Integrate with Bitbucket

Setup jenkins so that a build is started each time a commit is done in a repository on bitbucket.

Webhook: Will notify jenkins of all new commits and send some information with it.

Itbucket needs to be able to access Jenkins installation to tell its new commits.

Step 1: Install bitbucket plugin for jenkins.

Step 2: Create a job and configure it.

Step 3: Test it.

<https://wiki.jenkins.io/display/JENKINS/Installing+Jenkins+on+Ubuntu>

Reference: <https://youtu.be/nNaR5Q_pIa4>

Jenkins:

1. Install jenkins: To install jenkins, take the following steps
   1. Should be done on the AWS EC2 instance.
   2. Set up jenkins on the instance.
   3. Install plugins to pull bitbucket project into it and use it for CI.
2. Install the plugin that helps in integrating with bitbucket. (Takes half a minute and then redirects it the the original page)
3. Create a new job in jenkins. A freestyle project.
4. In that choose SCM as GIT. Then under build triggers: choose “Build when a change is pushed to BitBucket.”
5. Give the URL of the bitbucket project that you are gonna use.

Bitbucket:

1. Go to settings of the repository
2. Under integrations: feature called webhook. Add a webhook. Give URL of the jenkins installation. Append bitbucket-hook at the end of the URL.
3. Click on active
4. Trigger every time we “Repository push”

Jenkins and Docker

* Installation: <https://jenkins.io/solutions/docker/>
* Bitbucket and docker: <https://docs.docker.com/docker-hub/bitbucket/>
* To deploy docker containers: <https://aws.amazon.com/getting-started/tutorials/deploy-docker-containers/>
* Docker Community Edition (CE) is free for anyone to use. This version of Docker is [open source](https://github.com/docker/docker-ce) and can be used on a variety of platforms including Windows, Mac, and Linux. You can install Docker CE yourself on your computer or an Amazon EC2 virtual machine instance, or start using it immediatly with the [Amazon ECS-optimized AMI](https://docs.aws.amazon.com/AmazonECS/latest/developerguide/ecs-optimized_AMI.html).
* <https://www.thepolyglotdeveloper.com/2017/04/continuous-deployment-of-web-application-containers-with-jenkins-and-docker/>

Jenkins set up on cloud

* 1. EC2 instance (also check what OS has been installed.
  2. Set up jenkins on the instance.
  3. Install plugins to pull bitbucket project into it and use it for CI.