

# Linux Commands

يعتبر اتقان الاوامر commands هو من احد الاساسيات التي يحتاجها مستخدم انظمة اللينكس و اليونكس ، حتى لو كان ذلك هناك برامج لها واجهة رسومية GUI ، فاختلاف النسخ من لينكس والتوزيعات يجعل من الصعب التعود على برنامج معيناً فثلاً يوجد برنامج يدعي neat يقوم بعمل اعدادات الشبكة في توزيعه Redhat ولا يوجد في باقي التوزيعات انما يوجد غيره ، ولاكن الذي يتقن عمل ذلك عن طريق الاوامر فلن يواجه متاعب في ذلك اذا قام بتغيير النسخة التي يعمل عليها خاصة ، ليس للمستخدمين العاديين للينكس او المستخدمين للاعمال المكتبية، فهناك تطبيقات كثيرة من الصعب التعامل معها من غير الواجهة الرسومية بل بعضها من المستحيل استخدامها في غير ذلك ، مثل برامج تحرير النصوص ..

وهذه بعض الاوامر التي اعتقد انها مهمة وسأحاول قدر المستطاع ان اختصر في الشرح حتى لا يكون الشرح مملاً .

:pwd

لعرض المسار الحالي.



```
root@server2:/home/araboracle
File Edit View Terminal Go Help
[root@server2 araboracle]# pwd
/home/araboracle
[root@server2 araboracle]#
```

:ls

لعرض محتويات الملف الحالي.



```
araboracle@server2:~
File Edit View Terminal Go Help
[araboracle@server2 araboracle]$ ls -la
total 1528584
drwx----- 3 araboracle araboracle 4096 Jun 29 20:21 .
drwxr-xr-x 4 root root 4096 Jun 29 16:53 ..
-rw----- 1 araboracle araboracle 565 Jun 29 20:25 .bash_history
-rw----- 1 araboracle araboracle 24 Oct 28 2003 .bash_logout
-rw----- 1 araboracle araboracle 191 Oct 28 2003 .bash_profile
-rw----- 1 araboracle araboracle 124 Oct 28 2003 .bashrc
-rw----- 1 araboracle araboracle 120 Oct 30 2003 .gtkrc
drwx----- 3 araboracle araboracle 4096 Jun 16 19:38 .kde
-r-xr-xr-x 1 araboracle araboracle 659577856 Jun 29 19:43 ship_9204_linux_disk1.cpio
-r-xr-xr-x 1 araboracle araboracle 646914048 Jun 29 19:44 ship_9204_linux_disk2.cpio
-r-xr-xr-x 1 araboracle araboracle 257192904 Jun 29 20:19 ship_9204_linux_disk3.cpio.gz
[araboracle@server2 araboracle]$
```

:mkdir  
لانشاء مجلد جديد

```
root@server2:~  
File Edit View Temina Go Help  
[root@server2 root]# mkdir oracle  
[root@server2 root]#  
[root@server2 root]# اسم المجلد  
[root@server2 root]# ls  
anaconda ks.cfg install.log oracle vmware linux tools.tar.gz  
Desktop install.log.syslog Screenshot.png vmware-tools-distrib  
[root@server2 root]#
```

:cd  
لانتقل من مجلد الى مجلد

```
araboracle@server2:/etc  
File Edit View Temina Go Help  
[araboracle@server2 araboracle]$ pwd  
/home/araboracle  
[araboracle@server2 araboracle]$  
[araboracle@server2 araboracle]$  
[araboracle@server2 araboracle]$ cd /etc  
[araboracle@server2 etc]$  
[araboracle@server2 etc]$  
[araboracle@server2 etc]$ pwd  
/etc  
[araboracle@server2 etc]$ █
```

:cat  
لعرض محتويات ملف نصي من خلاص شاشة Terminal,

```
araboracle@server2:/etc  
File Edit View Temina Go Help  
[araboracle@server2 etc]$ cat hosts اسم الملف  
# Do not remove the following line, or various programs  
# that require network functionality will fail.  
127.0.0.1 localhost.localdomain localhost  
192.168.5.100 server2  
[araboracle@server2 etc]$  
[araboracle@server2 etc]$  
[araboracle@server2 etc]$ █
```

