

## Exercise 11

# Troubleshooting

### Q1.

Pull an Image “docker.io/dtg2468/troubleshoot:v1”

This image is running httpd and pre-configured to do so.

After pulling this image you are to make an container out of this image using “podman run”.

After doing this simply execute this command:

“podman exec -it <name\_of\_container> httpd”

(Ignore the output.)

Now if you will do curl on this particular port you have associated this container to, it should give you a valid output.

If it does not, then you are troubleshoot this container using the methods we have discussed beforehand.

# Solutions

Q1.

```
[root@localhost ~]# podman pull docker.io/dtg2468/troubleshoot:v1
Trying to pull docker.io/dtg2468/troubleshoot:v1...
Getting image source signatures
Copying blob f41cd7913770 done
Copying blob 3b7adf049118 done
Copying config 543703aa49 done
Writing manifest to image destination
Storing signatures
543703aa492b5b3fb73496d1ff6a9628a35406db0c678f26e6fa0fbcce6553d1
[root@localhost ~]# podman images
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
docker.io/dtg2468/troubleshoot	v1	543703aa492b	21 hours ago	278 MB

```
[root@localhost ~]# podman run -itd --name con1 -p 8080:80 docker.io/dtg2468/troubleshoot:v1
d9edda95635ec8e280c651c82ca464ac612da2c4a9c57fdab757566191e11c61
[root@localhost ~]# podman ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
d9edda95635e	docker.io/dtg2468/troubleshoot:v1	/bin/bash	5 seconds ago	Up 5 seconds ago	0.0.0.0:8080->80/tcp	con1

```
[root@localhost ~]# podman exec -it con1 httpd
AH00558: httpd: Could not reliably determine the server's fully qualified domain name, using 10.88.0.16. Set the 'ServerName' directive globally to suppress this message
[root@localhost ~]# podman ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
d9edda95635e	docker.io/dtg2468/troubleshoot:v1	/bin/bash	21 seconds ago	Up 21 seconds ago	0.0.0.0:8080->80/tcp	con1

```
[root@localhost ~]#
```

```
[root@localhost ~]# curl localhost:8080
curl: (7) Failed to connect to localhost port 8080: Connection refused
[root@localhost ~]# podman exec -it con1 bash
[root@d9edda95635e /]# curl localhost
curl: (7) Failed to connect to localhost port 80: Connection refused
[root@d9edda95635e /]#
```

```
[root@localhost ~]# podman inspect con1
[
  {
    "Id": "d9edda95635ec8e280c651c82ca464ac612da2c4a9c57fdab757566191e11c61",
    "Created": "2023-10-01T12:16:53.281433581+05:30",
    "Path": "/bin/bash",
    "Args": [
      "/bin/bash"
    ],
    "State": {
      "OciVersion": "1.0.2-dev",
      "Status": "running",
      "Running": true,
      "Paused": false,
      "Restarting": false,
      "OOMKilled": false,
      "Dead": false,
      "Pid": 8444,
      "ConmonPid": 8440,
      "ExitCode": 0,
      "Error": "",
      "StartedAt": "2023-10-01T12:16:53.779871049+05:30",
      "FinishedAt": "0001-01-01T00:00:00Z",
      "Health": {
        "Status": "",
        "FailingStreak": 0,
        "Log": null
      }
    }
  }
]
```

```
[root@localhost ~]# podman inspect con1 --format '{{.State.Pid}}'
8444
[root@localhost ~]#
```

```
[root@localhost ~]# nsenter -n -t 8444 ss -pant
State      Recv-Q      Send-Q      Local Address:Port      Peer Address:Port      Process
LISTEN     0            511         *:81                    *:                        users:((("httpd"
,pid=8539,fd=4),("httpd",pid=8538,fd=4),("httpd",pid=8537,fd=4),("httpd",pid=8534,fd=4))
[root@localhost ~]# █
```

```
[root@localhost ~]# podman exec -it con1 bash
[root@d9edda95635e /]# cat /etc/httpd/conf/httpd.conf
#
# This is the main Apache HTTP server configuration file. It contains the
# configuration directives that give the server its instructions.
# See <URL:http://httpd.apache.org/docs/2.4/> for detailed information.
# In particular, see
# <URL:http://httpd.apache.org/docs/2.4/mod/directives.html>
# for a discussion of each configuration directive.
#
# See the httpd.conf(5) man page for more information on this configuration,
# and httpd.service(8) on using and configuring the httpd service.
#
# Do NOT simply read the instructions in here without understanding
# what they do. They're here only as hints or reminders. If you are unsure
# consult the online docs. You have been warned.
#
```

```
[root@localhost ~]# podman rm -f con1
WARN[0010] StopSignal SIGTERM failed to stop container con1 in 10 seconds, resorting to SIGKILL
d9edda95635ec8e280c651c82ca464ac612da2c4a9c57fdab757566191e11c61
[root@localhost ~]# podman run -itd --name con2 -p 8080:81 docker.io/dtg2468/troubleshoot:v1
00a9dd24db7fcea8aa2164b139c16cc3d7ff55b56809bc3c1bcala028c42d1d3
[root@localhost ~]# podman exec -it con2 httpd
AH00558: httpd: Could not reliably determine the server's fully qualified domain name, using 10.88.0.17. Set the
'ServerName' directive globally to suppress this message
[root@localhost ~]# podman ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS        PORTS
00a9dd24db7f   docker.io/dtg2468/troubleshoot:v1  /bin/bash              12 seconds ago Up 12 seconds ago  0.0.0.0:8080->81/
tcp   con2
[root@localhost ~]# curl localhost:8080
TROUBLESHOOTING COMPLETE!
#
# WELL DONE!
[root@localhost ~]#
#
# to be loaded here.
#
```