenView services by entering:

```
/opt/OV/bin/ovstop
```

4. Access the databases directory by entering:

```
cd /opt/sybase/backup
```

5. Enter the following command:

```
tar -cvf ovwdb.tar.<Date> /usr/OV/databases/openview
```

The `<Date>` refers to today's date in MM-DD-YY format.

6. Restart HP OpenView Services directory by entering:

```
/opt/OV/bin/ovstart
```

7. To upgrade to the latest NavisCore, see the *NavisCore Software Release Notes*.

IP Discovery

This appendix describes how to enable/disable IP Discovery. IP Discovery finds all IP-addressable nodes on your network and creates an object for each discovered node.

The Ascend script automatically disables IP Discovery during the installation of HP OpenView 5.01. However, if you use HP OpenView to manage an IP network, you can re-enable it.



ASCEND DOES NOT SUPPORT IP DISCOVERY. RE-ENABLING THIS FEATURE SEVERELY AFFECTS THE PERFORMANCE OF YOUR NMS SERVER.

Enabling IP Discovery

To enable IP discovery:

1. Log in as root user by entering:

```
su - root
```

When prompted, enter:

```
[root password]
```

2. Insert the HP OpenView CD-ROM in the CD-ROM device.
3. Change to the *cv_scripts* directory by entering:

```
cd /cdrom/cdrom0/cv_scripts
```
4. Start the Ascend Installation script by entering:

```
./install_cvux
```
5. At the NavisCore/UX Installation menu, enter **1** to view the HP OpenView installation menu.
6. At the HP OpenView Installation menu, enter **4** to re-enable IP discovery.
7. Press Return to view the Tail window.

The following message appears:

```
Ascend does not support the IP discovery mechanism. Enabling  
this feature will severely impact the performance of your  
NMS Server.
```

```
Do you wish to continue? <y|n> [default=y]
```

8. Press Return to continue.

The following message appears:

```
Enabling IP Configuration
*****

Adding netmon...Done.
Adding ovrepld...Done.
Adding ovtopmd...Done.
Adding snmpcollect...Done.
Adding ipmap...Done.
Enabling XNmevents for netmon and snmp collect...Done.
Starting IP Discovery daemons...Done.

The enabling of IP Map discovery is complete.
[Hit return to continue.]
```

- 9.** Press Return to continue.
- 10.** At the HP OpenView Installation Menu, go to the NavisCore/UX Installation menu by entering **7**.
- 11.** At the NavisCore/UX Installation Menu, exit by entering **4**.

The following message appears:

```
Cleaning up temporary files. Done.

Exiting Installation script.
```

- 12.** Close the Tail window by placing the mouse pointer in the window, holding down the **<Ctrl>** button, then pressing the **c** button.

Disabling IP Discovery Mechanism

To disable IP Discovery:

1. Log in as root user by entering:

```
su - root
```

When prompted, enter:

```
[root password]
```

2. Insert the HP OpenView CD-ROM in the CD ROM device.
3. Change to the cv_scripts directory by entering:

```
cd /cdrom/cdrom0/cv_scripts
```
4. Start the Ascend Installation script by entering:

```
./install_cvux
```
5. At the NavisCore/UX Installation menu, enter **1** to view the HP OpenView installation menu.
6. At the HP OpenView Installation menu, enter **5** to disable IP discovery.
7. Press Return to view the Tail window.

The following message appears:

```
Disabling HP OpenView IP Configuration
*****

Stopping the OV Platform...Done.
Removing netmon...Done.
Removing ovrepld...Done.
Removing ovtopmd...Done.
Removing snmpcollect...Done.
Removing ipmap...Done.
Disabling XNmevents for netmon and snmpCollect...Done.

The disabling of IP Map discovery is complete.
[Hit return to continue.]
```

8. Press Return to continue.

The following message appears:

```
Starting the OpenView object database...Done.
Processing field registration entries...Done.
```

9. At the HP OpenView Installation Menu, enter **7** to go to the NavisCore/UX installation menu.
10. At the NavisCore/UX Installation Menu, enter **4** to exit.

The following message appears:

Cleaning up temporary files. Done.

Exiting Installation script.

- 11.** Close the Tail window by placing the mouse pointer in the window, holding down the **<Ctrl>** button, then pressing the **c** button.

HP OpenView 5.01 Upgrade Error Messages

Error messages appear during the HP OpenView 5.01 upgrade. The upgrade will complete successfully regardless of these errors. See the appropriate section for the error messages you see:

- [“Tail Window Error Messages” on page B-1](#)
- [“Installation Xterm Window Error Messages” on page B-2](#)

Tail Window Error Messages

During the upgrade, the Tail window displays the following error messages:

```
ERROR:  OV - move_files: cpio failed
ERROR:  OV - move_files: cpio failed
ERROR:  OV - move_files: cpio failed
ERROR:  The "postinstall" script for "OVPlatform.OVWIN" failed (exit
* This script had errors but the execution of this product will
ERROR:  OV - move_files: cpio failed
ERROR:  OV - Could not move files to new directory location.
ERROR:  OV - move_files: cpio failed
ERROR:  The "configure" script for "OVNNMgr.OVNNM-RUN" failed (exit
* This script had errors but the execution of this product will
ERROR:  OVPlatform.OVWIN,r=B.05.01.00 Installed
ERROR:  OVNNMgr.OVNNM-RUN,r=B.05.01.00 Installed
ERROR:  The Execution Phase had errors.  See the above output for
5
```

You can ignore the cipo error(s) because they are caused by HP OpenView 5.01 installation/upgrade processes not being aware of custom directory locations Ascend used for the HP OpenView 4.11 installation.

