



Git:

Difference between git pull and fetch

Explain branching strategy used in your application
(important question)

Diff b/w git revert and reset / merge and rebase

What is stash, how to list out the stash and explain
its type (scenario based)

Suppose my latest commit causing issue, how you will
revise to previous commit

Git squash (scenario based)

How many microservices are used in your application?

Explain 3 tier architecture of your applications

Jenkins:

Diff bw poll scm and webhooks

Write the code for declarative pipeline for
compile/package phase

Explain the ci/cd pipeline jobs for ur project

What post build actions implemented for test phase

How you will analysis the code in Jenkins which is
available in source code repository

Suppose my compile phase is running longer, how will
identify which code is running longer

Master/ Slave concepts

How you will connect to remote server in master/slave
for linux and windows environment

Where the package file is stored

Nexus/ jfrog artifactory

Difference bw jar and war

Maven install, clean, validate and deploy

Lifecycle of maven

How you will store the package in nexus and which
command is used in declarative pipeline

Terraform:

- 1) Drawbacks or challenges of terraform
- 2) State file challenges
- 3) Diff between GCP and AWS
- 4) How to replicate env using TF
- 5) Best things of TF

Define architecture





Core and providers

State and lock file

How state file locking is happening?

Backends support state locking using backends like s3 and dynamo db.

What happens when 2 persons do the terraform plan and apply at same time?

State file get locked

Where your remote state file is stored?

S3, GCS (Google cloud storage), local, remote, artifactory, azurerm (azure remote=azure blob storage)

Suppose manually I made changes in EC2 instance configuration, how to you will get the updated field values in your remote state file?

Have to edit the state file manually and use terraform state push command to update remote state

Suppose I want to get the configuration details for already created ec2 instance, how will you get those details using terraform?

```
Using datasources data aws_instancer{
}
```

Explain life cycle of terraform?

Different stages in TF:

- 1) **Refresh:** with this command TF will query the infra provider to get the current state
- 2) **Plan:** Create an execution plan by comparing current state with desired state from TF config files
- 3) **Apply:** Executes the plan
- 4) **Destroy:** destroys the infra

What is the use of modules, how you are using modules inside terraform for ec2/eks

Explain provisioners and its types?

Explain how you will connect to remote server when using provisioners?

How you will configure aws access and secret key

What is null resource in terraform?

What are workspaces?





How to replicate the env in TF?

How to create multiple env using TF?

Docker:

What is Docker and Docker image?

What is containerization and its uses?

Why we need to use docker and drawback of traditional methodology

What is agile methodology?

Docker commands

Lifecycle of container

How you will check the image size

Write sample docker file

Why we need docker file

What is the use of base image in docker file?

Suppose I want to create docker file for java what would be the base image you will choose

Diff bw cmd, entrypoint and run

How you will stop the container

Why paused container will not stopped directly

Diff bw kill and stop the container

How you will find the vulnerabilities in docker image

How you will store unwanted binaries in docker image (dockerignorefile)

What means exit code 0, 1, 142 in containers

Multi stage docker

What is layer in docker

What is the use of cache in layered file system

How the 2 standalone containers are communication each other (docker network concepts)

How we connect 2 different bridged networks

What are the challenges faced in docker images due to error/vulnerabilities

What is the use of docker commit


How do u check the container memory utilization

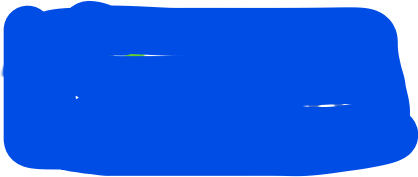
Kubernetes:

What is the diff bw docker and Kubernetes?

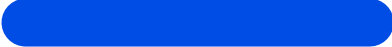

what is the diff bw swarm and kubernetes?


