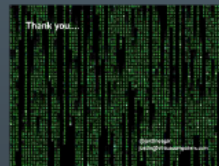


Follow the white rabbit...



Command Line 101

MacTech BootCamp DC



Follow the white rabbit...

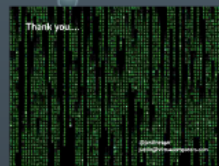
The Matrix has you



Follow the white rabbit...

Command Line 101

MacTech BootCamp DC



\$ whoami

Yes this is ^^ command line

Autriv
SOFTWARE DEVELOPMENT



@justinesgar

virtua
COMPUTERS

NYC TRUCK FOOD

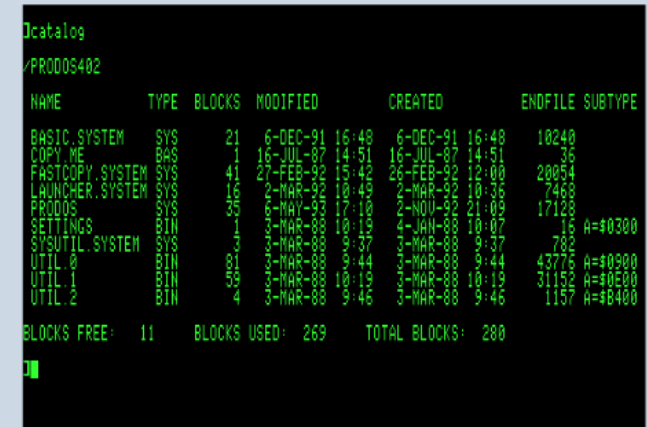


Email Phoenix

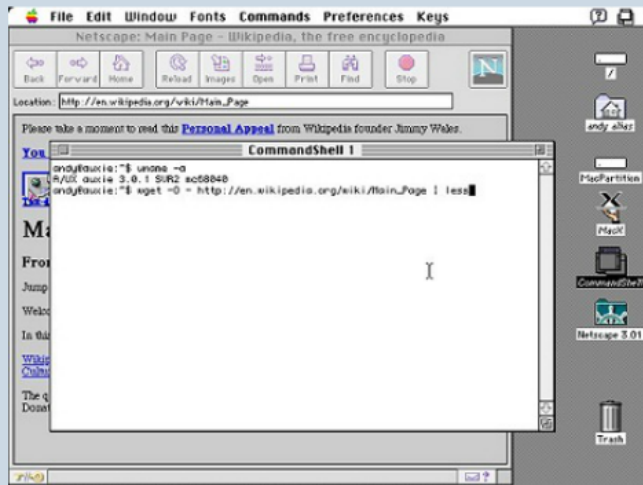
\$ history



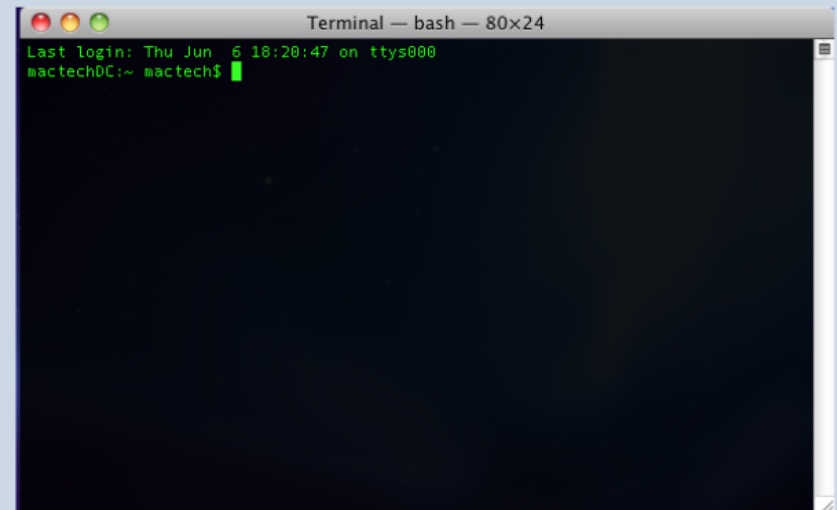
Teleprinter



Remember this?



Apple Unix



Comes full circle

Why use Command Line?

