UNDERGROUND NEXUS QUICK GUIDE

Before the steps below I installed docker. I used a raspberry pi, follow Docker documentation to install Docker on your machine.

1. Install Portainer

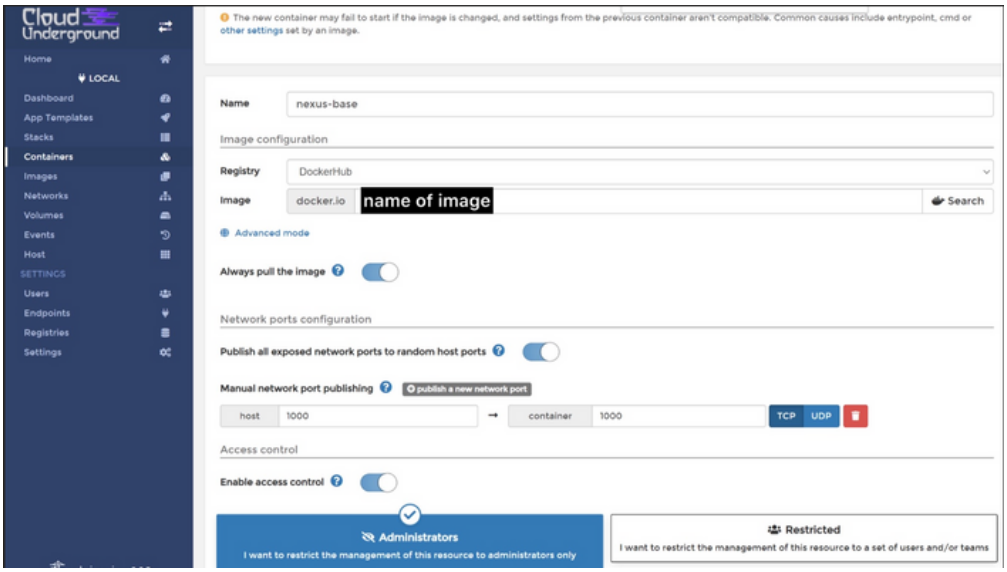
- open a console (terminal in Linux or powershell or cmd in Windows)
- run docker volume create portainer_data
- next run docker run -d -p 8000:8000 -p 9443:9443 --name portainer --restart=always -v /var/run/docker.sock:/var/run/docker.sock -v portainer_data:/data portainer/portainer-ce:2.11.1
- On a web browser on a different machine, access the portainer instance at the appropriate ip address at port 9443
- You will need to set a password and, if desired, username

2. Build the Nexus image

- You should see the local environment, click it and then navigate to the images section in the left column
- Once in images select "Build a new Image"
- Paste the contents of the Dockerfile into the web editor or upload the file using the "Upload" box in the middle-top of the screen
- Give it a name and then click the "Build the Image" button at the bottom of the page

