

Linux Security Commands Cheat Sheet

Keep this cheat sheet handy to strengthen your Linux system's security. Below are 15 essential commands you should master to manage user access, monitor activity, and secure your server.

Critical Security Commands Explained

1. passwd

Change the password of the current user.

```
passwd
```

2. chown

Change ownership of a file or directory.

```
sudo chown user:group filename
```

3. chmod

Modify file or directory permissions.

```
chmod 755 filename
```

4. su

Switch to another user account.

```
su - username
```

5. sudo

Execute a command as the superuser or another user.

```
sudo command
```

6. ssh

Establish a secure shell connection to a remote server.

```
ssh user@hostname
```

7. scp

Securely copy files between systems.

```
scp file.txt user@remote:/path/
```

8. ufw

Manage firewall rules easily.

```
sudo ufw enable
```

9. iptables

Configure advanced firewall rules.

```
sudo iptables -L
```

10. fail2ban

Monitor log files and ban suspicious IPs.

```
sudo fail2ban-client status
```

11. netstat

Display active network connections.

```
netstat -tuln
```

12. nmap

Scan open ports on a system.

```
nmap 192.168.1.1
```

13. rkhunter

Scan for rootkits on your system.

```
sudo rkhunter --check
```

14. auditd

Audit and monitor system activity.

```
sudo systemctl status auditd
```

15. openssl

Generate SSL certificates and manage encryption.

```
openssl genrsa -out private.key 2048
```

Other Useful Security Commands (Quick Reference)

Command	Description
chpasswd	Change passwords of multiple users at once
chroot	Create a restricted virtual environment
sftp	Secure File Transfer Protocol
lynis	Perform security audits and vulnerability scans
snort	Network Intrusion Detection System (NIDS)
gpg	Encrypt and sign files/emails using GnuPG
firewalld	Advanced firewall management with zones
selinux	Mandatory Access Control (MAC) for Linux
chkrootkit	Scan for rootkits
logwatch	Analyze logs and generate reports
tripwire	Monitor file integrity changes
apparmor	Restrict program capabilities via profiles
OpenSCAP	System hardening and compliance checking
AIDE	Advanced Intrusion Detection Environment