

DevOps Interview Preparation

- You have finished your Devops course and now preparing for the interview ?
- Are you wondering what kind of questions could come during the technical rounds ?
- Which domain are you good and how to evaluate this ?

DevOps Interview Preparation

Attempt Devops interviews with more confidence

Trainer : Raghu

Content part of Udemy course

What to expect from this course ?

- This is a mini course aimed towards preparing yourself to DevOps interview.
- Each video will have 2 questions from different Devops domain.
- Each question will have 5 seconds pause for you to think of the answer and later I shall present you the answer.
- Devops is an ocean and its hard for me to touch and cover all concepts but maybe in future I shall add more videos for the same.
- This course will contain 5 video sets meaning – 10 different Devops Questions
- To encourage me kindly leave your honest review and comments so I can prepare more such mini free courses.

DevOps Interview - Set - 1

Question :

You plan on running an open-source MongoDB database all year on EC2 instance because your client wants it this design . Which instance launch mode should you choose?

1. Reserved Instance
2. Spot Instance
3. On-demand Instance
4. Any of the above

Take 5 seconds to answer

Content part of Udemy course

Solution 1 : Reserved Instance

Solution answer document link : <https://aws.amazon.com/ec2/pricing/>

Domain : Jenkins

AskDevOps

Question : What is Pipeline-as-code ?

Take 5 seconds to answer

Content part of Udemy course

The definition of a Jenkins Pipeline is written into a text file (called a Jenkinsfile) which in turn can be committed to a project's source control repository. This is the foundation of "Pipeline-as-code"; treating the CD pipeline a part of the application to be versioned and reviewed like any other code.

Solution answer document link : <https://www.jenkins.io/doc/book/pipeline/>

DevOps Interview - Set - 2

Question : What is a terraform module, Why you do you use it ?

Terraform modules can be used to modularised your infrastructure creation and start using centralized terraform module.

These can be either terraform modules from registry or custom modules created by your team.

Link : <https://registry.terraform.io/modules/terraform-aws-modules/vpc/aws/latest>

Question : What is the VPC and what component in VPC will allow internet traffic into the VPC

Link : <https://aws.amazon.com/vpc/>

PR -> Test runs by CI → Test is good → Email to Senior Engineer → Review and comment → +1 → Merge

DevOps Interview - 3

Question : What is the secret engine used in your organization and how does it help ?

Hashicorp Vault is the solution for this

Manage Secrets and Protect Sensitive Data

Secure, store and tightly control access to tokens, passwords, certificates, encryption keys for protecting secrets and other sensitive data using a UI, CLI, or HTTP API.

<https://www.vaultproject.io/>

Question : What is git log ? What information in git log helps you ?

Basically *git logs* helps you explain the current state of your repo with respect to commits and other information.

You can view this also in a nice tree option *git log --graph --oneline --decorate*

```
* 0e25143 (HEAD, main) Merge branch 'feature'
| \
| * 16b36c6 Fix a bug in the new feature
| * 23ad9ad Start a new feature
* | ad8621a Fix a critical security issue
| /
* 400e4b7 Fix typos in the documentation
* 160e224 Add the initial code base
```

DevOps Interview - 4

Question : Can we write docker-compose file in json ? If yes will the below command work fine or will it fail ?

docker-compose -f docker-compose.json up

You can write docker-compose file in json or yaml. Yaml is a **superset** of json so any JSON file should be valid Yaml.

But companies prefer to have a standard across so they can choice to follow either json or yaml but not both.

Question : What is AWS Aurora ? What kind of RDS do your project use ?
Speak a bit about DB failure with respect to aurora.

Answer this if you have worked with aurora only, If not its fine.

Aurora DB failure handling information ,

Amazon Aurora automatically maintains six copies of your data across three Availability Zones (AZs) and will automatically attempt to recover your database in a healthy AZ with no data loss.

In the unlikely event your data is unavailable within Amazon Aurora storage, you can restore from a DB Snapshot or perform a point-in-time restore operation to a new instance.

Note that the latest restorable time for a point-in-time restore operation can be up to five minutes in the past.

DevOps Interview - 5

Question : What is a controller and agent in Jenkins ?

Jenkins architecture design in-scale works with a controller + agents.

Role of a **controller** : Handling of scheduling jobs

Role of **agents** : Run's the jenkins stage/part of jenkins job assigned by the controller

— Agents are common in multi-node jenkins setup even in a mid size company.

Question : What is a local and remote artifact ? Which one is commonly used in organizations and why ?

Local and Remote artifact are common way of storing your final code in a zip,jar,wheel format (compressed) .

Local artifact is a folder in your local system — Can't be used by anyone else

Remote artifact like Maven etc are something hosted in organization where in scalable systems like K8's , ASG etc can download the compressed file and run them.

Next Steps

- Thanks for completing this mini course.
- This is my first attempt to make such course and I hope you have liked it.
- If you have learnt something new during this 30+ mins of session then kindly leave a review
- Also while leaving a review please mention if you wish me to create more such videos or extend this course with more content.
- You can find the slides attached with this resource section
- Feel free to reach me out on LinkedIn (Link in my profile)
- Best of luck

DevOps Interview - 6

Book your devops mock interview using the link in the description

Question : How do you handle security in Jenkins ?