:echo

لاضافة نص الى ملف وله حالتين، اما اضافة نص الى الملف مباشرة ومسح جميع ماكان موجود سابقا .rewrite

```
araboracle@server2:~  
File Edit View Terminal Go Help  
[araboracle@server2 araboracle]$  
[araboracle@server2 araboracle]$  
[araboracle@server2 araboracle]$  
[araboracle@server2 araboracle]$ echo Linux is the most trusted OS > textfile  
[araboracle@server2 araboracle]$  
[araboracle@server2 araboracle]$  
[araboracle@server2 araboracle]$ cat textfile  
Linux is the most trusted OS  
[araboracle@server2 araboracle]$
```

اضافة نص بعد اخر سطر (في سطر جديد) .

ملاحظة : اذا لم يكن الملف موجود الذي نريد اضافة النص اليه سيتم انشاء ملف نصي جديد.

```
araboracle@server2:~  
File Edit View Terminal Go Help  
[araboracle@server2 araboracle]$  
[araboracle@server2 araboracle]$  
[araboracle@server2 araboracle]$  
[araboracle@server2 araboracle]$ echo Windows is the worst OS in the world >> textfile  
[araboracle@server2 araboracle]$  
[araboracle@server2 araboracle]$  
[araboracle@server2 araboracle]$ cat textfile  
Linux is the most trusted OS  
Windows is the worst OS in the world  
[araboracle@server2 araboracle]$
```

:mv

لنقل ملف من مكان الى آخر. وبنفس الخطوات الامر cp ويستخدم لنسخ الملفات.

```
araboracle@server2:~  
File Edit View Terminal Go Help  
[araboracle@server2 araboracle]$  
[araboracle@server2 araboracle]$  
[araboracle@server2 araboracle]$ mv folder1/prog.cpp folder2  
[araboracle@server2 araboracle]$  
[araboracle@server2 araboracle]$
```

:rm

لحذف ملف . وبنفس الطريقة نستخدم الامر rmdir لحذف مجلد

```
araboracle@server2:~  
File Edit View Terminal Go Help  
[araboracle@server2 araboracle]$  
[araboracle@server2 araboracle]$  
[araboracle@server2 araboracle]$  
[araboracle@server2 araboracle]$ rm textfile  
[araboracle@server2 araboracle]$  
[araboracle@server2 araboracle]$
```

:man

وهي اختصار لكلمة manual ، وتستخدم لعرض شرح عن اي امر ، وتكتب هكذا man pwd ، وبأمكانك الخروج من الصفحة التي يقوم بعرض الشرح بها عن طريق الضغط على حرف Q

```
root@server2:~  
PWD (1) F&F EWD (1)  
  
pwd - print name of current/working directory  
  
[OPTION]  
  
NOTE: your shell may have its own version of pwd which will supersede  
the version described here. Please refer to your shell's documentation  
for details about the options it supports.  
  
Print the full filename of the current working directory.  
  
display this help and exit  
  
output version information and exit  
  
Written by Chm Meyering.
```

:grep

لعرض اسطر معينه من ملف نصي، او نتيجة لامر command معين ، فمثلا لوكان لدينا ملف يحتوي على ملف يحتوي على 50 سطر ونريد ان نعرض فقط الاسطر التي تحتوي على كلمة معينه . وهي لاتستخدم لوحدها بل يجب ان تكون بعد امر معين مثل cat و ls ...  
وفي هذا المثال نقوم بعرض الاسطر التي تحتوي على كلمة telnet من الملف /etc/services والذي يحتوي على المنافذ الموجودة في النظام

```
root@server2:~  
[root@server2 root]#  
[root@server2 root]#  
[root@server2 root]# cat '/etc/services' | grep telnet  
telnet      23/tcp  
telnet      23/udp  
rtelnet     107/tcp      # Remote Telnet  
rtelnet     107/udp  
telnet      992/tcp  
telnet      992/udp  
[root@server2 root]#
```

