

## Lab: Working with hostpath

```
root@myVM: ~  
login as: anusha954  
anusha954@20.70.141.13's password:  
Welcome to Ubuntu 24.04 LTS (GNU/Linux 6.8.0-1012-azure x86_64)  
  
 * Documentation:  https://help.ubuntu.com  
 * Management:    https://landscape.canonical.com  
 * Support:       https://ubuntu.com/pro  
  
System information as of Tue Aug 13 04:10:24 UTC 2024  
  
System load:  0.08      Processes:      117  
Usage of /:   5.0% of 28.02GB Users logged in: 0  
Memory usage: 3%       IPv4 address for eth0: 10.0.0.4  
Swap usage:   0%  
  
Expanded Security Maintenance for Applications is not enabled.  
  
0 updates can be applied immediately.  
  
Enable ESM Apps to receive additional future security updates.  
See https://ubuntu.com/esm or run: sudo pro status  
  
The programs included with the Ubuntu system are free software;  
the exact distribution terms for each program are described in the  
individual files in /usr/share/doc/*/copyright.  
  
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by  
applicable law.  
  
To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo_root" for details.  
  
anusha954@myVM:~$ sudo su -  
root@myVM:~# # dnf -y install yum-utils  
root@myVM:~# sudo apt-get update  
Hit:1 http://azure.archive.ubuntu.com/ubuntu noble InRelease  
Get:2 http://azure.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]  
Get:3 http://azure.archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]  
Get:4 http://azure.archive.ubuntu.com/ubuntu noble-security InRelease [126 kB]  
Get:5 http://azure.archive.ubuntu.com/ubuntu noble/universe amd64 Packages [15.0 MB]  
Get:6 http://azure.archive.ubuntu.com/ubuntu noble/universe Translation-en [5982 kB]  
Get:7 http://azure.archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]  
Get:8 http://azure.archive.ubuntu.com/ubuntu noble/universe amd64 c-n-f Metadata [301 kB]  
Get:9 http://azure.archive.ubuntu.com/ubuntu noble/multiverse amd64 Packages [269 kB]  
Get:10 http://azure.archive.ubuntu.com/ubuntu noble/multiverse Translation-en [118 kB]  
Get:11 http://azure.archive.ubuntu.com/ubuntu noble/multiverse amd64 Components [35.0 kB]  
Get:12 http://azure.archive.ubuntu.com/ubuntu noble/multiverse amd64 c-n-f Metadata [8328 B]
```

```
anusha954@AnushaKubernetes: ~  
anusha954@AnushaKubernetes:~$ nano storage-hostpath.yml  
anusha954@AnushaKubernetes:~$ cat -n ~/kubernetes/storage-hostpath  
.yml  
1  apiVersion: v1  
2  kind: Pod  
3  metadata:  
4    name: test-pd-hostpth  
5  spec:  
6    containers:  
7    - name: test-container  
8      image: nginx  
9      volumeMounts:  
10     - mountPath: "/usr/share/nginx/html"  
11       name: test-hostpath  
12    volumes:  
13    - name: test-hostpath  
14      hostPath:  
15        path: /data  
16        nodeName: 10.1.0.4  
anusha954@AnushaKubernetes:~$ kubectl apply -f ~/kubernetes/storage-hostpath.yml  
pod/test-pd-hostpth created  
anusha954@AnushaKubernetes:~$ kubectl get pod test-pd-hostpth -o  
wide  
NAME                                READY  STATUS    RESTARTS  AGE  IP        NODE  
test-pd-hostpth                    0/1    Pending   0          14s  <none>    10.1  
.0.4  <none>                          <none>  
anusha954@AnushaKubernetes:~$ ssh 10.1.0.4 "echo "Hello from Kubernetes Storage" >  
/data/index.html"  
anusha954@10.1.0.4's password:  
Permission denied, please try again.  
anusha954@10.1.0.4's password:  
bash: -c: line 1: syntax error near unexpected token `newline'  
bash: -c: line 1: `echo Hello from Kubernetes Storage > '  
anusha954@AnushaKubernetes:~$ kubectl exec -it test-pd-hostpth -- /bin/bash  
Error from server (NotFound): pods "test-pd-hostpth" not found  
anusha954@AnushaKubernetes:~$ curl http://localhost/  
curl: (7) Failed to connect to localhost port 80 after 0 ms: Could  
n't connect to server
```

```
root@kavinv2: ~/kubernetes
187669252 bytes.
Normal Created 28s kubelet Created container co
ntainer1
Normal Started 28s kubelet Started container co
ntainer1
Normal Pulling 28s kubelet Pulling image "redis
"
Normal Pulled 22s kubelet Successfully pulled
image "redis" in 6.224s (6.224s including waiting). Image size: 11
6937259 bytes.
Normal Created 22s kubelet Created container co
ntainer2
Normal Started 22s kubelet Started container co
ntainer2
Normal Pulling 22s kubelet Pulling image "memca
ched"
Normal Pulled 17s kubelet Successfully pulled
image "memcached" in 4.971s (4.971s including waiting). Image size
: 84788109 bytes.
Normal Created 17s kubelet Created container co
ntainer3
Normal Started 17s kubelet Started container co
ntainer3
root@kavinv2:~/kubernetes# kubectl exec -it multi-container-pod -
- bash
Defaulted container "container1" out of: container1, container2, c
ontainer3
root@multi-container-pod:/# exit
exit
root@kavinv2:~/kubernetes#
root@kavinv2:~/kubernetes# kubectl exec -it multi-container-pod
-c container2 -- bash
root@multi-container-pod:/data# exit
exit
root@kavinv2:~/kubernetes#
root@kavinv2:~/kubernetes#
root@kavinv2:~/kubernetes# kubectl delete pod multi-container-pod
pod "multi-container-pod" deleted
root@kavinv2:~/kubernetes#
```