



Tech Info Library

MAE 2.0: HP Floppy, SCSI CD-ROM, and SCSI Floppy Drives (5/96)

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TOPIC -----

This article describes adding floppy, SCSI, and SCSI floppy devices on a Hewlett Packard (HP) workstation running HP-UX 9.0 & 10.0 for Macintosh Application Environment (MAE).

DISCUSSION -----

SCSI CD-ROM
=====

To add devices to be used by MAE, you may have to edit the file macdisks.HP-UX. Entries for SCSI drives have the format:

```
scsiX:[fixed|removable]:[ro|rw]:</dev/path>
```

X in scsiX represents the SCSI device number, which can often be found by looking at the back of the SCSI device. On HP-UX, you can also run sam, and by examining "Disks and File Systems" and then entering "CD-ROM, Floppy and Hard Disk", look at the CD-ROM's device name and number.

Example SCSI entry:

```
scsi4:removable:ro:/dev/dsk/c201d4s0 (hp-ux 9.0.x)
scsi4:removable:ro:/dev/dsk/c0t2d0 (hp-ux 10.x)
```

Alternatively, once you know the SCSI device number, you can simply change an entry to "default," and the next time you launch MAE, the "default" will be converted into the defaults for a CD-ROM at the given SCSI address on HP-UX.

Example of the use of "default"

```
scsi4:default
```

Devices marked "ignore" WILL NOT be checked by MAE. You will not be able to read a CD in a CD-ROM drive if the entry for that SCSI device number is "ignore"

If you have other types of SCSI devices, you would like to use with MAE, you may wish to change read-only ("ro") to read-write ("rw"), and/or change "removable" to "fixed" if the device does not support ejecting the media.

This is what the entries for SCSI disks in the macdisks.HP-UX file look like:

```
scsi0:ignore
scsi1:ignore
scsi2:ignore
scsi3:ignore
scsi4:ignore
scsi5:ignore
scsi6:ignore
```

Floppies (non-SCSI)
=====

Entries for floppy drives have the format:

```
floppyX:[ro|rw]:</dev/path>
```

Configuring floppy devices is similar to configuring SCSI devices, except floppy devices generally do not have SCSI ID numbers. You simply need to enable the drive by entering whether the drive is read-only or read-write, and providing the path name.

Since HP's floppy device naming scheme varies by model, the floppy0 entry has been set to "default," and will be determined upon the first launching of MAE. Furthermore, since HP systems normally only have one floppy drive, only the floppy0 entry has been enabled.

For example:

```
floppy0:default
```

This entry will be converted, depending on HP workstation model, into either:

```
floppy0:rw:/dev/rfloppy/c201d0s0 (hp-ux 9.0.x)
or
floppy0:rw:/dev/rfloppy/c20Ad1s0 (hp-ux 9.0.x)
```

AND

```
floppy0:rw:/dev/rfloppy/c0t0d0
```

This is what the entries for floppy disks in the macdisks.HP-UX file look like:

```
floppy0:default
floppy1:ignore
```

SCSI Floppy Drives

=====

MAE can use a SCSI floppy drive with HP-UX as follows:

Item 1

Verify that HP-UX utilizes the drive as SCSI floppy and not generic SCSI. You can verify this with the 'ioscan -f' command. Your output should look similar to the following:

```
disk 2.0.1.1.0 scsifloppy ok(0x800101) ok TEAC FC-1 HF 00 (hp-ux
9.0.x)
```

```
disk 2/0/1.0.0 sflop CLAIMED DEVICE TEAC FC-1 HF 07 (hp-ux 10.x)
```

The SCSI drive must scan as 'scsifloppy' for the SCSI address utilized by that drive. If it does not, verify that the scsifloppy driver has been installed into the kernel, and that you have the required patches for your level of HP-UX. In addition, the chosen SCSI address cannot conflict with any other devices.

Also, ensure that you are using the proper device files with the drive. For example, the following entries were created in /dev/floppy and /dev/rfloppy respectively using 'mknod':

```
brw-rw-rw- 1 root sys 23 0x201100 Jun 27 18:03 c201d1s0
crw-rw-rw- 1 bin bin 106 0x201100 Jun 28 10:28 c201d1s0(hp-ux 9.x)

brw-rw-rw- 1 root sys 23 0x201100 Jun 27 18:03 c0t1d0
crw-rw-rw- 1 bin bin 106 0x201100 Jun 28 10:28 c0t1d0 (hp-ux 10.x)
```

Note that read and write permission is granted to all users.

Item 2

In the file 'macdisks.HPUX' (located in the Preferences folder for each user), add an entry similar to the following prior to starting MAE (or relaunch MAE after changing it if MAE is running):

```
floppy0:rw:/dev/rfloppy/c201d1s0 (hp-ux 9.0.x)
floppy0:rw:/dev/rfloppy/c0t1d0 (hp-ux 10.x)
```

The exact entry will depend upon the SCSI address utilized by the drive. In all of the examples above, SCSI address = 1 is shown. Do NOT put an entry into the SCSI section of this file -- it must be entered as a floppy drive. If you already have a floppy drive as 'floppy0', you can put the SCSI floppy as 'floppy1' instead.

NOTE: Apple tested with an ISA 1015S drive that required an upgrade from the vendor before it would be recognized by HP-UX as 'scsifloppy.' MAE will NOT be

able to use the drive until HP-UX recognizes the unit as a SCSI floppy drive. We also discovered that our unit did not work if SCSI address = 0 was utilized.

Article Change History:

13 May 1996 - Complete rewrite of article.

08 Feb 1996 - Included SCSI Floppy Drive information.

10 Aug 1995 - Changed title to better reflect the article.

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