Nexus on Docker

Updated on 19/07/2022

++nexus container++install nexus in docker++containerize nexus++nexus on docker++nexus docker++

https://hub.docker.com/r/sonatype/nexus3

Create/Start nexus container:

Create a volume to persist the Nexus repositories(stored at /nexus-data):

```
$ docker volume create --name nexus-data
$ docker run -d -p 8081:8081 --name nexus -v nexus-data:/nexus-data sonatype/nexus3
```

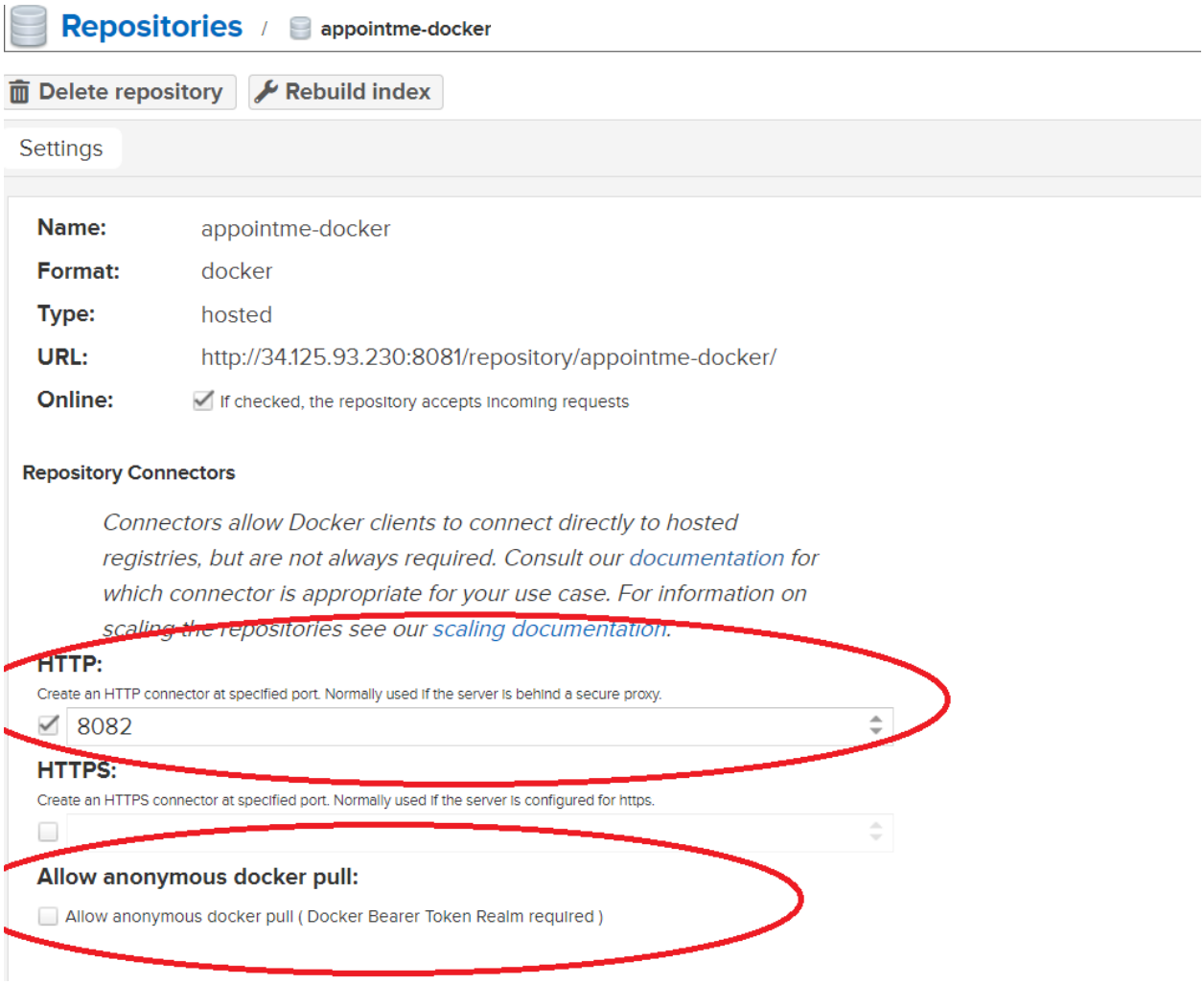
If any additional ports are to be used for connecting to certain registries,for example, to connect to docker registry at 8082.

```
$ docker run -d -p 8081:8081 -p 8082:8082 --name nexus -v nexus-data:/nexus-data
sonatype/nexus3
```

