

useful commands

- which, whereis
- env

su -- a word of wisdom

- root: su and sudo
 - motivation for root
 - motivation for not having root
- su
- sudo

Starting Linux

- Hardware self diagnostics
- Linux kernel loaded from */boot* directory of root device
- Kernel starts running and initializes itself
- Kernel starts process *init*
 - pid = 1
 - first user process

3

Run Levels

- Linux kernel can run in different ways, defined by *run levels*.
 - 10 levels define desired state of the system
- view */etc/inittab* (sidenote: what is the difference vi != view)
 - This file describes how the INIT process should set up the system in a certain run-level.

4

Run Levels

- from inittab:

Default runlevel. The runlevels used by RHS are:

0 - halt (Do NOT set initdefault to this)

1 - Single user mode

2 - Multiuser, without NFS

(The same as 3, if you do not have networking)

3 - Full multiuser mode

4 - unused

5 - X11

6 - reboot (Do NOT set initdefault to this)

5

init process

- *init* process

- first user process

- parent to all processes

- *init* starts other programs

- controls run level and *boot script* associated with each run level

6

Boot Scripts

- scripts:
 - *src.sysinit*
 - *rc.boot*
 - *rc.modules*
 - *rc.local*
- scripts for different run levels located in /etc/rc.d
 - take a look

7

Stopping Linux

- Pull the plug? @#\$%^!!!
- shutdown
- halt
- sync - flush file system buffer

8