:top

لعرض احصائية للبرامج التي تعمل في النظام.

```
root@server2:~  
18:52:42 up 1:54, 5 users, load average: 0.03, 0.03, 0.74  
71 processes: 69 sleeping, 2 running, 0 zombie, 0 stopped  
CPU states:  cpu   user   nice  system  irq  softirq  inwait  idle  
              total  0.0%  0.0%   0.0%  33.3%   33.4%   33.2%   0.0%  
Mem:   514560k av, 509000k used, 5552k free, 0k shrd, 77776k buff  
       154224k active, 233488k inactive  
Swap: 1044216k av, 0k used, 1044216k free, 247723k cached  


| PID   | USER | PRI | NI | SIZE  | RSS  | SHARE | STAT | %CPU | %MEM | TIME | CPU | COMMAND        |
|-------|------|-----|----|-------|------|-------|------|------|------|------|-----|----------------|
| 1846  | root | 15  | 0  | 31972 | 13M  | 5016  | S    | 1.1  | 2.6  | 0:47 | 0   | X              |
| 2835  | root | 16  | 0  | 2032  | 2028 | 1760  | S    | 0.9  | 0.3  | 0:01 | 0   | sshd           |
| 10000 | root | 17  | 0  | 1120  | 1120 | 888   | S    | 0.7  | 0.2  | 0:00 | 0   | top            |
| 10051 | root | 17  | 0  | 1116  | 1116 | 888   | R    | 0.7  | 0.2  | 0:00 | 0   | top            |
| 1978  | root | 16  | 0  | 10748 | 10M  | 8212  | S    | 0.3  | 2.0  | 0:02 | 0   | gnome-panel    |
| 1982  | root | 15  | 0  | 5408  | 5408 | 4712  | S    | 0.3  | 1.0  | 0:02 | 0   | magickdev      |
| 2006  | root | 16  | 0  | 12336 | 12M  | 7872  | S    | 0.3  | 2.3  | 0:07 | 0   | gnome-terminal |
| 10001 | root | 16  | 0  | 2016  | 2012 | 1760  | S    | 0.3  | 0.3  | 0:00 | 0   | sshd           |
| 16    | root | 15  | 0  | 0     | 0    | 0     | SW   | 0.1  | 0.0  | 0:00 | 0   | kjournald      |
| 1932  | root | 16  | 0  | 21160 | 20M  | 1984  | R    | 0.1  | 4.1  | 0:04 | 0   | gssd-2         |
| 1     | root | 16  | 0  | 416   | 416  | 360   | S    | 0.0  | 0.0  | 0:05 | 0   | init           |
| 2     | root | 15  | 0  | 0     | 0    | 0     | SW   | 0.0  | 0.0  | 0:00 | 0   | kavend         |
| 3     | root | 15  | 0  | 0     | 0    | 0     | SW   | 0.0  | 0.0  | 0:00 | 0   | kavend         |
| 4     | root | 34  | 19 | 0     | 0    | 0     | SWN  | 0.0  | 0.0  | 0:00 | 0   | ksoftirqd/0    |
| 6     | root | 25  | 0  | 0     | 0    | 0     | SW   | 0.0  | 0.0  | 0:00 | 0   | bdflush        |


```



:ps

يقوم بعرض البرامج التي تعمل في session الحالي للمستخدم ، وإذا أضفنا إليها اللاحقة (-a) فيقوم بعرض البرامج التي تعمل لجميع المستخدمين .

```
root@server2:~# ps
  PID TTY          TIME CMD
 3088 pts/2        00:00:00 bash
10117 pts/2        00:00:00 ps
root@server2:~#
root@server2:~#
root@server2:~#
root@server2:~# ps -a
  PID TTY          TIME CMD
 9894 pts/0        00:00:00 man
 9897 pts/0        00:00:00 sh
 9898 pts/0        00:00:00 sh
 9902 pts/0        00:00:00 nroff
 9903 pts/0        00:00:00 less
 9906 pts/0        00:00:00 groff
 9908 pts/0        00:00:00 grotty
10118 pts/2        00:00:00 ps
root@server2:~#
```

