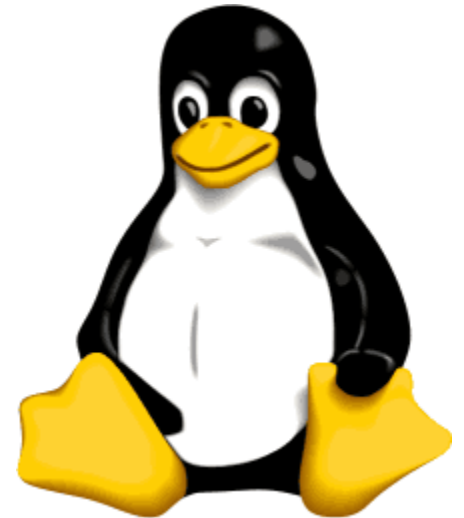


Linux / Linux Labs



What is Linux?

- An alternative to Microsoft Windows
- Open source
- Freely available
- Reliable
- More use seen in labs/scientific situations, but is seeing more popularity.
- Command line based interface



What is Linux?

- This is what we'll learn to program on in this class.
- Become comfortable with it early on. Don't wait until your first assignment.

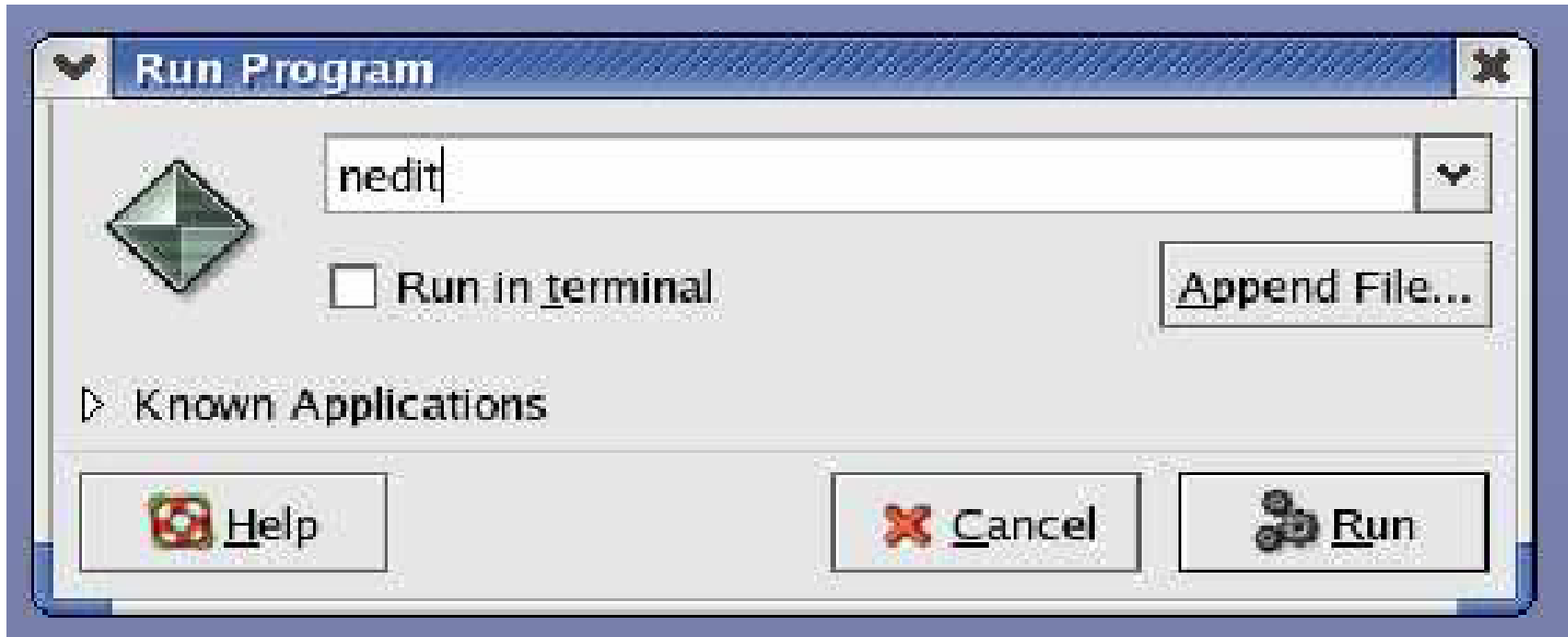
Linux Labs

- We'll hand out the appropriate accounts
- Where are the labs?
 - 301 Maclean Hall
 - B5 Maclean Hall

Now that I'm in the lab, what do I do?

- Login
- Go to start menu
- Go to “run programs”

Text Editor(s)



