



Network Simulator 2 (Linux basics)

- Linux: Introduction
- Linux: Architecture
- Linux: Basic Commands
- Starting and handling NS2
- Exploring example scripts

Linux is a free Unix-type operating system developed under the GNU General Public License. Linux is a multi-user, multi-tasking operating system.

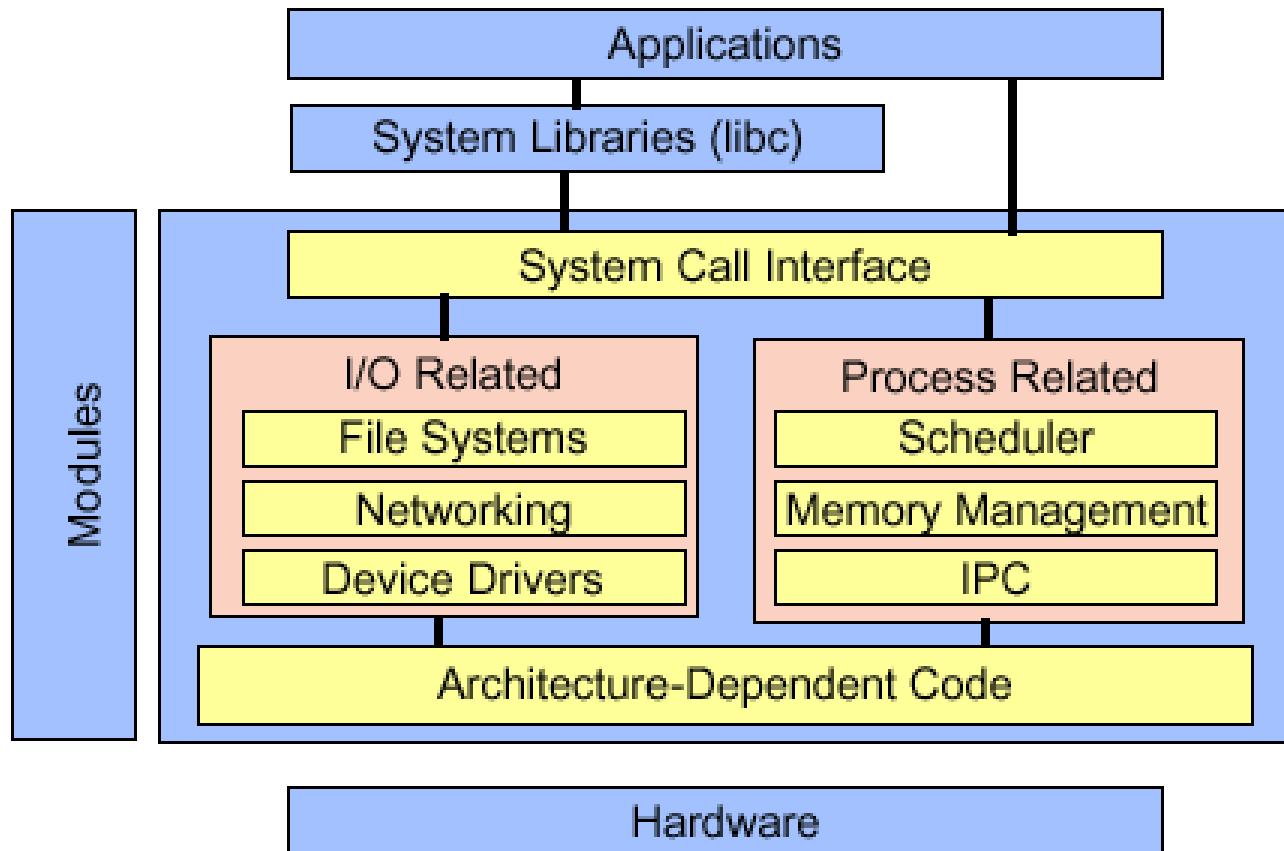
The features of Linux are:

- ♦ Open source
- ♦ Multiuser
- ♦ Multi-tasking
- ♦ Support for multiple platforms.

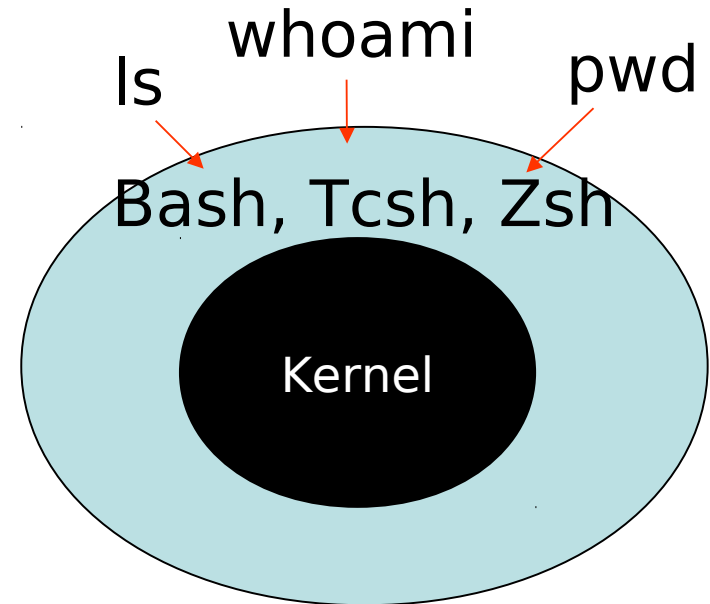
In 1991 Linus Torvalds wrote first version of Linux kernel

– Linus' UNIX= Linux

Architecture: Programmer's Viewpoint



- **Shell** interprets the command and request service from kernel
- Similar to DOS but DOS has only one set of interface while Linux can select different shell
 - Bourne Again shell (Bash), TC shell (Tcsh), Z shell (Zsh)
- Different shell has similar but different functionality
- **Bash** is the default for Linux
- Graphical user interface of Linux is in fact an application program work on the shell



Linux is a command based system. Basic commands of Linux are:

1. **date**

- Shows current date.

2. **who**

- Shows the current user profile of the system.

3. **pwd**

- Shows current working directory.

4. **cal**

- Shows the calender of current month

5. **ls**

- Shows the content of directory.

6. **cd**

- Changes the directory to the specified name.

7. **mkdir**

- Make the new directory with the specified name.

8. **cd ..**

- Comes out of the current directory.

9. **cd /**

- Comes out of all directories and go to the root folder.

10. **rmdir**

- Removes the specified directory.

10.1. **rmdir abc -v**

- Gives the message about making directory.

11. clear

- Clears the screen of the terminal.

12. echo

- Prints the specified msg on the screen. (for ex: echo training will print 'training' on the terminal screen.)

13. ps

- Displays the currently runings processes.

14. pstree

- Displays the process treee with hierarchy stracture.

15. top

- Displays top running processes of the system.

16. vim

- Vi improved editor to write text files.

17. cat

- Shows the content of the file. (ex. Cat first.c)

18. rm

- Delete the specified file.

19. gedit

- Opens editor for text files.

20. df

- To see the available disk space

21. help

- Gives help on specified topic.

22. man

- Used for manual help on particular command. (ex: man rmdir)

Showing practically on terminal...

Showing practically on terminal by running given example scripts within Tcl folder of ns2...

To be continued...

THANK YOU !