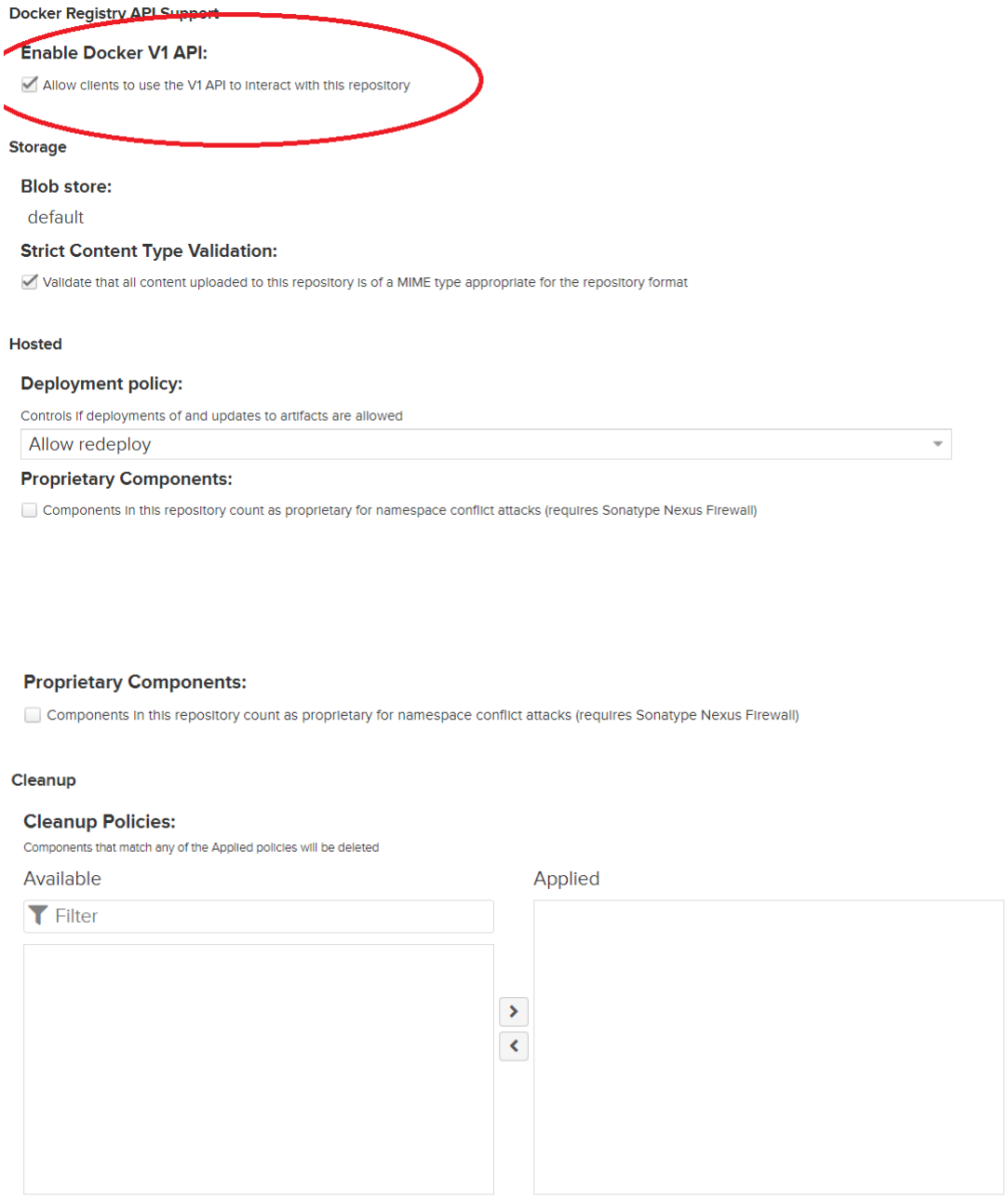
Setting up Docker Registry listening on 8082:

In order to get this work,

1) HTTP should be checked and is provided with a port# (in this case, 8082). This port should have been opened while creating the container. In this case, 8082 is provided with the above “docker run” command.
2) Allow anonymous docker pull is NOT checked.
3) Enable Docker V1 API is checked.



The port in the Nexus container should have been opened.



Configure daemon.json as below on the Docker server

```
>> cat /etc/docker/daemon.json
{
  "insecure-registries" : ["34.125.93.230:8082","34.125.209.72:8082"]
}
```

Connecting to the private Nexus registry:

```
 >> docker login 34.125.93.230:8082
Authenticating with existing credentials...
WARNING! Your password will be stored unencrypted in /root/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
```

To upload non-java files to the repository manager:

```
curl -v   -H "Connection: close"  -F "r=snapshots"     -F "g=com.mytasks"     -F "a=tasks"     -F "v=1.1-1"     -F "p=phar"
-F "file=@/var/www/html/phar/myapp.phar"     -u admin:admin123
http://localhost:8081/nexus/content/repositories/snapshots/myapp.phar
```

For reference, here are all the available form parameters for this endpoint:

r : repository

hasPom - whether you are supplying the pom or you want one generated. If you are uploading a pom, then the parameters **g**, **a**, **v**, **p**, and **c** are not needed as part of the command as those values are extracted from the pom.ml

e - extension

g - group id

a - artifact id

v - version

p - packaging

c - classifier (optional, not shown in examples above)

file - each file to be uploaded, use one file parameter per file.

The similar upload through Maven:

```
mvn deploy:deploy-file -DgroupId=com.somecompany -DartifactId=project -Dversion=1.0.0
-DgeneratePom=true -Dpackaging=jar -DrepositoryId=nexus
-Durl=http://localhost:8081/nexus/content/repositories/releases -Dfile=target/project-1.0.0.jar
```

To download files:

curl -u admin:admin123 "http://localhost:8081/nexus/content/repositories/snapshots/myapp.phar?r=snapshots&g=com.mytasks&a=tasks&v1.1-1&p=phar&c=" > myapp.phar