What is pod?





how to set limit on pod resources?
how to secure the cluster?
Explain components of master and worker nodes
Explain different services used in Kubernetes
How to restrict communication between pods
Diff bw replica set and replica controller
Diff bw load balancers and ingress controller
What ingress rule you should use in ingress controller
Explain diff types of load balancers
What is blue green deployment
How u will check the logs using kubectl
Diff bw deployment and services
Diff bw deployment and replicaset
Why labels are used
What is namespace and it's uses
Service account
Cluster role and rolebinding
How do u provide permissions for accessing the clusters
Kubectl commands
Write code for deployment file having volume and target
port should be direct to 9090
I am the user, whenever I am requesting the incoming
traffic requests should go certain pod . How can we do
that and is there anyway available to implement this
What is cni
How you will define network policy for clusters
Lifecycyle of pods
If my pod is crashbackloopoff , how you will identify
the issue and resolve the issues
I have only one pod mentioned in my yaml files, due to
insufficient memory it's not working fine. What would
be the pod status and internally how it works
Taint and tolerated
Node affinity
Healthchecks of pod
Diff b/w liveness and readiness probe
Explain restart policy available in your project yaml
file
Horizontal and vertical pod autoscaler





How the communication between the pod is happening

Ansible:

Why u r using ansible instead of puppet

Ansible roles

How you will mention environment variables

What is notifier and handlers

What are all the modules u r used in ansible

How you will run the ansible playbook

How you will skip particular task in playbook

Where u will store host servers in ansible

How u will display the output in ansible

How u will store the output in ansible

Write the playbook to install tomcat

How u will deploy source code using ansible in cluster

AWS:

Different type of instances?

Spot instances , on-demand, reserved

Which instance should you suggests for web applications?

<https://www.mkwd.net/aws-ec2-picking-the-right-instance-types-for-your-web-application/>

What is vpc?

Amazon Virtual Private Cloud (Amazon VPC) enables you to launch AWS resources into a virtual network that you've defined

Diff bw private and public subnet?


A public subnet is a subnet that is associated with a route table that has a route to an Internet gateway. This connects the VPC to the Internet and to other AWS services. Private Subnet. A private subnet is a subnet that is associated with a route table that doesn't have a route to an internet gateway.

Subnet exposed to external traffic is called public subnet

Components of vpc

Nacl and security groups?





Mention the security policies used for ec2 instance ?
Internet and nat gateway?

How u will define cidr block for vpc ?

What is ebs and efs ?

Suppose I lost my key pairs (.pem file), what are all ways we can rectify the keypairs in aws ?

What is the use of user data ?

How is cloud watch working for ec2 instances?

Cloud watch monitors the health of the ec2 instances and we can check the cloud watch events in the monitoring tab of the instances

Explain route53 and which dns queries policy used

Amazon Route 53 is a highly available and scalable Domain Name System (DNS) web service. You can use Route 53 to perform three main functions in any combination: domain registration, DNS routing, and health checking.

If I lost my access and secret key , how will I rectify it

Disable them from UI

Iam roles and policies

Different type of iam

Explain MFA available in your aws console?

S3 storage class types?

Difference between s3 and glaciers ?

What is autoscaler and load balancers?

Types of AS and LB in aws?

Diff b/w application and network load balancers ?

Which load balancers would you choose for web applications?

Suppose my ec2 instance is terminating and restarting again, how you identify the issue and fix it?

<https://aws.amazon.com/premiumsupport/knowledge-center/ec2-instance-automatic-reboot-cause/>

If I am getting a 502 gateway error , what are all the steps you would take to resolve it?

<https://www.allconnect.com/blog/502-bad-gateway-error-explained>



Can we store a static website in s3?

yes

Tell me about services which are non-region specific?

Some services are classed as global services, such as AWS Identity & Access Management (IAM) or Amazon CloudFront, which means that these services are not tied to a specific region

Amazon CloudFront is a web service that speeds up distribution of your static and dynamic web content, such as .html, .css, .js, and image files, to your users. CloudFront delivers your content through a worldwide network of data centers called edge locations. When a user requests content that you're serving with CloudFront, the request is routed to the edge location that provides the lowest latency (time delay), so that content is delivered with the best possible performance.