:finger

لعرض المستخدمين اللذين يعملون على النظام حالياً ، ووقت دخولهم وعنوان IP الخاص بالجهاز الذين دخلو به على النظام عن بعد remotely .

```
root@server2:~# finger
Login      Name      Tty      Idle  Login Time   Office      Office Phone
araboracle araboracle pts/0
root       rcot      *:0
root       rcot      pts/1    1:26  Jul 21 17:34 (:0.0)
root       rcot      pts/2    Jul 21 18:08 (192.168.5.1)
```

:whoami

يقوم بعرض اسم المستخدم الحالي.

```
araboracle@server2:/root
[araboracle@server2 root]$ whoami
araboracle
[araboracle@server2 root]$
```

وهذه مجموعة من الاوامر الشائعة ايضا مع شرح لها ، وجدتھا في احد المواقع:

alias	Create an alias
awk	Find and Replace text within file(s)
break	Exit from a loop
builtin	Run a shell builtin
cal	Display a calendar
case	Conditionally perform a command
cat	Display the contents of a file
cd	Change Directory
chgrp	Change group ownership
chmod	Change access permissions
chown	Change file owner and group
chroot	Run a command with a different root directory
cksum	Print CRC checksum and byte counts
clear	Clear terminal screen
cmp	Compare two files
comm	Compare two sorted files line by line
command	Run a command - ignoring shell functions
continue	Resume the next iteration of a loop
cp	Copy one or more files to another location
cron	Daemon to executescheduled commands
crontab	Schedule a command to run at a later time
csplit	Split a file into context-determined pieces
cut	Divide a file into several parts
date	Display or change the date & time
dc	Desk Calculator
dd	Data Dump - Convert and copy a file
declare	Declare variables and give them attributes
df	Display free disk space
diff	Display the differences between two files
diff3	Show differences among three files
dir	Briefly list directory contents
dircolors	Colour setup for `ls`
dirname	Convert a full pathname to just a path
dirs	Display list of remembered directories
du	Estimate file space usage

<code>echo</code>	Display message on screen
<code>ed</code>	A line-oriented text editor (edlin)
<code>egrep</code>	Search file(s) for lines that match an extended expression
<code>eject</code>	Eject CD-ROM
<code>enable</code>	Enable and disable builtin shell commands
<code>env</code>	Display, set, or remove environment variables
<code>eval</code>	Evaluate several commands/arguments
<code>exec</code>	Execute a command
<code>exit</code>	Exit the shell
<code>expand</code>	Convert tabs to spaces
<code>export</code>	Set an environment variable
<code>expr</code>	Evaluate expressions
<code>factor</code>	Print prime factors
<code>false</code>	Do nothing, unsuccessfully
<code>fdformat</code>	Low-level format a floppy disk
<code>fdisk</code>	Partition table manipulator for Linux
<code>fgrep</code>	Search file(s) for lines that match a fixed string
<code>find</code>	Search for files that meet a desired criteria
<code>fmt</code>	Reformat paragraph text
<code>fold</code>	Wrap text to fit a specified width.
<code>for</code>	Expand <i>words</i> , and execute <i>commands</i>
<code>format</code>	Format disks or tapes
<code>free</code>	Display memory usage
<code>fsck</code>	Filesystem consistency check and repair.
<code>function</code>	Define Function Macros
<code>gawk</code>	Find and Replace text within file(s)
<code>getopts</code>	Parse positional parameters
<code>grep</code>	Search file(s) for lines that match a given pattern
<code>groups</code>	Print group names a user is in
<code>gzip</code>	Compress or decompress named file(s)
<code>hash</code>	Remember the full pathname of a name argument
<code>head</code>	Output the first part of file(s)
<code>history</code>	Command History
<code>hostname</code>	Print or set system name
<code>id</code>	Print user and group id's
<code>if</code>	Conditionally perform a command
<code>import</code>	Capture an X server screen and save the image to file
<code>info</code>	Help info
<code>install</code>	Copy files and set attributes
<code>join</code>	Join lines on a common field
<code>kill</code>	Stop a process from running
<code>less</code>	Display output one screen at a time
<code>let</code>	Perform arithmetic on shell variables
<code>ln</code>	Make links between files
<code>local</code>	Create variables
<code>locate</code>	Find files
<code>logname</code>	Print current login name
<code>logout</code>	Exit a login shell