Take 5-10 seconds to answer

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or email awslearning1992@gmail.com

When we speak of jenkins security , There are lot of components involved.

So it's better to ask a cross question around this first, What kind of security are we speaking off here ?

Jenkins login authentication can be done via different LDAP services present

Apart from this many other authentication methodology exists which are more specific to where the job runs, where to store secrets etc

Question : What is livenessProbe ? Why is it used ?
Also what's failureThreshold ?

Take 5-10 seconds to answer

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LivenessProbe is responsible for having checking if the pod is in a proper running state after deployment.

DevOps Interview - 7

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Question : Why use Helm ? in K8's ?

Take 5-10 seconds to answer

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Helm helps you manage Kubernetes applications — Helm Charts help you define, install, and upgrade even the most complex Kubernetes application.

It becomes complex when you have a lot of yaml to handle (deployment, back-up,service,serviceaccount etc)

Charts are easy to create, version, share, and publish — so start using Helm and stop the copy-and-paste.

Question : What is remote-exec in terraform and when will you use it ?

Take 5-10 seconds to answer

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The remote-exec provisioner invokes a script on a remote resource after it is created.

This can be used to run a configuration management tool, bootstrap into a cluster, etc.

To invoke a local process, see the local-exec provisioner instead.

The remote-exec provisioner requires a connection and supports both ssh and winrm.

DevOps Interview - 8

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Question : What is git log ? What information in git log helps you ?

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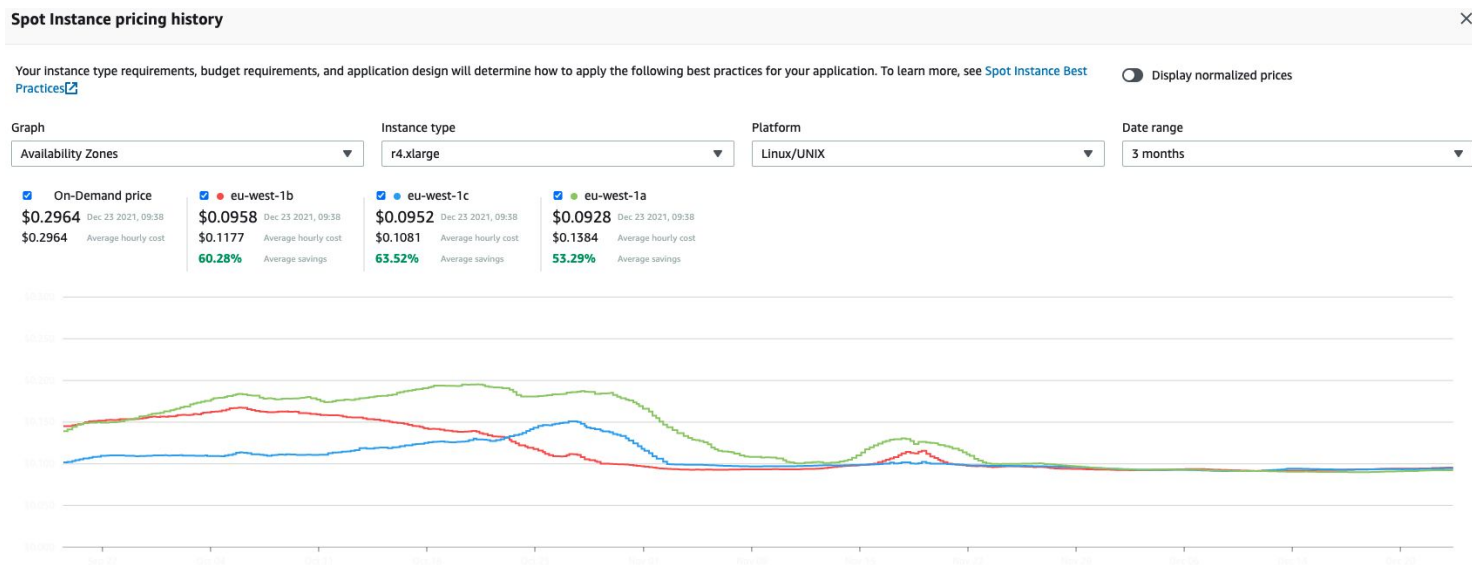
```
* 0e25143 (HEAD, main) Merge branch 'feature'
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| * 16b36c6 Fix a bug in the new feature
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| /
* 400e4b7 Fix typos in the documentation
* 160e224 Add the initial code base
```

Question : What is bid price in AWS EC2 spot instances ?

Take 5-10 seconds to answer

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Amazon EC2 Spot Instances let you take advantage of unused EC2 capacity in the AWS cloud. Spot Instances are available at up to a 90% discount compared to On-Demand prices.



DevOps Interview - 9

Book your devops mock interview using the link in the description

Domain :

Question :

Take 5-10 seconds to answer

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Domain :

AskDevOps

Question :

Take 5-10 seconds to answer

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