- If the content is already in the edge location with the lowest latency, CloudFront delivers it immediately.
- If the content is not in that edge location, CloudFront retrieves it from an origin that you've defined—such as an Amazon S3 bucket, a MediaPackage channel, or an HTTP server (for example, a web server) that you have identified as the source for the definitive version of your content.

How will you connect your clusters service to the local machine?

Explain the use of end points in vpc?

A VPC endpoint is a virtual device which is horizontally scaled, redundant and highly available, that provides communication between EC2 instances within your Virtual Private Cloud and other supported AWS services without introducing availability risks or bandwidth constraints on your network traffic

How can you connect 2 vpc's?





Vpc peering

What is code deploy?

Where the artifacts are storing?

S3 in ci/cd pipelines using code build, code deploy services

Can we use Jenkins to do partial CI stages and pull it into aws pipelines?

Yes we can

Explain web and db servers used in your project, which subnet is used for web and db servers?

Private subnet for db and public subnet for web

What are all the security policies you will provide for nacl and security groups when I want requirement to launch a web applications in linux os ?

How u communicate between 2 host servers ?

Types of iam policies?

AWS supports six types of policies: identity-based policies, resource-based policies, permissions boundaries, Organizations SCPs, ACLs, and session policies. IAM policies define permissions for an action regardless of the method that you use to perform the operation.

https://docs.aws.amazon.com/IAM/latest/UserGuide/access_policies.html

Json policies in iam

How you will reduce the cost and what are actions time taken for that

Explain the challenges u are faced while deploying the application in clusters?


What is fargate and nodegroups?

What are all iam policies u will define for eks cluster ?

Linux:

How u will find particular word in a folder?





```
grep -Rw '/path/to/search/' -e 'pattern'
or
ack 'pattern'
```

Which command is used to listout the ports that are listening?

```
sudo netstat -tunlp
```

the options used in this command have the following meaning:

```
-t - Show TCP ports.
-u - Show UDP ports.
-n - Show numerical addresses instead of resolving
hosts.
-l - Show only listening ports.
-p - Show the PID and name of the listener's process.
This information is shown only if you run the command
as root or sudo user.
```

How u will the memory and cpu utilization using linux commands?

Top

<https://phoenixnap.com/kb/linux-commands-check-memory-usage>

What is the use of top command ?

Memory and cpu utilisation of each processes

Df -f

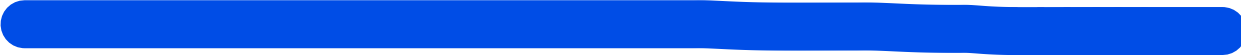

df (abbreviation for disk free) is a standard Unix command used to display the amount of available disk space for file systems on which the invoking user has appropriate read access

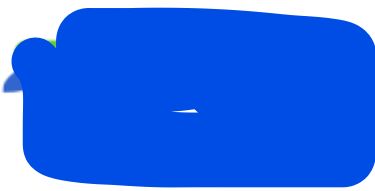
Df -u

Netstat

Mstat

Cstat

- 1) Explain diff stages in pipeline to deploy an app
 - 2) Diff b/w git fetch git pull
 - 3) Diff b/w git stash and git rebase
 - 4) Tell me the command to build dockerfile and create a new docker image
- 
- 



5) Diff b/w run and entry-point

6) EFS in aws

7) Have u used Autoscaling grps in aws

8) How to check if pkg is already present with ansible

9) What is TF workspace

10) How to check how many users are logged in on the server in linux?

11) How to create a back dated file?

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1. [w command](#) : Show who is logged on and what they are doing on Linux
2. [who command](#) : Display information about Linux users who are currently logged in
3. [whoami command](#) : Find out who you are currently logged in as on Linux
4. [id command](#) : See user and group information for the specified USER account on Linux

man w

man who

man whoami

