

Bash for the Bashful

A Crash Introduction

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What is a shell?

Why Bash?

What can it do?

Where do I go from here?

What is a Shell?

A shell protects you from the kernel (unlike nuts, where the opposite is true :-))

It hides 'nasty' facts of life

It offers short-cuts (sometimes)

It offers history mechanisms (sometimes)

It offers command-line editing (sometimes)

Why Bash?

POSIX Compliant

Well supported

"Safe"

(Largely) compatible with the Bourne shell

Fully featured!

What can it do interactively?

Give you a nice (informative?) prompt

Find your programs for you

Find your directories for you

Allow you to change program functionality

Remembers where you've been

Remembers what you've done

```
bash% PS1="\! \t \d \w% "  
2 17:20:36 Mon Nov 9 ~% history  
3 17:20:50 Mon Nov 9 ~% HISTSIZE=100  
4 17:21:05 Mon Nov 9 ~% history  
4 history  
5 17:21:10 Mon Nov 9 ~% ls  
Devel  
6 17:21:15 Mon Nov 9 ~% history  
4 history  
5 ls  
6 history  
7 17:21:20 Mon Nov 9 ~% !!  
ls  
Devel  
8 17:21:24 Mon Nov 9 ~% function ls() { /bin/ls -l $* }  
9 17:21:34 Mon Nov 9 ~% ls  
drwx----- 5 mpc staff 512 Nov 9 16:04 Devel  
10 17:21:40 Mon Nov 9 ~%
```

Where do I go from here?

Decide what you want to do.

Try it out.

Put it in an automatically run file (.bashrc, .bash_profile or .bash_logout).

Read 'info bash'.

Ask around (wylug-help@scs.leeds.ac.uk)!

What can it do?

Run programs as you log in:

- Listing mail?
- Setting DISPLAY
- Keeping a log

Change the behaviour of the command line for your session:

- Have command history
- Add extra flags to 'ls'
- Add a default printer

Run programs as you log out (.bash_logout)

Logging in and out

```
bash% cat .bash_profile
/usr/bin/frm
DISPLAY=${REMOTEHOST}:0
export DISPLAY
/bin/echo "Log in!" >> ~/.logfile
/bin/date >> ~/.logfile
/bin/echo $LOGNAME >> ~/.logfile
/bin/hostname >> ~/.logfile
```

```
bash% cat .bash_logout
/bin/echo "Log out!" >> ~/.logfile
/bin/date >> ~/.logout
```

```
bash% echo $PATH  
/usr/sbin:/sbin:/root/bin:/usr/local/bin:/bin:/usr/bin:  
/usr/bin/X11:.  
bash% program  
bash: program: Command not found.  
bash% ls /usr/newpackage/bin/program  
/usr/newpackage/bin/program  
bash% PATH=${PATH}:/usr/newpackage/bin  
bash% program  
Hello, world!  
bash% cd /usr/tmp  
bash% pushd mymail  
bash: mymail: No such file or directory  
bash% CDPATH="...:~"  
bash% pushd mymail  
~/mymail /usr/tmp  
bash% popd  
/usr/tmp  
bash%
```