- Do things the GUI just can not do
- Speed
- Scripting
- Single-User / Verbose Mode
- Run commands as other users
- Troubleshooting

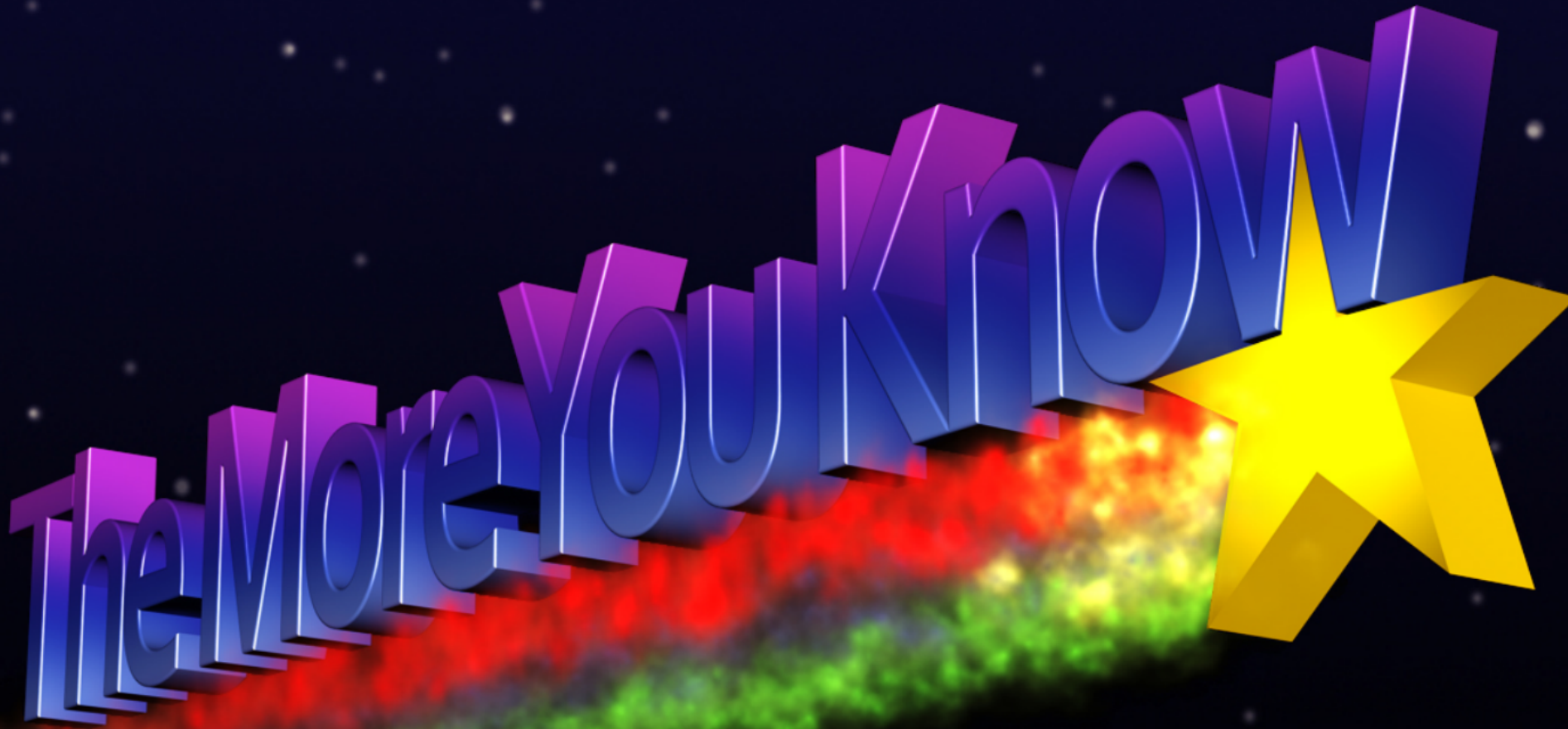


```

mpvhash=095
hi_men tramps at 0xffe00000
PIE enabled
64 bit mode enabled
rtclock_init: Taking bus rapid path 4 (Intel / Apple)
TSC: Verification of clock speed PASSED.
TSC: Frequency = 2730.945GHz; FSB frequency = 604.737390MHz; bus ratio = 4
Downdate: Tue Jul 28 15:08:58 Sat Dec 6 19:39:54 IST 2008; Voodoo: Release 1.0 :xnu-1228.7.50/BUILD/obj/RELEASE_i386
Downdate: Tue Jul 28 15:08:58 Sat Dec 6 19:39:54 IST 2008; Voodoo: Release 1.0 :xnu-1228.7.50/BUILD/obj/RELEASE_i386
Free pages and 9119 wired pages
Copyright © 1989, 1991, 1992, 1993 by
The Regents of the University of California. All rights reserved.
MFC Framework successfully initialized
using 7864 buffer headers and 4096 cluster IO buffer headers
IOPIC: Version 0x11 Vectors 8:23
ACPI: System State (S0 S1 (S0))
ACPI: Button driver prevents system sleep
ACPI: Button driver prevents system sleep
USBF: 0.871 AppleUSBOHCI(10x3155000)::CheckSleepCapability - controller will be unloaded across sleep
SRAT WARMING: Checksum Cookie not valid
USBF: 5.989 AppleUSBOHCI(10x3155000)::CheckSleepCapability - controller will be unloaded across sleep

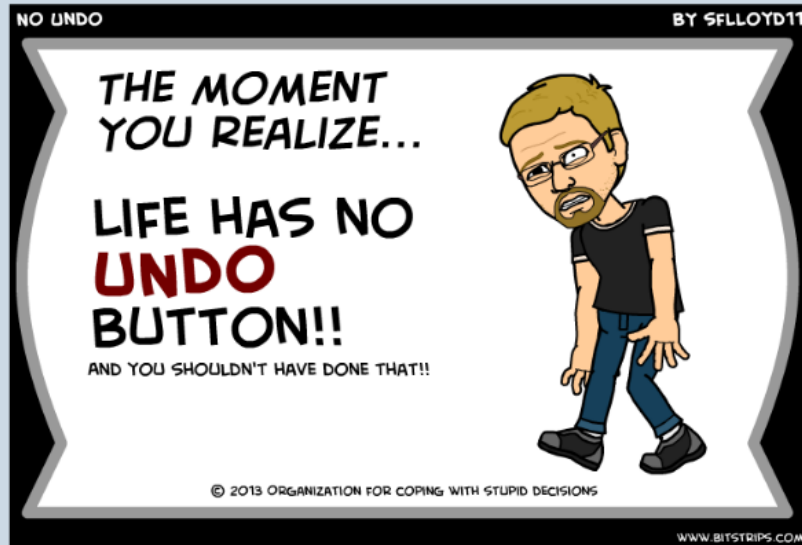
```

