

Linux操作简介

Basic File Operations

ls	List files in a directory
cp	Copy a file
mv	Rename (“move”) a file
rm	Delete (“remove”) a file
ln	Create links (alternative names) to a file

Directory Operations

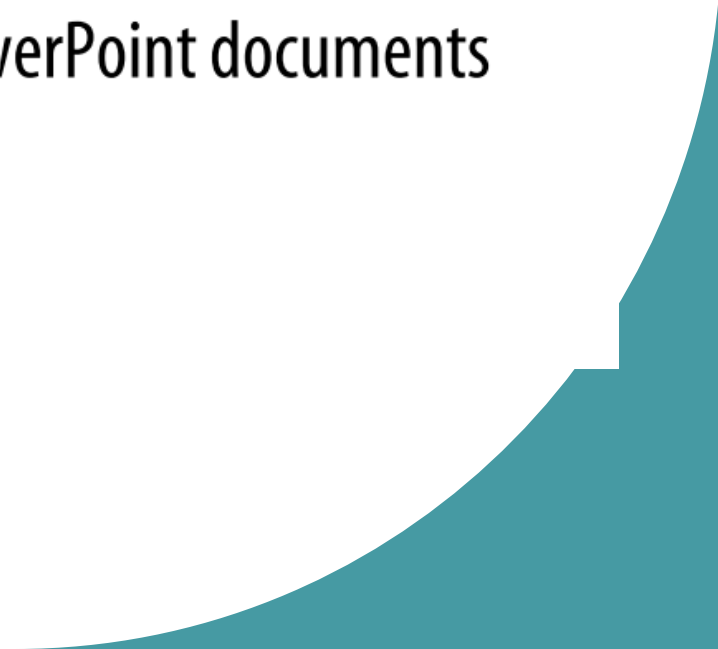
<code>cd</code>	Change your current directory
<code>pwd</code>	Print the name of your current directory, i.e., “where you are now” in the filesystem
<code>basename</code>	Print the final part of a file path
<code>dirname</code>	Remove the final part of a file path
<code>mkdir</code>	Create a directory
<code>rmdir</code>	Delete an empty directory
<code>rm -r</code>	Delete a nonempty directory and its contents

File Viewing

cat	View files in their entirety
less	View files one page at a time
head	View the first lines of a file
tail	View the last lines of a file
nl	View files with their lines numbered
od	View data in octal (or other formats)
xxd	View data in hexadecimal
gv	View Postscript or PDF files
xdvi	View TeX DVI files

File Creation and Editing

emacs	Text editor from Free Software Foundation
vim	Text editor, extension of Unix <code>vi</code>
umask	Set a default mode for new files and directories
soffice	Office suite for editing Microsoft Word, Excel, and PowerPoint documents
abiword	Edit Microsoft Word documents
gnumeric	Edit Excel spreadsheets



File Properties

stat	Display attributes of files and directories
wc	Count bytes, words, lines in a file
du	Measure disk usage of files and directories
file	Identify (guess) the type of a file
touch	Change timestamps of files and directories
chown	Change owner of files and directories
chgrp	Change group ownership of files and directories
chmod	Change protection mode of files and directories
chattr	Change extended attributes of files and directories
lsattr	List extended attributes of files and directories

File Location

<code>find</code>	Locate files in a directory hierarchy
<code>slocate</code>	Create an index of files, and search the index for string
<code>which</code>	Locate executables in your search path (command)
<code>type</code>	Locate executables in your search path (bash builtin)
<code>whereis</code>	Locate executables, documentation, and source files

File Text Manipulation

grep	Find lines in a file that match a regular expression
cut	Extract columns from a file
paste	Append columns
tr	Translate characters into other characters
sort	Sort lines of text by various criteria
uniq	Locate identical lines in a file
tee	Copy a file <i>and</i> print it on standard output, simultaneously


```
$ cat myfile  
This is a very wonderful file.  
$ cat myfile | tr aeiouAEIOU '*'  
Th*s *s * v*ry w*nd*rf*l f*l*.
```

