

Steps 1-6 are not required to install a new release of mbarivision. This is for reference only should any of the following need to be reinstalled. Applications are listed in the order to install them. For example, transcode-1.0.1 and mq require the OpenQuicktime library, so OpenQuicktime is installed first.

1) **OpenQuicktime**

OpenQuicktime has been modified for the AVED workflow to incorporate timecode. Do not overwrite the source code by downloading the OpenQuicktime available from <http://www.openquicktime.org>, instead, CVS checkout the aved/OpenQuicktime module from the MBARI CVS repository moonjelly.

Xvid is required by OpenQuicktime, download xvidcore, and xvidcore-devel RPMs, and install. After xvid installed, now build OpenQuicktime with

```
# ./bootstrap
# ./configure --prefix=/usr/local
# make
```

(The make failed for me with an error in the file io_curl.c. I simply commented out line 323 that caused the failure, then tried make again and it worked fine)

```
# vi lib/io_curl.c and commented out line 323
# make
# make install
```

2) **transcode-1.0.1**

Transcode-1.0.1 has been modified for the AVED workflow to incorporate OpenQuicktime and ImageMagick libraries for DPX support. Do not overwrite the transcode-1.0.1 source code by downloading from the web site, instead cvs check-out the aved/transcode-1.0.1 module from the MBARI CVS repository moonjelly.

Before, building transcode-1.0.1, the following RPMs are required, so download and install these first:

- 1) liblame, liblame-devel
- 2) a52, a52-devel
- 3) libfaac, libfaac-devel
- 4) libfaad2, libfaad2-devel
- 5) libdvdread, libdvdread-devel
- 6) libdvdcss
- 7) download mpeg2dev from <http://libmpeg2.sourceforge.net/downloads.html>, and do
configure;make;make install
- 8) ffmpeg, ffmpeg-devel
- 9) libxvidcore, libxvidcore-devel
- 10) ImageMagick
- 11) GraphicsMagick (required ImageMagick)
- 12) Imlib2, imlib2-devel

Now configure, build and install transcode-1.0.1. This can be done all in one step with

```
# ./configure;make;make install
```

3) mq

Mq is used in the aved scripts to create quicktime movies from ppms. It uses the OpenQuicktime library. Check-out from cvs the aved/mq module, then do a make, then make install. There is no configuration script for mq and it will be default install to /usr/local/bin, so if you want it to install to a different location, edit the Makefile.

```
# make
```

```
# make install
```

4) mpeg_encode

mpeg_encode is used in the runclip script. It can be downloaded from http://bmrc.berkeley.edu/frame/research/mpeg/mpeg_encode.html, or tar up the version on beowulffish at /home/aved/mpeg_encode and scp to Koi. Mpeg_encode requires some modification of the makefile and has no configuration script.

If using the version on beowulffish you need to modify the Makefile as follows:

- 1) Edit the Makefile
- 2) Change the CC variable to point to your gcc compiler.
- 3) Modify the install rule to install to /usr/local/bin and /usr/local/man
- 4) Remove the reference to -I /home/aved/include/c++/3.3.2 in the INCLUDEDIR variable

If downloading the version from Berkeley, following the instructions provided.

When the Makefile modifications are done, do a make followed by make install

```
# make
```

```
# make install
```

5) mpeg_play

mpeg_play is used to play mpeg files created with mpeg_encode. This can be downloaded from http://bmrc.berkeley.edu/frame/research/mpeg/mpeg_play.html, or tar up the version on beowulffish at /home/aved/mpeg_play and scp to Koi. Mpeg_play requires some modification of the makefile and has no configuration script. I ran into problems when working with the version on beowulffish and installing on Koi and had to change the LIBS and DEST variables as follows.

- 1) Edit the Makefile, and check that the LIBS variable is set to a valid path (should be something like /usr/X11/lib , or /usr/X11R6/lib)
- 2) Change DEST variable to /usr/local

When the Makefile is setup,do make followed by make install

```
# make
```

```
# make install
```

6) **xerces-c-src 2 6 0**

Xerces c is the XML library used in mbarivision. It has been modified slightly to include a AVEDDOMTest in the xerces-c-src_2_6_0/samples/AVEDDOMTest directory. To build

- 1) Check-out `aved/xerces20051219.tar.gz` from Moonjelly and `untar`
- 2) Run the `runConfigure` script in the `xerces-c-src_2_6_0/src/xeresc` directory as follows:
runConfigure -p linux
This will create the configure script and export the required environment variables
- 3) Then run `gmake`
gmake

7) **saliency and mbarivision**

mbarivision is the core AVED software and overrides some of the modules in the saliency toolkit. So these modules have some dependencies and should be built in the order saliency first, then mbarivision.

To build saliency and mbarivision,

- 1) Check-out `aved/mbarivision` from Moonjelly
- 2) Check out `aved/saliency20051219.tar.gz` from Moonjelly and `untar`

Then, follow the instructions in the `aved/mbarivision/README` file

8) **AVED scripts**

If changes have been made to the `aved` script, do a `cvs` update or checkout the `aved/scripts` module from Moonjelly to get the latest changes. Then, make the scripts accessible to the user by copying the files to the `/usr/local/aved/scripts` directory.

9) **AVED users and the /etc/profile.d/aved.csh and aved.sh files**

If you need to add a path to new applications for all users to see, like Java applications, or need to add a `CLASSPATH` variable, do this in the `/etc/profile.d/aved.csh` and `aved.sh` files. These files configure the AVED environment for all users upon login.