liatrio

Consultant Interview - Jenkins in Vagrant

Overview

Welcome! The goal of this interview is to get an idea of how well you will fit into our practice, and if the way that we work is the right fit for you.

First, let's be clear - a successful interview does NOT mean that you solve all of the issues or questions without help, or even necessarily just solve them. We are going to see how you identify and solve problems, how you communicate, how and where you ask for help and finally how you demonstrate what you did.

Some of the items of the interview are going to be purposely vague for 2 reasons: 1. To see how well you can figure things out on your own and 2. How you search, find and and ask for help.

You are free to use any information needed to work this out. We all use google, twitter, and our friend sitting right next to us every day. We will expect to hear about how you accomplished these tasks and what resources you needed at demonstration time.

If you are stuck, or if something is unclear, communicate this in the Slack channel.

Remember, at Liatrio, communication, collaboration, transparency and sharing are key pillars of our work culture.

Interview Preparation

For this interview, we are going to ask you to do a few things in a virtual environment running Jenkins and Nexus. You will also need to install and use git.

To get started, please do the following steps:
1. If you do not have a terminal shell, please install one now.
2. If you do not have git installed, please install it now.
3. Install vagrant: https://www.vagrantup.com/downloads.html
4. If you do not have a github account, create one now.

Interview Exercise

Ok, now that you have Vagrant installed, let's get started on the actual exercise.

1. Install and run this vagrant box:
   https://app.vagrantup.com/liatrio-engineering/boxes/jenkins-nexus
   (it's a relatively large file, it may take a little while to download)
2. Validate Jenkins is installed on the VM.
3. Fork Liatrio's spring-petclinic repository to your own Github account.
4. Modify the existing spring-petclinic Jenkins job to point to your own repository.
5. Configure the spring-petclinic job to build on git code push.
6. Clone your spring-petclinic repository to your local machine.
7. Validate that the build job runs on Jenkins.
8. Using the existing Jenkinsfile within your spring-petclinic repository, create additional pipeline stages that mimic a real-life delivery pipeline
   a. These can be "mock" stages that just return text to the console or stages that actually do something interesting; That's up to you!
9. Make sure that the pipeline runs and can be visible in both the classic pipeline view and BlueOcean - Look it up if you don't know what that is. ;)
   a. The running pipeline will look like this:

Start	Build	Package	Deploy to Dev	Smoke-Test Dev	Another stage	End
●	✓	✓	✓	✓	✓	●

10. This is an example pipeline with simple stages and one mock stage ("Another Stage" - highlighted above) - please edit the jenkinsfile to mock the pipeline to show an example of what this would look like in an enterprise world. Post an image of your pipeline to Slack and then be prepared to talk about it in the presentation.
11. Prepare for the presentation!

Wrap Up, Demo, Follow-Up

Once you have completed all of the items above, please communicate with us in Slack. We will want to conduct a presentation where a portion of it will be you presenting what you did, what you learned, what you may have struggled with and any additional ideas or items that you may think of. We will use **Google Hangouts** for this demo and the expectation is that it will be a video demo including screen share.

Based on the outcome of the presentation, we may ask you to tweak a few things, show some more information or even add additional integrations or technologies. It all depends on where things are going, but it will be done in the manner as the others; using Slack in a fully transparent, collaborative way.