

Included in this file is documentation for the desk accessory 'RasNIX.'
RasNIX is a miniature pseudo-UNIX emulator, which allows you perform some simple commands to look at disks and files (ls, wc, cd, rm, etc.)

RasNIX was written entirely with The Rascal Development System. For any of you Rascallers out there who might be reading this, I suggest you take a quick look at the source: I rewrote RasNIX with an experimental version of Rascal (post A+ version), and it should give you a taste of some of the new features you can expect in the next release.

A few comments:

- 1) Note that Rascal can take the Compiler+Linker output of the RasNIX source and:
 - (a) execute it within the development environment
 - (b) turn it into a stand-alone application
 - (c) turn it into a desk accessoryNo source modifications are required for any of these steps, although some source-level care must be taken to get step (c) to work.
- 2) No, it ain't UNIX, it's RasNIX. Sorry, but I didn't have time to make a 4.2 BSD desk accessory. In particular, I am sorry to say that I never got around to putting in wildcards.
- 3) It is pretty big for a desk accessory (about 9.3K). It also wants another 1K of space for program globals when it is opened. It should Beep and exit if there isn't enough memory.
- 4) RasNIX hasn't been extensively tested, so let me know if there are any problems.

Hope you enjoy it! The source and desk accessory are in the public domain, so do with them what you will (but don't make a profit from them).

Scott Gillespie
Reed College
Portland, OR 97202

RasNIX.doc

RasNIX is a pseudo-UNIX emulator, which allows you to examine and manipulate (to some extent) the files on your disks. Instead of being iconically oriented, RasNIX provides a command-line-oriented shell, and supports several standard UNIX commands (as well as some Mac specific commands).

When you start up RasNIX (by selecting 'RasNIX' from the desk accessory menu) you will see the window divided into two sections by a horizontal line: a small top section with prompt and cursor, and a large lower section. You can type in RasNIX commands at the top, and any output (for instance when you list files) will

appear in the bottom section.

Whenever you type any commands which cause RasNIX to list more files than will fit in the window, you will be prompted with the following line:

```
More?
```

Type a 'y' or a <Return> to continue with the file listing, or type <Enter> to abort the listing. RasNIX ignores case: you can type commands or filenames with whatever combination of lower and upper-case characters you desire. When in UNIX, one has a number of directories: in RasNIX, each disk is seen as a directory. Standard UNIX commands referring to directories (such as 'cd') will refer to disks, in RasNIX. When you first start up RasNIX, you are in the Home directory (where typing 'ls' will list all of the disk names). You can specify a file from a different disk than the current directory by using the syntax:

```
DiskName:FileName
```

(unlike UNIX's use of '/' to indicate pathnames).

Here is a summary of the current RasNIX commands:

ls (List). Ls lists all of the files in the current directory (disk).

If you are in the home directory (see 'cd'), ls will cause all disk names to be listed (for those disks which have been inserted since RasNIX was started up.

If you type '-l' as an argument to ls:

```
ls -l
```

the size (in bytes) of each file will be listed along with the filename. If you are in the home directory, the number of used bytes will be listed for each disk (for floppies, 400K-Number listed = free space).

cd (Change Directory). Cd causes the base directory to change to the disk specified by the argument accompanying Cd:

```
cd A+
```

changes the base directory to the disk 'A+'. After you type cd, you can type the name of any disk listed in the home directory. If you just type cd (with no argument), you will go to the home directory. In the home directory, typing 'ls' will cause all of the known disk names to be listed. Another obscure option is to type a volume reference or drive number, preceded by a colon:

```
cd :-2
```

The command above will change directories to the disk with a volume reference number of -2. The following command:

```
cd :2
```

will change directories to the external disk (positive numbers are drive numbers: 1=internal, 2=external, etc.). See Inside Macintosh (File Manager) for details on volume reference and drive numbers.

pwd (Print Working Directory). When you type this command, RasNIX will print out the name of the current directory.

date Print out the current date.

time Print out the current time.

help A brief summary of all possible RasNIX commands is displayed.

info Information about RasNIX is displayed.

wc Use this command to find out the size of any individual file, or of the current working directory (except Home). If, for example, your working directory was 'Support', and you wanted to find out how big the file 'aquarium.src' was, just type the following:

```
wc aquarium.src
```

RasNIX will print the size of the file in bytes. Just typing 'wc' with no arguments will cause RasNIX to print the size of the current working directory in bytes.

separ (Separator). This is not a standard UNIX command. Often, Macintosh file or disk names contain spaces. RasNIX will understand any disk or filename typed *unless the name BEGINS with a space*. If you want to refer to a disk or file that begins with a space, use this command to specify another character (e.g. comma (',')) to be the character that separates the command from its operand. If you type 'separ' all by itself on the command line, the default (separate command/operand at spaces) will be set. If you give a character as an argument to separ, all further parsing will be done by breaking the command line with that character. For example, if you want to do a 'cd MyDisk' (where ' MyDisk' begins with a space):

```
separ , (Set the separator char to a comma)
```

```
cd, MyDisk ('cd' and ' My Disk' are each seen as separate words).
```

```
separ (Set the separator character to the default).
```

It is always o.k. for a filename to contain embedded spaces (e.g. 'Rascal Work File').eject 'Eject' followed by a disk name, will cause the specified disk to be ejected (if it is currently mounted).

forget Same action as 'eject', plus makes the Macintosh forget about the disk (for experts, forget=unmount). Don't 'forget' any disks that you might want to keep using.

rm (Remove) Causes the specified file to be deleted from disk:

```
rm test.obj (deletes test.obj).
```

logout Causes RasNIX to halt: the desk accessory will be closed.
