Basic Unix Commands

Knowing **basic Unix commands** should allow you to navigate your Unix or Linux system, confirm current system status and manage files or directories.

UPDATE 01/2019: I'll be publishing a short **video walkthrough of Basic Unix Commands** here at the top of the page shortly.

Getting help in Unix

- **man** – view manual pages for Unix commands

Unix Shell Commands

- **clear** – clear screen
- **history** – show history of previous commands

Time and Date commands

- **date** – show current date and time
- **sleep** – wait for a given number of seconds
- **uptime** – find out how long the system has been up

Unix users commands

These commands allow you to get basic information about Unix users in your environment.

- **whoami** – show your username
- **id** – print user identity
- **groups** – show which groups user belongs to
- **passwd** – change user password
- **who** – find out who is logged into the system
- **last** – show history of logins into the system

Unix file operations

Navigating filesystem and managing files and access permissions:

- **ls** – list files and directories
- **cp** – copy files (work in progress)
- **rm** – remove files and directories (work in progress)
- **mv** – rename or move files and directories to another location
- **chmod** – change file/directory access permissions
- **chown** – change file/directory ownership

Text file operations in Unix

Most of important configuration in Unix is in clear text

files, these commands will let you quickly inspect files or view logs:

- **cat** – concatenate files and show contents to the standard output
- **more** – basic pagination when viewing text files or parsing Unix commands output
- **less** – an improved pagination tool for viewing text files (better than more command)
- **head** – show the first 10 lines of text file (you can specify any number of lines)
- **tail** – show the last 10 lines of text file (any number can be specified)
- **grep** – search for patterns in text files

Unix directory management commands

Navigating filesystems and managing directories:

- **cd** – change directory
- **pwd** – confirm current directory
- **ln** – make links and symlinks to files and directories
- **mkdir** – make new directory
- **rmdir** – remove directories in Unix

Unix system status commands

Most useful commands for reviewing hostname configuration and vital stats:

- **hostname** – show or set server hostname
- **w** – display system load, who's logged in and what they are doing
- **uname** – print Unix system information

Reboot

- **shutdown** – graceful shutdown and reboot of your system
- **halt** – ungraceful (without stopping OS services) shutdown
- **reboot** – ungraceful reboot (without stopping OS services)

Networking commands in Unix

Most useful commands for inspecting network setup and exploring network connections and ports:

- **ifconfig – show and set IP addresses (found almost everywhere)**
- **ip** – show and set IP addresses (in recent Linux versions)
- **ping** – check if remote host is reachable via ICMP ping
- **netstat** – show network stats and routing information

Process management

Listing processes and confirming their status, and stopping

processes if needed:

- **ps** – list processes
- **top** – show tasks and system status
- **kill** – kill a process (stop application running)

Remote access commands

ssh is really the only way to go, but it's important to know telnet as well:

- **telnet** – clear-text (insecure) remote access protocol
- **ssh** – Secure SHell – encrypted remote access client
  - check out the **SSH reference**!

File transfers commands

Always useful to know how to copy files between servers or just download some package from the web:

- **ftp** – clear-text (insecure!) File Transfer Protocol client
- **sftp** – secure (encrypted) version of FTP
- **scp** – secure (encrypted) version of cp command
- **wget** – download files from remote servers, HTTP/HTTPS and FTP

See also

- Basic Linux Commands
- Unix Commands
- Linux Commands
- macOS commands
- Advanced Unix commands