<code>lpc</code>	Line printer control program
<code>lpr</code>	Off line print
<code>lprint</code>	Print a file
<code>lprintd</code>	Abort a print job
<code>lprintq</code>	List the print queue
<code>lprm</code>	Remove jobs from the print queue
<code>ls</code>	List information about file(s)
<code>m4</code>	Macro processor
<code>man</code>	Help manual
<code>mkdir</code>	Create new folder(s)
<code>mkfifo</code>	Make FIFOs (named pipes)
<code>mknod</code>	Make block or character special files
<code>more</code>	Display output one screen at a time
<code>mount</code>	Mount a file system
<code>mtools</code>	Manipulate MS-DOS files
<code>mv</code>	Move or rename files or directories
<code>nice</code>	Set the priority of a command or job
<code>nl</code>	Number lines and write files
<code>nohup</code>	Run a command immune to hangups
<code>passwd</code>	Modify a user password
<code>paste</code>	Merge lines of files
<code>pathchk</code>	Check file name portability
<code>popd</code>	Restore the previous value of the current directory
<code>pr</code>	Convert text files for printing
<code>printcap</code>	Printer capability database
<code>printenv</code>	Print environment variables
<code>printf</code>	Format and print data
<code>ps</code>	Process status
<code>pushd</code>	Save and then change the current directory
<code>pwd</code>	Print Working Directory
<code>quota</code>	Display disk usage and limits
<code>quotacheck</code>	Scan a file system for disk usage
<code>quotactl</code>	Set disk quotas
<code>ram</code>	ram disk device
<code>rcp</code>	Copy files between two machines.
<code>read</code>	read a line from standard input
<code>readonly</code>	Mark variables/functions as readonly
<code>remsync</code>	Synchronize remote files via email
<code>return</code>	Exit a shell function
<code>rm</code>	Remove files
<code>rmdir</code>	Remove folder(s)
<code>rpm</code>	Remote Package Manager
<code>rsync</code>	Remote file copy (Synchronize file trees)
<code>screen</code>	Terminal window manager
<code>sdiff</code>	Merge two files interactively
<code>sed</code>	Stream Editor
<code>select</code>	Accept keyboard input

seq	Print numeric sequences
set	Manipulate shell variables and functions
shift	Shift positional parameters
shopt	Shell Options
shutdown	Shutdown or restart linux
sleep	Delay for a specified time
sort	Sort text files
source	Run commands from a file `.'
split	Split a file into fixed-size pieces
su	Substitute user identity
sum	Print a checksum for a file
symlink	Make a new name for a file
sync	Synchronize data on disk with memory
tac	Concatenate and write files in reverse
tail	Output the last part of files
tar	Tape ARchiver
tee	Redirect output to multiple files
test	Evaluate a conditional expression
time	Measure Program Resource Use
times	User and system times
touch	Change file timestamps
top	List processes running on the system
traceroute	Trace Route to Host
trap	Run a command when a signal is set(bourne)
tr	Translate, squeeze, and/or delete characters
true	Do nothing, successfully
tsort	Topological sort
tty	Print filename of terminal on stdin
type	Describe a command
ulimit	Limit user resources
umask	Users file creation mask
umount	Unmount a device
unalias	Remove an alias
uname	Print system information
unexpand	Convert spaces to tabs
uniq	Uniquify files
units	Convert units from one scale to another
unset	Remove variable or function names
unshar	Unpack shell archive scripts
until	Execute commands (until error)
useradd	Create new user account
usermod	Modify user account
users	List users currently logged in
uuencode	Encode a binary file
uudecode	Decode a file created by uuencode
v	Verbosely list directory contents (`ls -l -b')
vdir	Verbosely list directory contents (`ls -l -b')

<code>watch</code>	Execute/display a program periodically
<code>wc</code>	Print byte, word, and line counts
<code>whereis</code>	Report all known instances of a command
<code>which</code>	Locate a program file in the user's path.
<code>while</code>	Execute commands
<code>who</code>	Print all usernames currently logged in
<code>whoami</code>	Print the current user id and name ( <code>`id -un`</code> )
<code>xargs</code>	Execute utility, passing constructed argument list(s)
<code>yes</code>	Print a string until interrupted

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