Installation Xterm Window Error Messages

Error Messages When the Upgrade Nears Completion

When the upgrade nears completion, the following error messages appear in the installation Xterm window:

```
ERROR: Execution phase for "/" had errors.

* More information may be found in the agent logfile (location
  is /var/adm/sw/swagent.log).

===== 09/28/98 14:33:00 EDT END swinstall SESSION (setup mode)

*****
* Errors have been encountered in your installation. *
*
* Please look at the log file (/var/adm/sw/swagent.log) *
* for more information. You will need to look at the *
* last session in that file. Each session is marked *
* with the starting date and time. *
*****

Hit the Return Key to Continue...
```

Upgrade Worksheet

Complete the worksheet before you start the Sybase 11.0.3.3 and HP OpenView 5.01 upgrade. The installation script will prompt you for the following new and existing configuration information.

Sybase Parameters

1. Media Device pathname:
(for CD ROM devices, */cdrom/cdrom0*, for files from the FTP server, */tmp*) _____
2. Sybase 11.0.2 release path (for example, */opt/sybase*):

3. Sybase 11.0.3.3 install path (for example, */opt/sybase_new*):

4. Existing database server name (for example, *CASCADE*):

5. Sybase 11.0.3.3 error log pathname (for example, *CASCADE_err.log*):

6. Database SA password (for example, *superbase*):

7. TCP socket number of Sybase 11.0.2 (for example, *1025*):

8. TCP socket number of backup server (for example, *1026*):

9. Sybase 11.0.2 master partition device (for example, */dev/rdisk/c0t1d0s4*):

10. Sybase 11.0.3.3 system procs device directory (for example, */opt/databases*):

11. Sybase 11.0.3.3 system procs device size (for example, *25*):

12. Number of remote users (for example, 25):

13. Remote backup server's hostname:

14. IP address of remote backup server:

15. TCP socket number of remote backup server (for example, 1025):

Index

B

- Backup procedures
 - HP OpenView database backups [5-15](#)
 - performing subsequent Sybase backups to the Local Backup Server [3-8](#), [4-17](#)
 - Sybase 11.0.2 [3-12](#)
 - Sybase 11.0.3.3 [4-14](#)
- Bulk copy procedures
 - Sybase 11.0.2 databases [3-10](#), [4-19](#)

C

- Check_sys output
 - checking database size [3-15](#)
 - checking the file system [3-17](#)
 - verifying database integrity [3-19](#)

D

- Databases
 - backing up HP databases [5-15](#)
- Disk Check script
 - running [3-12](#)
 - using output. *See* Check_sys output
- DSQUERY, entering [4-6](#)

E

- Error log pathname, entering [4-6](#)

H

- HP OpenView 5.01
 - loading Ascend-supplied HP OpenView media [5-2](#)

I

- Integrating Sybase with NavisCore [4-20](#)
- IP Discovery
 - disabling [A-4](#)
 - enabling [A-2](#)

L

- Local Backup Server
 - backing up Sybase 11.0.3.3 databases to. *See* Backup procedures

M

- Master device, locating [4-9](#)
- Memory, verifying space.
 - See* Check_sys output

P

Prerequisite tasks
 HP OpenView [5-2](#)
 Sybase [3-1](#) to [3-19](#)
PSOV_02091 and PSOV_02161 patches
 installing [5-11](#)

R

Remote users, increasing number of [4-11](#)
Requirements
 hardware [1-3](#)
 software, HP OpenView 5.01 [1-6](#)
 software, Solaris Operating Environment [1-5](#),
 [1-8](#)
 software, Sybase 11.0.3.3 SQL Server [1-5](#)

S

SA password
 changing [4-21](#)
Scripts
 [check_sys](#). *See* Disk Check script
 [install_sybase](#). *See* Upgrade Script
Solaris 2.6
 editing the inittab file [2-9](#)
 installing the Solaris patch [2-8](#)
 upgrading to [2-8](#)
Sybase 11 Install pathname, entering [4-6](#)
Sybase 11 Release pathname, entering [4-6](#)
Sybase users
 logging off [3-3](#)

T

TCP socket number, entering
 for Backup Server [4-7](#)
 for Sybase Server [4-7](#)

U

Upgrade features [1-2](#)
 HP OpenView scripts [1-7](#)
 Sybase scripts [1-7](#)
Upgrade script
 running the HP OpenView script [5-2](#)
 running the Sybase script [4-2](#)
Upgrading to HP OpenView 5.01
 disabling IP Discovery [5-8](#)
 verifying the installation [5-9](#)

V

[Verifying database integrity](#). *See* [Check_sys](#) output

W

Window
 Events Categories [5-9](#)
 HP OpenView installation menu [5-4](#)
 HP OpenView window [5-9](#)