The More You Know!



The biggest lesson about Command Line

There is NO UNDO!



also - everything is case sensitive

Time to Plug in



Open Terminal on your computer

`/Applications/Utilities/Terminal.app`



commands

and operators

Great tip:
Auto-complete
paths using the
tab key

cd	pwd
ls	permissions
ls -l	cp
ls -la	cp -R
ls -laR	mv
ls -laR > file.txt	mkdir
ls -lah	rm
du -h	rm -rf

Remember:
Commands are
case sensitive

Great tip:
Use > and >>
to output to
a file

What is an operator?

- modifies the command

chmod

000-777

- 1 - excute
- 2 - write
- 3 - write & excute
- 4 - read
- 5 - read & excute
- 6 - read & write
- 7 - read/write/excute

commands

and operators

Great tip:
Auto-complete
paths using the
tab key

cd	pwd
ls	permissions
ls -l	cp
ls -la	cp -R
ls -laR	mv
ls -laR > file.txt	mkdir
ls -lah	rm
du -h	rm -rf

Remember:
Commands are
case sensitive

Great tip:
Use > and >>
to output to
a file

What is an operator?

- modifies the command

The story of rsync



Files 1-5



Files 4-8



Files 1,2,8,9,10

How do we get all the files into 1 folder?

```
$ rsync -av --progress --inplace folderb/ foldera/
```

```
$ rsync -av --progress --inplace folderc/ foldera/
```



Files 1-10

more

^^yet another terminal command!

sudo / su

tail / tail -f

find

cat

touch

less/more

ssh

Secure SHell - provides a way to remote into another computer

How to use:

Enable SSH from Sharing Pane in Sys. Prefs

\$ ssh user@IPaddress

SSH encrypts both the authentication and communication

Can be setup to ssh passwordless using public and private keys

Great for scripting, and for data transfer

```
"/usr/bin/rsync -rltvz --chmod=ugo=rwX --exclude .ssh --stats --progress -e  
"ssh -p 50000 -i id_rsa -o BatchMode=yes -o UserKnownHostsFile=/dev/null -o  
StrictHostKeyChecking=no -o PasswordAuthentication=no" --keep-dirlinks --  
delete-during --ignore-errors "/usr/local/kerio/mailserver/users.cfg" "/usr/  
local/kerio/mailserver/license" "/usr/local/kerio/mailserver/mailserver.cfg"  
"/usr/local/kerio/mailserver/sslcrt" --exclude *.zip --exclude store/  
spamassassin --exclude *.log.* --max-size=500m "/usr/local/kerio/mailserver/  
store" "root@254.X7.2I.253:/opt/kerio/mailserver/"
```

Apple Specific Command Line

Of course there are Apple custom commands...

dscl
ipconfig
defaults
profiles
diskutil
hdiutil
mdfind
serversetup
launchctl
certtool
security
GetFileInfo
open
osascript
lsbom
installer
softwareupdate
system_profiler

and so many more...



help?!?!?

