Appendix B SunOS 4.0 Installation Checklist

This appendix addresses SunOS 4.0 installation issues and should be considered both a preface and appendix to the *SunOS 4.0 System Administration Guide*. Some steps are also relevant for porting uses, but the checklist is targeted to System Administrators of a single and networked group of Sun workstations.

The following diagram depicts valid network configurations of Sun hardware platforms and SunOS releases.

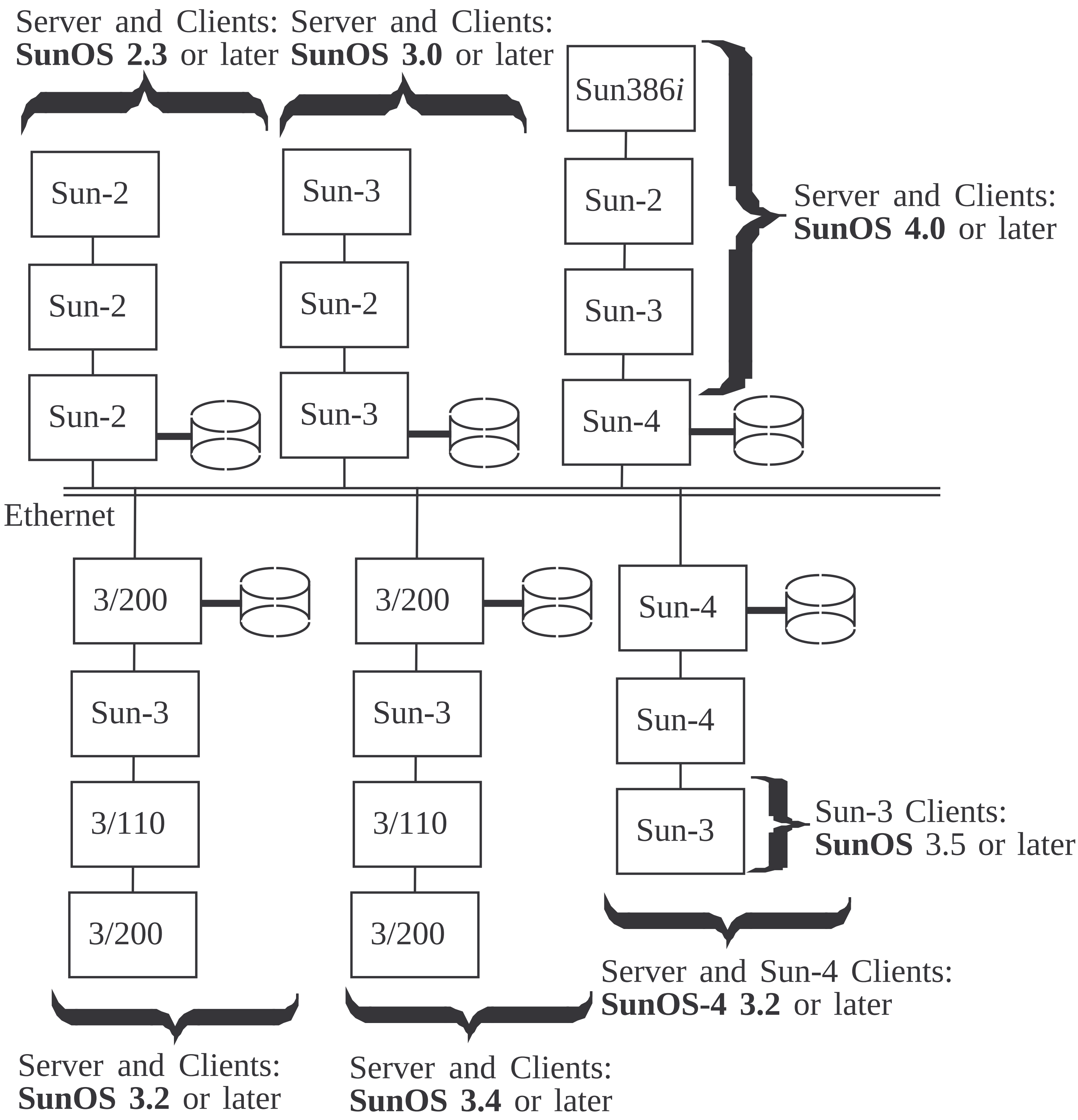

Figure B-1. Supported Configurations

The following checklists are examples of the relevant stages for a SunOS 3.X to 4.0 migration. With this checklist, the system adminstrator can easily document all phases of pre-installation, suninstall, and post-installation.

B.1 Pre-Installation

After release incompatibilities (if any) are resolved, these steps can aid a SunOS 4.0 installation. Many of the installation precautions also apply to application porting efforts. For further details, refer to *Installing the SunOS* (4.0 documentation).

¥ Perform full backups

¥ Plan your disk space

¥ Run the format program (optional)

¥ Run suninstall

¥ Configure the kernel

¥ Recustomize the environment

¥ Before installing SunOS 4.0, it is essential to complete full dumps of everything you wish to save. This ensures a current, complete copy of important system and user files

¥ Plan your disk space requirements. The disk layout changes in this release so careful accounting of filesystems, newly unbundled compilers, and third-party applications is highly advised. Note the new home directory conventions:

(/usr/server_name/user_name is now /home/server_name/user_name).

