



Read This First

Software READ THIS FIRST
System Administration Minibox

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Part No: 800-1745-10
Revision A, of 9 May 1988

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Introduction

This document supplements the manuals contained in the System Administration minibox for Release 4.0 of the Sun Operating System.

Getting Help

If you have any problems installing or using the SunOS Release 4.0, call Sun Microsystems at: 1-800-USA-4SUN (1-800-872-4786). Have your system's model number and the SunOS release number (for software) ready to give to the dispatcher.

You can also send questions by electronic mail to `sun!hotline`. Be sure to include your name, company, phone number, and SunOS release number in your mail message.

If you have questions about Sun's support services or your shipment, call your sales representative.

□ To see the SunOS release number, type: `cat /etc/motd`

Known Problems with the Software

1. File system blocksize must be \geq system page size.

The system will not support the use of file systems with a block size that is smaller than the page size of the system. An example would be a file system with a blocksize of 4K bytes used on a Sun-3 (8K page size). Such file systems should be recreated with an appropriate block size. This problem does *not* affect file systems with a block size *larger* than page size. For example, a block size of 8K on a Sun-2 (2K page size) works properly.

2. *core* files appear to be very large.

A *core* file of a dynamically linked program produced by 4.0 appears to be very large, having a *length* over 2Mbytes in many cases (as shown by an `ls -l` command). However, their actual size on disk (as shown by an `ls -s`) is often much less, usually about the same as it would be with previous versions of the system. Such files contain one or more "holes" of unused space that are optimized out of the disk space requirements.

If such files (or for that matter, any file containing a hole) are copied using a command such as `cp` or `tar`, the "holes" will be filled in and as a consequence the file will actually occupy the amount of disk space indicated by its length. This is not a problem if the files are renamed (via `mv`) or dumped with `dump`. A future release of the system will include changes to the format of the *core* file to permit more compact lengths.

3. If it is necessary to decrease the size of the Drive 0 'b' partition (typically the system swap area), use the `format` command running under MUNIX. DO NOT decrease the partition size using the *suninstall* Disk Form. (Note that it is permissible to increase the size of the 'b' partition using *suninstall*.)

4. Sizing client root and swap partitions.

`/export/root`: Size this partition to allow approximately 2Mbytes for each diskless client.

The suggested size for a client's swap area is sixteen (16) Megabytes. Note that this is only a rule of thumb, requirements are system and application dependent.

`/export/swap`: Size this partition using the formula:

$$(\text{clientAswap} + \text{clientBswap} + \dots + \text{clientNswap}) * 1.06$$

The added 6% allows for file system overhead and allocation of full disk blocks to swap files.

5. Currently `/usr` and `/export/exec` can not be used as the freehog partition. Do not select `/usr` and `/export/exec` as freehog. Select another partition which has extra space that can be reduced when `/usr` and `/export/exec` are running out of space.

A new feature was added so that *suninstall* automatically takes extra space from the freehog partition when `/usr` and `/export/exec` are running out of space while users are selecting software categories. Freehog is the partition whose size can be reduced when `/usr` and `/export/exec` are running out of space. Currently `/usr` and `/export/exec` can not be used as the freehog partition.

Documentation Errata and Additions

SunOS Reference Manual

1. In the printed versions of the following Reference Manual pages, the indicated files are incorrectly shown as residing in `/etc`. The on-line versions correctly show these files as residing in `/usr/etc`:

<code>audit_warn(8)</code>	<code>/usr/etc/security/audit/audit_warn</code>
<code>auditd(8)</code>	<code>/usr/etc/auditd</code>
<code>config(8)</code>	<code>/usr/etc/config</code>
<code>devnm(8)</code>	<code>/usr/etc/devnm</code>
<code>lockd(8C)</code>	<code>/usr/etc/rpc.lockd</code>
<code>routed(8C)</code>	<code>/usr/etc/in.routed</code>
<code>sendmail(8)</code>	<code>/usr/etc/sendmail</code>
<code>statd(8C)</code>	<code>/usr/etc/rpc.statd</code>
2. The printed version of the `init(8)` Reference Manual page incorrectly states that for a secure system, when the console is marked `secure` in `/etc/ttytab`, a root password is required before the system comes up in single-user mode. The on-line page correctly states that when the console is *not* marked `secure`, the root password is required.

Release 4.0 Change Notes, Chapter 1

1. Shared Libraries

By default, programs are built to access shared libraries. This is the standard behavior and can only be changed through the use of the `-Bstatic` flag. See the `ld(1)` man page for more information.

The definition for the largest shared memory segment has been changed from `SHMPOOL` in Release 3.x to `SHMSIZE` in Release 4.0.

2. `fsck(8)`

`fsck(8)` now checks the raw device by default. `fsck(8)` is unreliable in checking filesystems currently mounted read-write since the filesystem activity can interfere with `fsck` operation.

The kernel boots with the root filesystem mounted read-only. This allows `fsck` to repair any damaged filesystems reliably. This feature can be overwritten by using the new `-w` option when booting.

A new remount option for the `mount(8)` command allows converting 4.2 filesystems mounted as read-only to read-write. This facility is used in the `rc` scripts to remount 4.2 filesystems as read-write after the filesystems have passed `fsck`.

Installing the SunOS, Chapter 5

For remote installations, on page 105 and 106 of Chapter 5, the user must specify `bs` (block size) in order for `dd` to copy the miniroot correctly. On page 105, the line

```
dd if=/dev/nr<tapedevice#> of=/export/exec/ARCH/local/miniroot
```

should be changed to

```
dd if=/dev/nr<tapedevice#> bs=<blocksize>b of=/export/exec/ARCH/local/miniroot
```

On page 106, the line

```
dd if=/usr/local/miniroot of=/dev/r<diskdevice#>b
```

should be changed to

```
dd if=/usr/loca/miniroot bs=<blocksize>b of=/dev/r<diskdevice#>b
```

Block size is determined by the following:

For `st0`, `bs` is 126. For `st8`, `bs` is 200. For `mt0`, `bs` is 20.

If the user does not specify the correct block size, the miniroot will not boot.