3. Deploy the container

- Now navigate to the container section in the left column
- Click the button that says "+ Add Container"
- Name the container (I called it Nexus)
- fill out the "Image" field to say the name of the image you made at the end of 2 with :latest behind it, so if you called the image "nexus" you would put in `nexus:latest`
- Click the option to "Publish all exposed newtork ports to random host ports"
- Below that, click the "+ publish a new network port" and type 1000 into both the host and container fields
- At the bottom, in the "Command & logging" tab, make sure "Interactive & TTY" are checked under the console option
- Now select the "Runtime & Resources" tab at the bottom and make sure "Privileged mode" and "Init" are turned on and that "Runtime" is set to "runc"
- Now hit "Deploy the container"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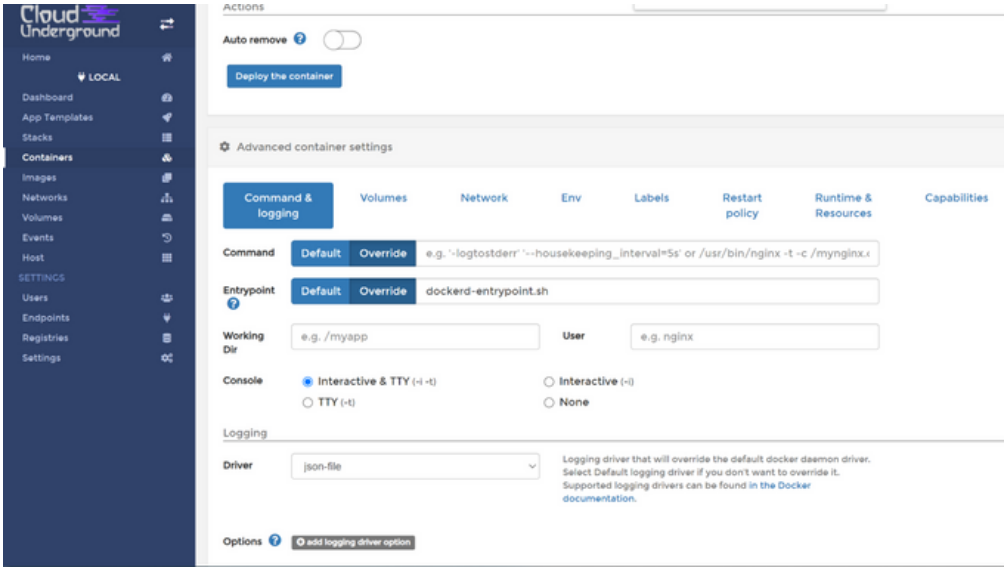
The new container may fail to start if the image is changed, and settings from the previous container aren't compatible. Common causes include entrypoint, cmd or other settings set by an image.
Name
nexus-base
Image configuration
Registry
DockerHub
Image
docker.io
name of image
Search
Advanced mode
Always pull the image
Network ports configuration
Publish all exposed network ports to random host ports
Manual network port publishing
publish a new network port
host
1000
container
1000
TCP
UDP
Access control
Enable access control
Administrators
I want to restrict the management of this resource to administrators only
Restricted
I want to restrict the management of this resource to a set of users and/or teams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Actions
Auto remove
Deploy the container
Advanced container settings
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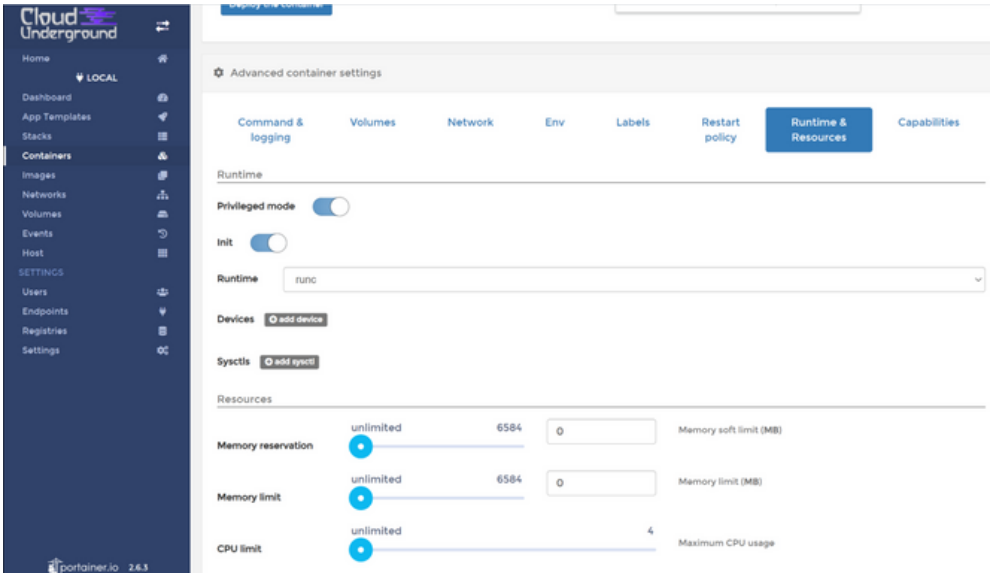
Restart policy
Runtime & Resources
Capabilities
Command
Default
Override
e.g. '-logtostderr' '--housekeeping_interval=5s' or /usr/bin/nginx -t -c /mynginx.c
Entrypoint
Default
Override
dockerd-entrypoint.sh
Working Dir
e.g. /myapp
User
e.g. nginx
Console
Interactive & TTY (-i -t)
Interactive (-i)
TTY (-t)
None
Logging
Driver
json-file
Logging driver that will override the default docker daemon driver. Select Default logging driver if you don't want to override it. Supported logging drivers can be found in the Docker documentation.
Options
add logging driver option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Runtime & Resources
Capabilities
Runtime
Privileged mode
Init
Runtime
runc
Devices
add device
Sysctls
add sysctl
Resources
Memory reservation
unlimited
6584
0
Memory soft limit (MB)
Memory limit
unlimited
6584
0
Memory limit (MB)
CPU limit
unlimited
4
Maximum CPU usage
portainer.io 2.6.3

4. Run the deploy-olympiad script

- Still in portainer, navigate to the "Containers" section in the lefthand column
- You should see your new nexus container running. Look for a heading called "Quick Actions" above where the containers are listed.
- One of the quick actions should be >_ click on that to "Exec console"
- This should bring you to a new page with a button that says "Connect", click on that button
- You should now be in a terminal, type sh deploy-olympiad.sh to run the setup script
- Once the script is done you should be able to access a Mate desktop at the same ip address you used to access portainer but at port 1000 instead of 9443.