

DevOps - Interview Questions

1. Building a highly available and scalable system with examples and exact approaches?
2. Web app is running low in the VM Linux system. What measures can you take?
3. How can you move a critical application hosted on ec2 (AWS) to GCP? Give me the steps.
4. Commands to get top files consuming more resources in Linux.
5. How to remove the job which has been completed in Jenkins? Also using a script.
6. Command to check the timestamp?
7. Difference between ingress and gateway?
8. How to get external traffic on the gateway?
9. How to image updater work in ArgoCD?
10. What is the difference between modules and resources in TF?
11. What is the difference between count and foreach in TF?
12. What is the difference between cloud and bare metal?
13. How to handle if the VM goes down?
14. Types of services in Kubernetes?
15. What is the difference between devops and SRE?
16. How to migrate from EKS to GKE?
17. How to manage the application secrets?
18. Difference types of load balancers in Eks?
19. What is the difference between a service and pods?
20. What is a Statefulset?
21. What are side car containers?
22. How will you schedule a CronJob for 1 min?
23. What is the default route in Aws VPC?
24. What are the services in AWS?
25. Types of load balancers in AWS?
26. What is the difference between roles and policies?
27. Why do we need roles in AWS?
28. What are the requirements to install Jenkins?
29. How to handle if you have 100s of builds in Jenkins?
30. How to attach master to the node in Jenkins?
31. Types of docker networks?
32. How to optimise the docker images?
33. How to set up an ALB load balancer in the Kubernetes cluster?
34. How to map the ips in alb to other services?
35. How to access s3 from a pod?
36. What is the difference between role bindings and cluster role bindings?
37. What is a zombie process?
38. Steps to create a custom VPC in AWS?
39. How to decide a CIDR range to create a VPC?
40. Why do we need route tables in AWS?
41. What is static application security testing?

42. Command to kill a process in linux?
43. How do we get the Pid in Linux?
44. Command to delete all files in a folder?
45. What are the commands in linux?
46. What are the commands in Docker?
47. How to create git branches?
48. What are the parameters in Jenkins?
49. What is the Kafka Model?
50. What is the EFK role of EFK?
51. What are ansible playbooks?
52. How will you execute an ansible playbook?
53. What is the use of the telnet command?
54. Command to copy?
55. What is a shell script?
56. Print 1 to 10 in shell script?
57. What are the benefits of redis?
58. Commands used in redis?
59. What is the use of the keys command in redis?
60. How to get the value of a specific key in redis?
61. How to create a Jenkins pipeline to deploy?
62. How will you switch between branches in git?
63. How to configure EFK?
64. What is terraform?
65. What is a helm?
66. What is docker?
67. What is the difference between add and copy in docker?
68. What is the difference between alb and ELB ?
69. How to put ec2 behind a load balancer?
70. How will you create a VPC and its components?
71. What are nat gateways?
72. What is the difference between Nacl and security groups?
73. What is the difference between roles and users?
74. How to configure an ASG?
75. How to manage Kubernetes Rbac?
76. Rbac deployment?
77. What is daemon in linux?
78. What is load average?
79. What is the difference between apt and yum?
80. How to check free memory in an instance?
81. How to check the free space in our root dir?
82. How to use grep command and how to use it?
83. What is a daemon set?
84. What is a deployment?
85. What is the blue green deployment strategy?
86. What are namespaces?
87. What is dns?
88. What are the ports used in dns?
89. How is the tcp connection established?

