

Linux Commands Cheat Sheet for DevOps

File & Directory Management

`ls -l`
list files with permissions, ownership, size, date

`cd /path`
change directory

`pwd`
print working directory

`mkdir dirname`
create directory

`rm -rf dirname`
remove files/directories

`cp -r src dst`
copy files/directories

`mv old new`
move/rename files

File Viewing & Editing

`cat file.log`
view contents

`less file.log`
view with pagination

`head -n 20 file.log`
first 20 lines

`tail -f file.log`
live log monitoring

`vim file.sh / nano file.sh`
edit files

User & Group Management

`whoami`
current user

`id username`
show UID, GID, groups

`adduser devopsuser`
create new user

`usermod -aG sudo devopsuser`
add user to group

`groupadd devops`
create group

`groupdel devops`
delete group

`passwd username`
change password

Process & System Monitoring

`top`
real-time process monitoring

`htop`
better version of top (if installed)

`ps aux | grep nginx`
check if process is running
`kill -9`
force kill process
`free -h`
check memory usage
`df -h`
check disk usage
`du -sh /var/log`
check folder size

Networking

`ip a`
show IPs
`ping host`
test connectivity
`curl -I URL`
check HTTP headers
`ss -tulnp`
show open ports
`scp file user@host`
/path : copy file over SSH

Package Management

`sudo apt update && sudo apt upgrade`
update system (Debian/Ubuntu)
`sudo yum install httpd`
install package (CentOS/RHEL)
`dpkg -l | grep nginx`
list installed package

Services & Systemd

`systemctl status nginx`
check service status
`systemctl start nginx`
start service
`systemctl stop nginx`
stop service
`systemctl restart nginx`
restart service
`journalctl -u nginx -f`
follow service logs

Logs & Debugging

`tail -f /var/log/syslog`
follow system log
`tail -f /var/log/messages`
check system events (RHEL/CentOS)
`grep ERROR /var/log/app.log`
search for errors
`dmesg | less`

check kernel/system messages

Compression & Archiving

`tar -czvf backup.tar.gz /path`
create compressed archive
`tar -xzvf backup.tar.gz`
extract archive
`zip -r backup.zip /path`
create zip file
`unzip backup.zip`
extract zip

Permissions

`chmod 755 script.sh`
change file permissions
`chown user`
group file : change ownership
`ls -l`
verify permissions

SSH & Remote Access

`ssh user@hostname`
connect to remote server
`ssh -i key.pem user@hostname`
connect using SSH key
`scp -i key.pem file user@host`
/path : copy files with key

File Operations

`ls -l`
list files
`cd /path`
change directory
`cp src dst`
copy file
`mv old new`
move/rename
`rm -rf dirname`
delete dir

Monitoring

`top / htop`
process monitoring
`df -h`
disk usage
`free -h`
memory usage
`tail -f file.log`
live log view

System & Services

`systemctl status service`
check service
`systemctl restart service`
restart service
`journalctl -u service -f`
follow service logs

User & Permissions

`id user`
check user info
`chmod 755 file`
change permissions
`chown user`
group file : change ownership
`usermod -aG group user`
add user to group

Archiving

`tar -czvf file.tar.gz dir`
compress
`tar -xzvf file.tar.gz`
extract