

July 1, 2009

How to install and run LINUX version of:

bosor4, bigbosor4, bosor5, panda2, and genopt:

The tar file may be called:

bosor4bigbosor4bosor5panda2genopt.tar

or possibly

b4bigb4b5p2g.linux.tar

or something like that.

This “tar” file contains bosor4, bigbosor4, bosor5, panda2, genopt and certain other software (identified below) for the Mandrake LINUX operating system.

bigbosor4 is like bosor4 except it works for more shell segments than bosor4. In running panda2 you need both bosor4 and bigbosor4: bosor4 because the panda2 system uses some of the software from bosor4, and bigbosor4 because you can generate bigbosor4 input files (which are the same as bosor4 input files) through three panda2 processors, one called “panel”, another called “panel2” and a third called “panel3”.

“genopt” is a program by means of which you can convert a straight analysis of a given structure (or anything else!) into a user-friendly optimization of that structure (or anything else!). If you obtain “genopt” you should also obtain “bigbosor4”, especially if you intend to optimize a shell of revolution.

How to proceed:

1. Establish a directory that you want to be the PARENT directory of bosor4, bigbosor4, bosor5, panda2, and genopt
2. read the contents of the disc into that PARENT directory.
3. Type the command:
tar xvf bosor4bigbosor4bosor5panda2genopt.tar (or whatever the “tar” file is called, such as **b4bigb4b5p2g.linux.tar**, for example).
4. If everything works all right, the PARENT directory will contain the “tar” file (which you can now delete if you wish) and several directories, including bosor4, bigbosor4, bosor5, panda2, and genopt (if all those computer programs were included in the original “tar” file). Here is a list of the files and directories existing after execution of the command, **tar xvf b4bigb4b5p2g.linux.tar**, for example):

```
-rw-r--r--  1 bush bush 682782720 Jul  1 06:52 b4bigb4b5p2g.linux.tar
drwxr-xr-x  9 bush bush   232 Jul  1 06:47 bigbosor4
drwxr-xr-x  2 bush bush   296 Jul  1 06:47 bin
drwxr-xr-x  9 bush bush   232 Jul  1 06:47 bosor4
drwxr-xr-x  9 bush bush   232 Jul  1 06:47 bosor5
```

drwxr-xr-x	2	bush	bush	48	Jun	29	2001	gawk
drwxr-xr-x	9	bush	bush	232	Jul	1	06:48	genopt
-rwxr-xr-x	1	bush	bush	4076	Mar	7	2008	install
drwxr-xr-x	9	bush	bush	232	Jul	1	06:48	panda2
drwxr-xr-x	2	bush	bush	1072	Jul	1	06:47	plotps
drwxr-xr-x	2	bush	bush	1656	Jul	1	06:47	util
drwxr-xr-x	5	bush	bush	1264	Jun	29	2001	xgraph

bigbosor4, bosor4, bosor5, panda2, and genopt are directories which contain subdirectories that include the source files, the executable files, the “doc” (documentation) files, and sample cases for each computer program, bigbosor4, bosor4, bosor5, panda2, and genopt, respectively. bin, gawk, plotps, xgraph, and util are directories with execution scripts (bin). text processing software (gawk), plotting software (plotps and xgraph), and utility routines (util). install is the script corresponding to the “install” command. (See the next item).

5. You may have to change the permission of “install” (e.g. `chmod 700 install`). Then execute “install”, specifying the entire path to “install”:

{path-to-install}/install

The main role of “install” is to change the home directory name from that used at the facility where the command “...bin/build_archive” was executed to the home directory name at the facility where David Bushnell’s computer programs are being installed. (See the file called .../doc/build_archive.session.pdf for details of a “build_archive” interactive session).

6. One of the directories listed above is called “bin”. “bin” will contain a file called “initialize”. If “install” didn’t work properly, you will have to modify “initialize” to give it the proper HOME directory on your system. I think you may also have to modify “install” in an analogous manner, that is, if Step 5 didn’t work.

7. In order to run any of these programs you first must give the command:

source {path to bin}/initialize.

8. If you want to run any of David Bushnell’s computer programs, you first create then go to a directory where you want to run the program, then type a command such as:

bigbosor4log (if you intend to run bigbosor4)

panda2log (if you intend to run panda2)

bosor5log (if you intend to run bosor5)

bosor4log (if you intend to run bosor4)

genoptlog (if you intend to run genopt)

(Note: you must **always** run GENOPT from a directory called <home directory>/**genoptcase**)

The purpose of each of these commands is to activate the set of commands that is relevant to the particular computer program you intend to run. Each of these “xxxlog”

commands generates a screen that lists the set of activated commands with definitions of what each activated command does.

8. Note that the “tar” file with the name such as “b4bigb4b5p2g.linux.tar” may have another name, such as “bigb4g.linux.tar” or “bigbosor4genopt.linux.tar” if it contains only bigbosor4 and genopt, for example. Or the “tar” file may have a name such as “b4bigb4p2.linux.tar” or “bosor4bigbosor4panda2.linux.tar” if it contains only bosor4, bigbosor4, and panda2, for example. The directions listed above for installation at your facility still apply.

9. You may want to create yourself a “tar” file analogous to those named here at some time after you have installed and possibly used one or more of David Bushnell’s computer programs at your facility. You would want to do this should you intend to create a CD containing one or more of Bushnell’s programs that you wish to port to another facility. In order to do this, please first read the file called “build_archive.session” or “build_archive.session.pdf” that is located in the directories ...bigbosor4/doc and ...panda2/doc and ...genopt/doc and bosor4/doc and bosor5/doc.