

Instructions for Creating, Loading, and Unloading a Ramdisk

The Major number for ramdisk devices is 31.

The Minor numbers for ramdisk devices are:

```
512M ramdisk 249
256M ramdisk 241
128M ramdisk 233
64M ramdisk 225
32M ramdisk 217
16M ramdisk 209
8M ramdisk 201
```

Scripts you will need are:

```
makeramdisk
removeramdisk
```

The first step in setting up a ramdisk is making the device nodes in the /dev directory. The command is "**mknod**" and must be run in the /dev directory.

```
mknod name [ b/c major minor] [ m/p/s ]
ram64 b 31 225
ram64.2 b 31 226
ram16.2 b 31 210
```

- name - Name of device is usually ram64 for the first ramdisk and ram64.2 for the second. Use a name that indicates the size of the ramdisk and whether it is the first or second of its size.
- b/c - this indicates whether the node is a block or character device. Ramdisks are always block devices.
- Major - the major designates this device as a ramdisk. The major for ramdisks on SCO 5.00 5.02 5.04 is 31.
- Minor - this number indicates the size and several other aspects of the ramdisk. The range of sizes we use is indicated above. You must add a 1 to each of the values if it is the second ramdisk or 2 if it is the 3rd and so on. i.e. the first 64M ramdisk has a minor number of 225. The second 64M ramdisk has a minor number of 226
- m/p/s - these are not used in the making of a ramdisk.

The second step is to create mount points in the root directory for the ramdisks. These can be any directory name but by convention we use /ramdisk and /ramdisk2. Should we desire a 3rd one it would be /ramdisk3.

The third step is to edit the makeramdisk script in the /abcslocal/bin directory.

Find the following lines:

```
mkfs -y -f HTFS /dev/ram64 128000
mkfs -y -f HTFS /dev/ram64.2 128000
```

If your ramdisks are of a size other than 64M, change the names as appropriate. The number at the end of the line should be [size of ramdisk * 2000]

Next, make sure the mount commands are correct. Find the following lines:

```
mount /dev/ram64 /ramdisk ||
mount /dev/ram64.2 /ramdisk2 ||
```

Again, if your ramdisk size is not 64M or you have changed the mount directory, make the appropriate changes.

The makeramdisk script will default to copying the bin xbin configs and selected files from systcfgs to the ramdisks. If you wish to add other files, such as the security databases, follow these instructions.

Find the area in the script called `##### Extra files to copy #####` .

In this area you will create the copy commands. For example:

```
copy -morv /work/common/userpass /ramdisk2/userpass
copy -morv /work/common/userauth /ramdisk2/userauth
copy -morv /work/common/wkstauth /ramdisk2/wkstauth
copy -morv /work/common/authpass /ramdisk2/authpass
```

Take note of what you have copied here, as it will also need to be entered in the remove ramdisk script to copy it to the hard drive for permanent storage.