Jenkins

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Resources used:

1. <https://www.youtube.com/watch?v=pMO26j2OUME&list=PLy7NrYWoggjw_LIiDK1LXdNN82uYuuuiC>
2. <https://github.com/jenkinsci/docker/blob/master/README.md>
3. How To Automate Jenkins Setup with Docker and Jenkins Configuration as Code: <https://www.digitalocean.com/community/tutorials/how-to-automate-jenkins-setup-with-docker-and-jenkins-configuration-as-code>
4. Introduction to Jenkins
   1. Graphical user interface, text, application

      Description automatically generatedClean Jenkins in a docker container

The “official” docker image for Jenkins is deprecated, use the other one which is provided by **jenkins/jenkins**.

* Jenkins runs on **Tomcat**, which publishes the port **8080** by default.

The container stores the workspace in /var/jenkins\_home. All Jenkins data lives in there - including plugins and configuration. You will probably want to make that an explicit volume so you can manage it and attach to another container for upgrades:

This will automatically create a jenkins\_home docker volume on the host machine. Docker volumes retain their content even when the container is stopped, started, or deleted.

Table

Description automatically generated**NOTE**: Avoid using a bind mount from a folder on the host machine into /var/jenkins\_home, as this might result in file permission issues (the user used inside the container might not have rights to the folder on the host machine). If you really need to bind mount jenkins\_home, ensure that the directory on the host is accessible by the jenkins user inside the container (jenkins user - uid 1000) or use -u some\_other\_user parameter with docker run.

1. You need to use the docker logs CONTAINER\_ID command in order to check **first login token**.
2. Go to localhost:8080, paste that token.
3. Install suggested plugins
4. FAIL…
   1. Jenkins custom docker image

**TODO** – Create an image by an already setup jenkins (with all the plugins, users and config)

* 1. TODO

**TODO** - How to install a plugin in Jenkins manually

<https://stackoverflow.com/questions/14950408/how-to-install-a-plugin-in-jenkins-manually>

* 1. Mistakes and Best Practices

**TODO** 5 Common Mistakes: (<https://www.youtube.com/watch?v=aFRjn_4nb-Q>)

1. Not storing the pipeline code in the Jenkinsfile
2. No unit tests for the pipeline code
3. Ignoring Jenkins Pipeline Best Practices
4. Not using timeouts at the stage level
5. Blocking executor and waiting for the input

* Putting build and deployment in one pipeline, instead of separating them.
  1. Jenkins Environment Variables

**TODO** Jenkins Pipeline Tutorial: Environment Variables Explained <https://www.youtube.com/watch?v=KwQDxwZRZiE>