

Kubernetes Questions for interview

1. How to do maintenance activity on the K8 node?
2. How do we control the resource usage of POD?
3. What are the various K8's services running on nodes and describe the role of each service?
4. What are the various things that can be done to increase Kubernetes security?
5. How to monitor the Kubernetes cluster?
6. How to get the central logs from POD?
7. How to turn the service defined below in the spec into an external one? (Hint Nodeport)
8. Why should namespaces be used? How does using the default namespace cause problems?
9. What service and namespace are referred to in the following file?
10. What is an Operator?
11. What the following in the Deployment configuration file mean?

spec:

```
containers:
- name: USER_PASSWORD
  valueFrom:
    secretKeyRef:
      name: some-secret
      key: password
```

12. How to troubleshoot if the POD is not getting scheduled?
13. How to run a POD on a particular node?
14. What are the different ways to provide external network connectivity to K8?
15. How can we forward the port '8080 (container) -> 8080 (service) -> 8080 (ingress) -> 80 (browser) and how it can be done?

16. Which of the following kubeadm command creates a new cluster?

- ☐ kubeadm create cluster
- ☐ kubeadm init
- ☐ kubeadm initialize cluster

17.

What is the default range of ports used to expose a NodePort service?

- ☐ 30000-32767
- ☐ 500-1000
- ☐ 60000-65536
- ☐ 1024-32767

18. You want to deploy two tightly coupled containers that share a volume and some memory. What is the best option?

- ☐ Deploy them in different Pods and pair them over the network
- ☐ Deploy them as two processes in a single container
- ☐ Deploy them in a single Pod

19. Which of the following commands gives you detailed info on a Pod?

- ☐ kubectl describe pods
- ☐ kubectl get pods -vvv
- ☐ kubectl get pods --detail
- ☐ kubectl pods inspect

20 Which component of the K8's worker stack registers Nodes with the cluster and watches the "apiserver" for new work?

- ☐ Kube-proxy
- ☐ Kubelet
- ☐ Container runtime

21. What is the default Service type (ServiceType) if you do NOT specify a value?

- ☐ LoadBalancer
- ☐ NodePort
- ☐ ClusterIP
- ☐ Ingress

22. What is the default protocol for a Service?

- ☐ TCP
- ☐ UDP
- ☐ HTTP
- ☐ SSH

23. What is the atomic unit of scheduling in K8s?

- ☐ Pod
- ☐ VM
- ☐ Container
- ☐ Deployment

24. Which of the following is true about Pods and IP addressing?

- ☐ Pods only work with IPv6 addresses
- ☐ All containers in a Pod get unique IP addresses
- ☐ An external DHCP server is required for Pod IP addressing
- ☐ All containers in a Pod share a single IP address

Q25 Why we use namespaces ?

Q26 What is the difference between deploying applications on hosts and containers?

Q27 What are the main components of Kubernetes architecture?

Q28 Explain the working of the master node in Kubernetes?

Q29. What is a node in Kubernetes?

Q30 What process runs on Kubernetes Master Node?

Q31 What is a pod in Kubernetes?

Q32 What is the job of the kube-scheduler?

Q33 What is a cluster of containers in Kubernetes?

Q34 What are Daemon sets?

Q35 Name the initial namespaces from which Kubernetes starts?

Q36 What is the Kubernetes controller manager?

Q37 What are the types of controller managers?

Q38 What is etcd?

Q39 What are the different services within Kubernetes?

Q40 What is NodePort?

Q41 What is the difference between a replica set and a replication controller?

Q42 What is a headless service?

Q43 What are federated clusters?

Q44 What is Kubelet?

Q45 What is Kubect!?

Q46 What is Kube-proxy?

Q47 How can you get a static IP for a Kubernetes load balancer?

Q48 List the master node consists components ?

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