**Objective:**

* Create an instance of Jenkins service, using docker container on windows OS.
* Start the Jenkins service on port 8082 to be used from windows localhost.
* Set-up Jenkins admin user/password and perform login.
* Build and run Jenkins jobs to capture disk storage info by running python module for a Linux based path in json format.

**Pre-Requisites:**

* Docker Desktop Is Installed/Configured
* Docker ToolBox Is Installed/Configured
* Windows Powershell CLI Is Installed/Configured

**Steps:**

* Create a container with docker image file: jenkins/jenkins:lts

[docker/Dockerfile at c2d6f2122fa03c437e139a317b7fe5b9547fe49e · jenkinsci/docker (github.com)](https://github.com/jenkinsci/docker/blob/c2d6f2122fa03c437e139a317b7fe5b9547fe49e/Dockerfile)

* Run the container by modifying the local host port to point to 8082, as my localhost has another instance of Jenkins running in port 8080.

Windows Jenkins Job: <http://localhost:8080/job/System_Programming_getStorageDetails/>

Linux Jenkins Job: <http://localhost:8082/job/System_Programming_getStorageDetailsUnix/>

* Trigger the Jenkins from localhost, but extract the admin password from the Jenkins installed inside the container.
* Set-up root userid/password

PS C:\Users\manoj> docker images

REPOSITORY TAG IMAGE ID CREATED SIZE

ubuntu latest ba6acccedd29 4 weeks ago 72.8MB

jenkins 2.60.3-alpine 2ad007d33253 4 years ago 223MB

PS C:\Users\manoj> docker container ls

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

d336dbc01c3c jenkins:2.60.3-alpine "/bin/tini -- /usr/l…" 3 minutes ago Up 3 minutes 8080/tcp, 50000/tcp myjenkins

5711d0ee0f28 ubuntu "bash" 21 minutes ago Up 21 minutes myubuntu

PS C:\Users\manoj> docker stop d336dbc01c3c

d336dbc01c3c

PS C:\Users\manoj> docker stop 5711d0ee0f28

5711d0ee0f28

PS C:\Users\manoj> docker ps

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

PS C:\Users\manoj> docker image pull jenkins/jenkins:lts

lts: Pulling from jenkins/jenkins

bb7d5a84853b: Pull complete

3e2bcf6b1921: Pull complete

978539702e19: Pull complete

7fa18bcbf207: Pull complete

a67725ef6531: Pull complete

be5329269e0a: Pull complete

f1514eafcdb2: Pull complete

a1f0f8fcd02d: Pull complete

8d76f0dde4b9: Pull complete

9f47eedf727b: Pull complete

74d1ec398ccc: Pull complete

df71683f45f5: Pull complete

95c82c721e5c: Pull complete

2569d89b2015: Pull complete

40a8b1ea9f1c: Pull complete

4d4e70b7b6df: Pull complete

d112a9446c9f: Pull complete

Digest: sha256:510c7e5a5e62049e48f5d01cc6a5e03197f84fbbce70ea51d9d788043926180a

Status: Downloaded newer image for jenkins/jenkins:lts

docker.io/jenkins/jenkins:lts

PS C:\Users\manoj> docker images

REPOSITORY TAG IMAGE ID CREATED SIZE

jenkins/jenkins lts 2219cea3096b 11 days ago 441MB

ubuntu latest ba6acccedd29 4 weeks ago 72.8MB

jenkins 2.60.3-alpine 2ad007d33253 4 years ago 223MB

PS C:\Users\manoj> docker container run -d -p 8082:8080 \

docker: invalid reference format.

See 'docker run --help'.

PS C:\Users\manoj> docker container run -d -p 8082:8080 -v jenkinsvol1:/var/jenkins\_home --name jenkins-local jenkins/jenkins:lts

e21737f2bd48962f53a49bc9b745506d4b1d8b1c03b82f8e48b6f0e0d2fe5ab9

PS C:\Users\manoj> docker ps

CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES

e21737f2bd48 jenkins/jenkins:lts "/sbin/tini -- /usr/…" 13 seconds ago Up 11 seconds 50000/tcp, 0.0.0.0:8082->8080/tcp jenkins-local

PS C:\Users\manoj> docker container exec e21737f2bd48 sh -c "cat /var/jenkins\_home/secrets/initialAdminPassword"

3ad485f1e27f4206b73c0b840ed695c0

PS C:\Users\manoj>