90. What is the difference between http and https?
91. What is cloudwatch?
92. What is a VPC?
93. What is the difference between region and az?
94. What is Prometheus and Grafana with uses cases and functions?
95. How to visualise in Grafana?
96. What are absolute paths and relative paths in linux?
97. Command to go to the 100th line in the vi file?
98. Command to replace in vi file?
99. Commands to delete a database?
100. How to find commands in linux?
101. What is fault tolerance?
102. What emr?
103. What are modules in terraform?
104. What is released in Jenkins?
105. What is the difference between continuous deployment and continuous delivery?
106. How to set up slaves in Jenkins vm?
107. How to configure Jenkins in a vm?
108. How to solve if an image updater is down?
109. What is the difference between Jenkins and ArgoCD?
110. How is the database deployed in Kubernetes?
111. What are the security concerns of virtualization?
112. What are the advantages of virtualization?
113. Advantages of containerD?
114. What are the different runtimes available in docker?
115. How to restrict resource sharing in docker?
116. Types of isolation in docker?
117. What is the difference between virtualization and dockerization?
118. How to check the health of an application in Kubernetes?
119. Explain route53 in detail?
120. What is a docker build kit?
121. What is the difference between docker and docker compose?
122. What is RDs service?
123. What are the resources you would configure if you want to give access to a new developer in EKS?
124. What are the ways to make an application highly available?
125. How does pod autoscaling work?
126. What is a headless service?
127. What are the ways to expose your application pod?
128. Use cases of StatefulSet?
129. What are the deployment strategies in k8 and its use cases?
130. What is the difference between deployment and daemonset?
131. What is a daemon set?
132. Readiness, Liveness Probe
133. How to check memory cpu disk in linux
134. IP addressing(Private IPs)
135. OSI model, tcp/ip protocol
136. Types of protocol in networks and port numbers (redis,mysql)

137. Nginx reverse proxy config and what is reverse proxy?
138. Write a reverse proxy config block where domain and port numbers are mentioned.
139. K8s architecture and its working
140. List all docker containers
141. How to go inside docker container shell and run commands
142. How to detach from cont
143. Pod disruptions budget
144. What to do if I am not able to ping my VM. Is vm stopped or ICMP protocol not approved?
145. What is an ingress controller and how does it work?
146. Difference between Git pull and git fetch
147. What step will you take to secure your ec2 instance?
148. What are lambda functions and Explain its architecture?
149. How git works and explain git architecture and workflow.
150. Write a script to build a CI CD in Jenkins?
151. Prometheus works on a push or pull mechanism?
152. Readiness probe vs liveness probe
153. Write declarative pipeline jenkins (Credentials via Env var)
154. Http, https, ssh, mysql, port no
155. Docker file nginx expose
156. Ways to check connection to other server
157. Netstat
158. List pods which are not running
159. Pod state
160. 5 pillars of AWS
161. ALB vs NLB
162. S3 types
163. KMS types of keys , one encryption
164. Docker build image and tag command
165. VPC--> Public Subnet --> IGW --> Route Table
166. Proxy (VPN) vs Rev proxy (How does it works)
167. Reverse Proxy Configuration
168. Helm Vs Kubectl
169. IAM Policy: AWS based policy and Role Based Policy
170. Role Based --> Why we need AWS Based Policy
171. Relational Database and Non-relational Database
172. Write a python script to mkdir from the name of all the user present
173. Extras: Can Jenkinsfile be in any folder?
174. Is there any Naming Convention for Jenkinsfile?
175. Diff between mvn clean package vs mvn clean install
176. How does data flow from Fluentbit to Kibana
177. Elasticsearch, Kibana and FluentBit Configuration K8S Cluster (Why fluentbit should be daemonSet? And Elasticsearch should be Stateful)
178. Relational Vs Non-Relational DB (SQL vs Mongo)
179. Cloudwatch setting alerts for EC2
180. Where does the data gets stored in ElasticSearch
181. Stateful, Stateless, DaemonSet

182. Redis cluster Memory management --> lfu/lru (Key Eviction Policy)
183. If a service is to be deployed then after deployment tell me the whole process starting from kubernetes till getting visualisation in grafana from deployment to get alerts.
184. What if there's a large no of. Queries in elasticsearch
185. Why t2.large for CI-CD not spot instances
186. How's your elasticsearch architecture look like?
187. Jenkins Architecture?
188. Deployment Strategy: canary, rollout, AB, Rolling Update, Recreate, Blue-Green,
189. Let's say a few developers working on a product feature, reach out to you and want to take advice on branches. How will you manage their branches?
190. What happens when you run terraform destroy? Did terraform erase everything?
191. Do you think python is a good choice for companies to manage their cloud resources?
192. What are the demerits of terraform?
193. What is docker compose? Why do we use it? How does it exposes the port of containers to the outer world?
194. When you write terraform Scripts, how do you pass the credentials?
195. Write a basic structure of a JenkinsFile.
196. When you are given many lines of docker file. How will you optimise the image?
197. Restful vs restless api
198. Border gateway protocol
199. How k8s pod gets deleted
200. OSI Model
201. TCP protocol
202. DNS Resolution
203. Redis : LFU and LRU
204. Linux: System Call
205. NACL vs Security Group
206. Http vs https