Basic usage

List User Specific Opened Files	lsof -u root
Find Processes running on Specific Port	lsof -i TCP:22
Exclude User with '^' Character	lsof -i -u^root
Search by PID	lsof -p 1
List all files opened by a particular command	lsof -c dhcpd
List open files that have no links to them on the filesystem	lsof +L1
Kill all Activity of Particular User	kill -9 `lsof -t -u doe`
Eavesdrop on your system	diff <(lsof -p 1234) <(sleep 10; lsof -p 1234)

Filesystem related commands

List files opened by a PID	lsof -p 15857
Show which process is blocking umount (Device or resource is busy)	lsof /folder
Find Out who's Looking What Files and Commands?	lsof -i -u doe
Discovering all open files/dirs underneath a directory	lsof +D <dirname>
View user activity per directory.	sudo lsof -u someuser -a +D /etc
Debug how files are being accessed by a process	inotifywait -m -r .

Network related commands

List all Network Connections	lsof -i
Which process has a port open	lsof -i :80
Find the process that is using a certain port e.g. port 3000	lsof -P | grep ':3000'
List Only IPv4/IPv6 Open Files	lsof -i 4 lsof -6
List Open Files of TCP Port ranges 1-1024	lsof -i TCP:1-1024
Which program is this port belongs to ?	lsof -i tcp:80 lsof -i :80https://cheatography.com/#
List all open ports and their owning executables	lsof -i -P | grep -i "listen"
Check open ports (IPv4)	lsof -Pni4 | grep LISTEN
Show apps that use internet connection at the moment. (Multi-Language)	lsof -P -i -n
Lists all listening ports together with the PID of the associated process	lsof -Pan -i tcp -i udp
View network activity of any application or user in realtime	lsof -r 2 -p PID -i -a
Show apps that use internet connection at the moment.	lsof -P -i -n | cut -f 1 -d " "| uniq | tail -n +2

Other commands

#Keep a copy of the raw Youtube FLV,MP4,etc stored in /tmp/

lsof -n -P|grep FlashXX|awk '{ print "/proc/" $2 "/fd/" substr($4, 1, length($4)-1) }'|while read f;do newname=$(exiftool -FileModifyDate -FileType -t -d %Y%m%d%H%M%S $f|cut -f2|tr 'n' '.'|sed 's/.$//');echo "$f -> $newname";cp $f ~/Vids/$newname;done

#Check which files are opened by Firefox then sort by largest size.

lsof -p $(pidof firefox) | awk '/.mozilla/ { s = int($7/(2^20)); if(s>0) print (s)" MB -- "$9 | "sort -rn" }'

#Check how far along (in %) your program is in a file

F=bigdata.xz; lsof -o0 -o -Fo $F | awk -Ft -v s=$(stat -c %s $F) '/^o/{printf("%d%%n", 100*$2/s)}'

#Display any tcp connections to apache

for i in `ps aux | grep httpd | awk '{print $2}'`; do lsof -n -p $i | grep ESTABLISHED; done;

By **Arest** (arest)

cheatography.com/arest/