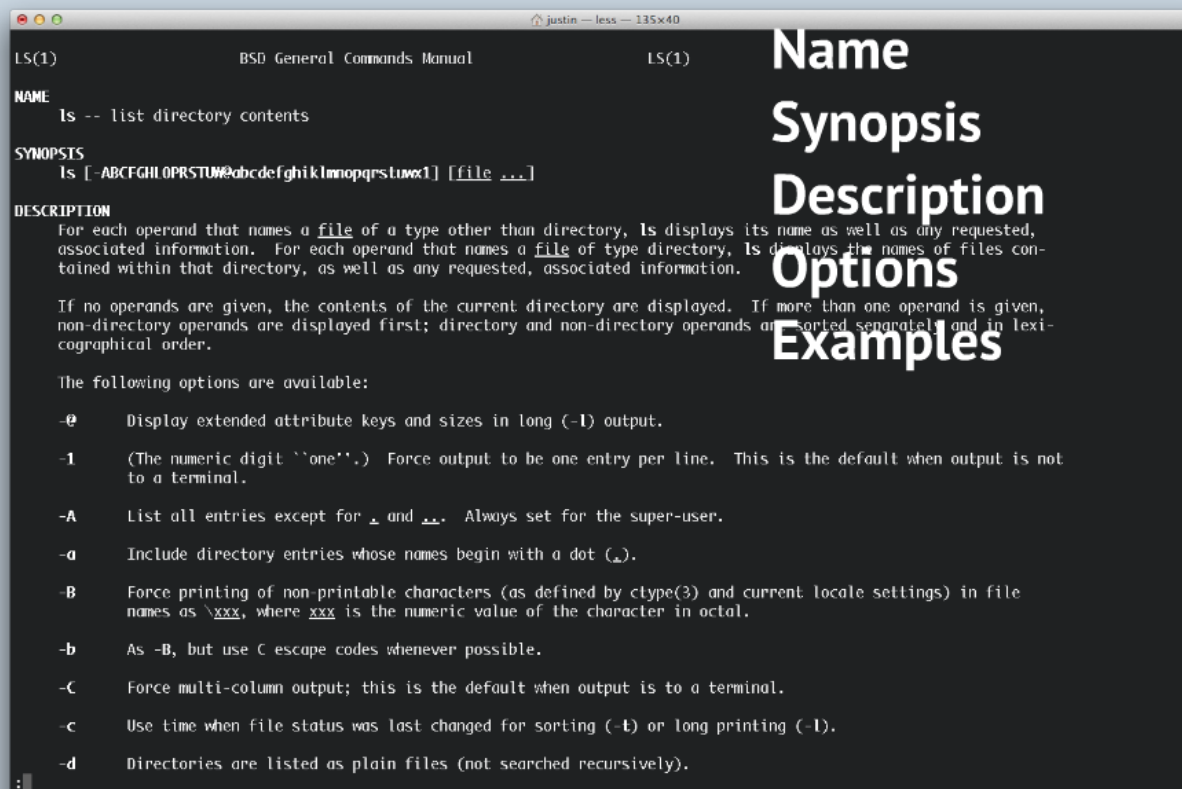
Use the "man" pages

The MANual PAGEs are there for help
with almost any command

Usage:

\$ man ls

What the man page says:



```
LS(1) BSD General Commands Manual LS(1)
NAME
  ls -- list directory contents
SYNOPSIS
  ls [-ABCFGHLOPRSTUW@abcdefghiklmnopqrstuwx1] [file ...]
DESCRIPTION
  For each operand that names a file of a type other than directory, ls displays its name as well as any requested, associated information. For each operand that names a file of type directory, ls displays the names of files contained within that directory, as well as any requested, associated information.
  If no operands are given, the contents of the current directory are displayed. If more than one operand is given, non-directory operands are displayed first; directory and non-directory operands are sorted separately and in lexicographical order.
  The following options are available:
  -e      Display extended attribute keys and sizes in long (-l) output.
  -l      (The numeric digit `one'.) Force output to be one entry per line. This is the default when output is not to a terminal.
  -A      List all entries except for . and ... Always set for the super-user.
  -a      Include directory entries whose names begin with a dot (.).
  -B      Force printing of non-printable characters (as defined by ctype(3) and current locale settings) in file names as \xxx, where xxx is the numeric value of the character in octal.
  -b      As -B, but use C escape codes whenever possible.
  -C      Force multi-column output; this is the default when output is to a terminal.
  -c      Use time when file status was last changed for sorting (-t) or long printing (-l).
  -d      Directories are listed as plain files (not searched recursively).
```

Name

Synopsis

Description

Options

Examples

Diagnostics

Environment

Compatibility

See Also

Files

Any Questions?



Thank you...

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justin@virtuacomputers.com