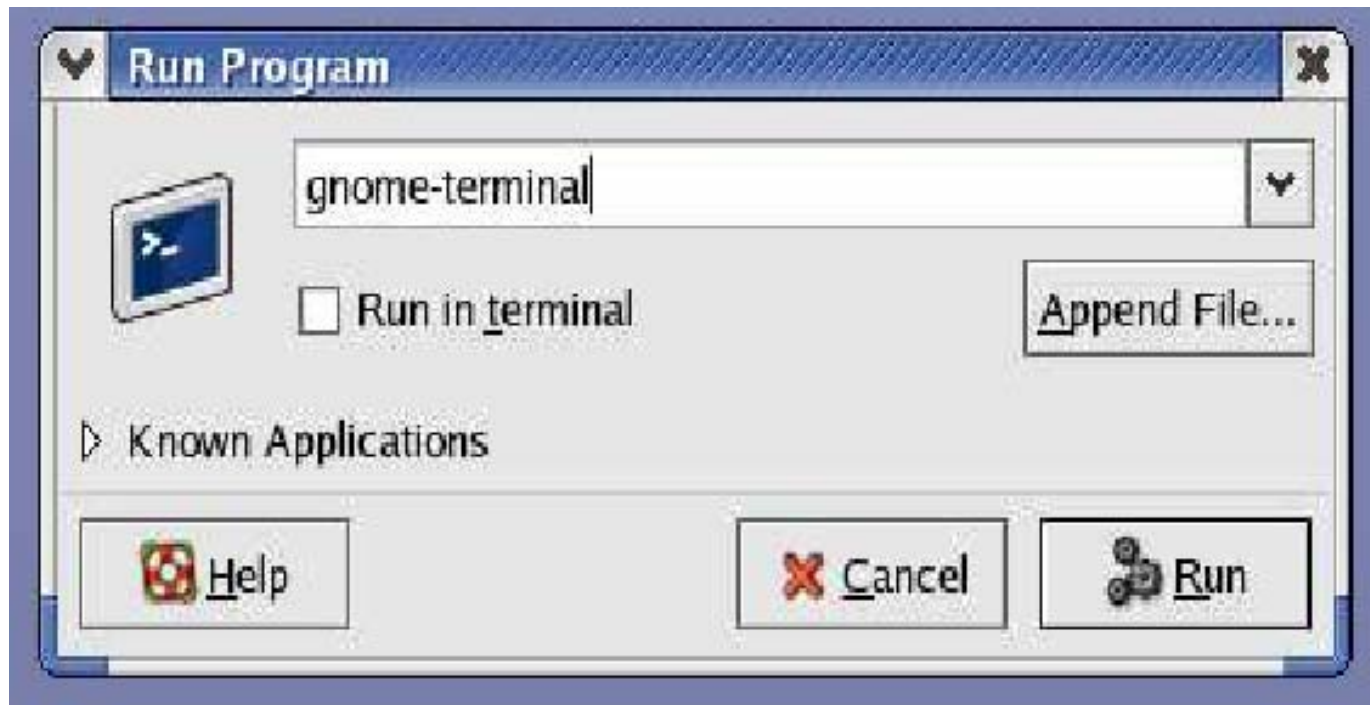
Like notepad, so easy to use.

Other options: emacs, vi (much harder to use)

Non GUI: pico

Terminal

- Command line interface (like the DOS prompt)
- Where you will compile and run programs, manage files etc.
- We'll learn a set of basic commands.



Terminal Window

```
Terminal
File Edit View Terminal Go Help
Disk quotas for user jier (uid 23448):
  Filesystem blocks quota limit grace files quota limit grace
fileserv:/fs/users/accounts
      37648  50000  60000      1115      0      0
fileserv:/fs/users/bacc
      37648  50000  60000      1115      0      0
fileserv:/fs/users/grchan
      37648  50000  60000      1115      0      0
[jier@l-inx101 ~]$
```

command prompt

Quota information (prints out every time)

Basic Linux Commands

- **pwd**

- *print out current working directory*

```
[skhandel@serv15 ~]$ pwd
/mnt/nfs/fileserv/grad/skhandel
[skhandel@serv15 ~]$
```

- **mkdir**

- *create a new directory*

```
[skhandel@serv15 ~]$ mkdir newdir
[skhandel@serv15 ~]$
```

- **cd**

- *change directory*

```
[skhandel@serv15 ~]$ cd newdir
[skhandel@serv15 ~/newdir]$
```


Basic Linux Commands

- **cd ..**
 - *back out of a directory*

```
[skhandel@serv15 ~/newdir]$ cd ..  
[skhandel@serv15 ~]$
```

- **ls or ls -l**
 - *list contents of directory*

```
[skhandel@serv15 ~/newdir]$ ls  
file1.txt  file2.txt  file3.jpg
```

```
[skhandel@serv15 ~/newdir]$ ls -l  
total 0  
-rw-r--r--    1 skhandel students      0 Jan 17 22:12 file1.txt  
-rw-r--r--    1 skhandel students      0 Jan 17 22:12 file2.txt  
-rw-r--r--    1 skhandel students      0 Jan 17 22:12 file3.jpg
```

Basic Linux Commands

- **cp**

- *copy a file*

```
[skhandel@serv15 ~/newdir]$ cp file1.txt file4.txt
[skhandel@serv15 ~/newdir]$ ls
file1.txt  file2.txt  file3.jpg  file4.txt
```

- **mv**

- *rename/move a file*

```
[skhandel@serv15 ~/newdir]$ ls
file1.txt  file2.txt  file3.jpg
[skhandel@serv15 ~/newdir]$ mv file1.txt newfile1.txt
[skhandel@serv15 ~/newdir]$ ls
file2.txt  file3.jpg  newfile1.txt
```

Basic Linux Commands

- **rm**

- *delete a file*

```
[skhandel@serv15 ~/newdir]$ ls
file2.txt  file3.jpg  renamedfile1.txt
[skhandel@serv15 ~/newdir]$ rm renamedfile1.txt
rm: remove regular empty file `renamedfile1.txt'? y
[skhandel@serv15 ~/newdir]$ ls
file2.txt  file3.jpg
[skhandel@serv15 ~/newdir]$
```

- **rmdir**

- *delete an empty directory*

And the Web shall be your master

- This was a quick introduction, there are plenty of pages online that cover this material & more.
- Become familiar with these commands, feel comfortable with Linux.