Cloud Ops Quick Cheat Sheet

Linux Essentials

- Check processes: ps aux | grep
- Kill process: kill -9
- Disk usage: df -h
- Memory usage: free -m
- Check logs: sudo journalctl -xe
- Service control: sudo systemctl start|stop|status
- Permissions: chmod 755 file / chown user:group file
- Networking test: curl http://localhost

Networking Essentials

- CIDR example: 10.0.1.0/24 = 256 IPs
- Public subnet = route to Internet Gateway
- Private subnet = route to NAT
- Security Group = stateful firewall
- Port 22 = SSH, 80 = HTTP, 443 = HTTPS
- Test ports: ss -tulnp

AWS CLI Patterns

- Describe resources: aws ec2 describe-instances
- Create resource: aws ec2 run-instances ...
- Delete resource: aws ec2 terminate-instances ...
- Filter output: --query "..." --output table
- Identity check: aws sts get-caller-identity

Lambda Mental Model

- Cold start = container initialization time
- Warm start = reused container
- Billing = execution time × memory
- Memory controls CPU power
- Stateless and event-driven

IAM Quick Rules

- Principle of Least Privilege
- Roles > Access Keys
- Never hardcode secrets
- Policies attach to roles or users
- Use sts get-caller-identity to verify context

Deployment Flow (Serverless)

- Write function code
- Define infrastructure (SAM / CloudFormation)
- Build → Deploy
- Test → Observe logs
- Clean up to avoid costs

Rule of Thumb: If you can explain the traffic flow and permission model, you understand the system.