

LINUX COMMAND LINE BASICS

What is this “shell”? ¶

The “shell” is another name for the command shell or command interpreter. This is the program that gives you a command prompt, accepts the commands you type there, and basically makes the computer do what you tell it to. In DOS the program that did this was `command.com` (unless you were a real technogeek and used 4dos or something). In Linux, the shell is the first program that starts when you log in, and it keeps running until you log out, waiting to do your bidding. Linux is able to use any of several different shells, but the default Linux shell is called `bash` and is the only one I will discuss.

Why It Is Called a Shell

The shell’s job is to interpret your commands and run the programs you request. Linux was designed to be a multitasking operating system, which means you can run more than one program at one time. Linux was also designed as a multi-user OS, which means that you can have more than one *shell* running at the same time. (Each user gets his own shell at login.) As a user, you have access only to the programs you are running, not the ones other users are running (though you can run your own copy of the same program). The programs are kept separate because they are “enclosed” in a “shell”.

Cool Command Line Tricks

Here is the stuff that you MUST know. The command line interface would be completely unbearable if not for a few simple tricks that make life okay.

Command History

The shell stores a list of the commands that you have issued. You can navigate up and down through this list using the Up and Down Arrow keys. To repeat the last command is just Up Arrow, Enter.

Command Completion

Linux can have some outrageously long file names, which is great when you're reading them in a list, but it sucks when you have to type it on the command line. At least it *would*suck if not for this nifty little feature. Type the first letter or two and then press the Tab key. The shell will try to complete your command. If you typed enough letters to uniquely identify the file name, the shell fills the rest in for you. If the letters match multiple file names, the shell will fill in everything up to the point where they differ and wait. Hit Tab again and it will give you a list of possibilities. The shell will also help you complete path names. Try it out. You will *love* this.

Multitasking

I'll try to expand this later, but here's the one minute version. To run a job (program) in the background, type an ampersand (&) at the end of the command line. To suspend the currently running job, Ctrl-Z. To force a suspended job to run in the background, type `bg<job>`. To bring a background job into the foreground, type `fg <job>`. To see a list of jobs currently running (or suspended) type `jobs`. If you exclude the `<job>` argument on these commands, it defaults to whatever job was last running in the foreground (not the one currently in the foreground).

Navigation: ls, cd, and pwd

Viewing files: cat, more or less

Creation: touch and mkdir

Copy and Move

Deletion: rm and rmdir

Source : <http://www.control-escape.com/linux/cli-basics.html>