On diskful systems, you must have separate partitions for root and swap. For diskless clients, separate root and swap partitions are recommended. Figure B-2 outlines the partitions for standalone and server installations. One approach to allocating space for the various partitions is to keep the same parameters you used under 3.X. Swap space may be added or expanded later to accommodate new clients or changing swap needs of existing clients.

Standalone	Server
root	*root*
swap	*swap*
/usr	*/usr*
[/home]	*/home*
[/var]	*[/var]*
[ ] denotes a recommended additional partition * same as /usr except on a heterogeneous server	*/export/root - 2-5 MB per client*
	/export/swap - 16MB default
	*/export/exec**

Figure B-2. Partitions for Standalone and Server Installation

Also, we highly recommend the addition of the /var partition. /var provides a place for files with variable file lengths such as /tmp, mail, adm, and others instead of using the root filesystem for this purpose. This eliminates most ÒFile System is FullÓ errors. One can add the /var filesystem during execution of the suninstall program (disk format screen).

¥ Run the format program from MUNIX or mini-UNIX if you are: changing the size of the root partition (all systems except diskless clients), decreasing the size of the swap partition (except diskless clients), or reformatting the disk(s).

¥ Run suninstall. This program will ask you various questions about the machine configuration. (See the installation manual for exact descriptions and screens.)

It is important that you know:

¥ The host name (assign a name in the case of a new machine)

¥ The internet address

¥ The host names, internet addresses, and ethernet addresses of all diskless clients (applicable when installing a server)

¥ The amount of swap space

To accommodate non-Sun consoles, suninstall is now curses-based. The previous setup installation utility was optimized for SunView installs. Installation time varies greatly depending upon the number, configuration, and type of machine. Allow from two to four hours to complete suninstall, and three hours to one day to complete the pre- and post-installation procedures.

When asked about the tape device in the software form in suninstall, the correct entry for Sun-3 and Sun-4 systems is a drive that can read QIC-24 format. For Sun-3 and Sun-4 machines with 1/4" tape drives, choose the st8 option. For Sun-2 machines with a 1/4" tape drive, choose the ar0 or st0 option. For machines with 1/2" tape drives, choose either the mt0 or xt0 options, depending on the type of tape controller (QIC-24 does not apply to 1/2" tape). See Figure B-3 for a pre-installation checklist.

Date completed	Pre-Installation Task Description
	Check that unbundled, 3rd party, and site specific files have been saved, and run properly under 4.0.
	Check Compatability Matrix for unbundled software advisories.
	Plan disk space requirements such as disk layout, client info, and swap space.
	Complete full dumps of everything you (and the users) wish to save.
	Make sure to log off all users via /etc/shutdown and halt all clients.
	Run Suninstall.

Figure B-3. SunOS 4.0 Pre-Installation Checklist

B.2 Post-Installation

For post-installation, configure the kernel to remove unneeded modules. Please read the chapter on this topic in *Installing the SunOS 4.0* documentation. A properly configured kernel requires less memory and improves performance as compared to the generic kernel. The GENERIC configuration file is located in /usr/sys/sun#/conf (where sun# is the architecture type such as sun4). It comments on each device type and is helpful in removing unneeded devices. This step is highly recommended and will also ease system administration duties.

The final step is to recustomize the environment. Follow these steps:

1. Initialize the Yellow Pages via /usr/etc/yp/ypinit -m or -s
2. Modify the following files (if you have modified them in the past):

```
/etc/passwd/etc/hosts.equiv/etc/rc
/etc/group/etc/fstab/etc/rc.boot
/etc/exports/etc/rc.local/etc/ttytab
/etc/hosts/etc/networks/etc/printcap
/etc/netgroup/etc/termcap (link)/etc/dumpdates
/etc/inetd.conf (formerly /etc/servers)/etc/remote
/etc/ttytab (formerly /etc/ttys )
/etc/aliases (formerly /usr/lib/aliases )/etc/remote
/.cshrc/.login/usr/lib/rootmenu
/.rhosts/.profile/.defaults
/.mailrc
```

3. Create spooling directories (such as /var/spool/lw) mountpoints (i.e ./home/server_name), and uucp files.
4. A new SunOS 4.0 feature permits user crontabs, so move crontab to /var/spool/cron/crontabs/root. (Use crontab -e to invoke this new feature.)

See Figure B-4 for the post-installation checklist.

Date completed	Post-Installation
	Task Description
	Run restore script or manually restore private files.
	Build and install a configured kernel.
	Add NFS entries in /etc/fstab and create mountpoints.
	Modify client /etc/fstab files, add necessary mountpoints to /export/root/client/home.
	Modify /etc/rc.boot if a network gateway.
	Modify /etc/exports if desired.
	If man pages are not selected, mkdir /usr/share/man, and add entry to client /etc/fstab.
	If system is a YP server, run ypinint.
	Update the userÕs home directories to /home... in /etc/passwd and update YP.
	Check crontab for obsolete path names.
	Use crontab -e to edit file Remove old nd entries from /etc/dumpdates.
	Run catman, if desired (puts man pages in text format).
	Perform full dumps.
	Reboot clients.

Figure B-4. SunOS 4.0 Post-Installation Checklist