File Compression and Packaging

gzip	Compress files with GNU Zip
gunzip	Uncompress GNU Zip files
compress	Compress files with traditional Unix compression
uncompress	Uncompress files with traditional Unix compression
zcat	Compress/uncompress file via standard input/output (gzip or compress)
bzip2	Compress files in BZip format
bunzip2	Uncompress BZip files
zip	Compress files in Windows Zip format
unzip	Uncompress Windows Zip files
uuencode	Convert file to uuencoded format
uudecode	Unconvert file from uuencoded format

File Comparison

diff	Line-by-line comparison of two files or directories
comm	Line-by-line comparison of two sorted files
cmp	Byte-by-byte comparison of two files
md5sum	Compute a checksum of the given files (MD5)

Disks and Filesystems

df	Display available space on mounted filesystems
mount	Make a disk partition accessible
umount	Unmount a disk partition (make it inaccessible)
fsck	Check a disk partition for errors
sync	Flush all disk caches to disk

Backups and Remote Storage

mt	Control a tape drive
dump	Write a disk partition to tape
restore	Restore the results of a dump
tar	Read and write tape archives
cdrecord	Burn a CD-R
rsync	Mirror a set of files onto another device or host

File Printing

lpr

Print a file

lpq

View the print queue

lprm

Remove a print job from the queue

```
$ lpr -P myprinter myfile
```

Viewing Processes

ps	List process
uptime	View the system load
w	List active processes for all users
top	Monitor resource-intensive processes interactively
xload	Monitor system load graphically in an X window
free	Display free memory

Controlling Processes

kill	Terminate a process (or send it a signal)
nice	Invoke a program at a particular priority
renice	Change a process's priority as it runs

Users and Their Environment

logname	Print your login name
whoami	Print your current, effective username
id	Print the user ID and group membership of a user
who	List logged-in users, long output
users	List logged-in users, short output
finger	Print information about users
last	Determine when someone last logged in
printenv	Print your environment

Working with User Accounts

useradd	Create a new account
userdel	Delete an account
usermod	Modify an account
passwd	Change a password
chfn	Change a user's personal information
chsh	Change a user's shell

Working with Groups

groups	Print the group membership of a user
groupadd	Create a new group
groupdel	Delete a group
groupmod	Modify a group

Basic Host Information

uname	Print basic system information
hostname	Print the system's hostname
dnsdomainname	Same as hostname -d
domainname	Same as hostname -y
nisdomainname	Same as hostname -y
ypdomainname	Same as hostname -y
ifconfig	Set and display network interface information

Host Location

host	Look up hostnames, IP addresses, and DNS info
whois	Look up the registrants of Internet domains
ping	Check if a remote host is reachable
traceroute	View the network path to a remote host

Network Connections

ssh	Securely log into a remote host, or run commands on it
telnet	Log into a remote host (insecure!)
scp	Securely copy files to/from a remote host (batch)
sftp	Securely copy files to/from a remote host (interactive)
ftp	Copy files to/from a remote host (interactive, insecure!)

Screen Output

echo	Print simple text on standard output
printf	Print formatted text on standard output
yes	Print repeated text on standard output
seq	Print a sequence of numbers on standard output
clear	Clear the screen or window

```
$ echo hello world  
hello world
```

```
$ printf "User %s is %d years old.\n" sandy 29  
User sandy is 29 years old.
```

```
$ seq 3  
1  
2  
3
```

Dates and Times

xclock	Display a graphical clock
cal	Print a calendar
date	Print or set the date and time
ntpdate	Set the system time using a remote timeserver

Graphics and Screensavers

eog	Display graphics files
gqview	Display graphics files and slideshows
ksnapshot	Take a screenshot (screen capture)
gimp	Edit graphics files
gnuplot	Create graphs and plots
xscreensaver	Run a screensaver

