

Mach³⁸⁶ Release Notes

23 March 1992

IMPORTANT: READ BEFORE INSTALLATION

- If, when Mach³⁸⁶ is first booted, after the message

```
root on fd0
```

is printed, the following error occurs:

```
fd0: Illegal format type
```

followed (eventually) by a panic, then your floppy controller can not handle the method used by the Mach³⁸⁶ floppy driver to determine the format of the floppy. This means that you have to inform the driver of the correct format. See the final entry on the buglist below.

BUGLIST

- We do not distribute *mh*, but we do distribute *Xmh*. If you run *Xmh* without having *mh*, you get the error:

```
Xmh: err 2 unrecognized file or directory
execvp failed
```

Sources to *mh* are available from UUNET. Via anonymous *ftp* they're in the mail directory (as of this writing, in file *mh-6.7.tar.Z*).

- For programs with very large data space usage, do not set *datasize* limit to be unlimited. Instead, just set it to be high (e.g., 64 Mb).
- *uncompress*, if given more than one file on the command line (e.g. *uncompress *.Z*) may corrupt some of its output. It will uncompress files one at a time without error.
- If running *nfs* via the 3Com 501 or 502 ethernet board, you will have to use the *rsize* and *wsize* options of value 512 for any NFS mounts to or from your Mach³⁸⁶ machine.
- The */usr/adm/aculog* file is not distributed with Mach³⁸⁶, but it is used by *tip(1)* to keep track of outgoing calls. Running *tip* produces the error *can't open log file /usr/adm/aculog*. No other *tip* operations are affected by this error. If you want to keep track of outgoing calls, create */usr/adm/aculog*, owned and/or writable by *uucp*. If you don't want to keep track of outgoing calls, but are annoyed by the error message from *tip(1)*, you may create a symbolic link for */usr/adm/aculog* pointing to */dev/null*.
- Running *iostat* to get disk performance statistics produces the error *Disk init info not in namelist*. The *iostat(1)* program has not been ported to the 386.
- *ftp* silently crops passwords at 8 characters before sending them to the remote *ftp* daemon. If that daemon is on a system that normally encrypts long passwords in their entirety, the *ftp(1)* user will not be able to access that system.
- Opening a socket in the filesystem causes a kernel panic, as in

```
echo hello > /dev/printer
```
- In using the *pn=@* field for */etc/remote*, if */etc/phones* is NOT readable by the world and you are not root, then *tip(1)* will complain that it cannot open */etc/phones*. You can work around this by making it world readable, which defeats the security purpose of using the */etc/phones* file.
- *Acucntrl* doesn't handle the */etc/utmp* file properly (doesn't examine or set the correct entry number).

- In the C-Shell, if you `cd /`, then `cd ..`, then `cd` to any directory name that doesn't start with `/`, the shell will terminate with an `abort(3)`, creating a core file (if you have permission to write into `/`).
- `eval 'resize'` does not work in the C-Shell.
- The `xdm(1)` program in the X-Windows Base component dumps core.
- In the directory `/usr/local/gnu/lib/emacs/etc`, `DOC` is a symbolic link to a non-existent file. It should be a link to `DOC-18.55.6` in the same directory.
- The following steps will have to be taken to successfully bootstrap Mach³⁸⁶ if your floppy controller cannot handle the method used by the Mach³⁸⁶ floppy driver to determine the format of the floppy.

When the (replacement) boot floppy is booted and prints `Boot:`, type `-as`. After the filesystem is inserted and the bootup messages are printed, the kernel will stop and ask for a `Root device?`, to which you answer `fd0d`, if you are running on 5.25" floppies, or `fd0b` for 3.5" floppies.

After booting, and when the `#` prompt appears, you will need to change the device node files in `/dev` on the filesystem. The device files that get installed on the hard disk will also need to be changed - more on that below. Here is the sequence of commands for the filesystem floppy:

```
# cd /dev
# rm *fd* *flop*
# ./MAKEDEV fd0.3      (for 5.25" floppies)
  or
# ./MAKEDEV fd0.1      (for 3.5" floppies)
```

Once you have made these changes, type `sync` and then `halt -l -q` to halt the machine. When you reboot, this time (and every subsequent time the system is brought up on the floppy) type `-a` to the `Boot:` prompt. `Fsck` may still find an error, but it should fix it and reboot without incident.

When you get to step 1.3.3 in the installation sequence (page SMM1:1-3), after booting, you will probably get some more `Illegal format messages` and the error messages

```
Can't mount bootstrap floppy to extract kernel
Please insert Bootstrap floppy and press <Return>
```

Type `<Control>-C` at that point and wait for the `#` prompt. You can then do the same sequence as above to change the floppy device. After doing that, `sync` the filesystem again, then run `rc.install`. Hopefully, everything will go much smoother after all this.

Once the system is installed, you may need to replace the device files for the second floppy drive in order to use that one. Use the `MAKEDEV` script with the argument `fd1.1` for a 3.5" floppy drive, or `fd1.3` for a 5.25" drive.