


Assignment 5 – Kubernetes

 Hands On 1 – Creating A Volume

Hands On 2 – Creating A Persistent Volume

Hands On 3 – Creating A Secrets

Hands On 4 -Creating A Taint On A Node

Then A Pod With Tolerations But Not To The Taint

Case Study – Introduction To Kubernetes

Module 9 - Kubernetes II

Module 10 - Terraform

DevOps Certification Training



Module-9: Kubernetes Assignment - 5

You have been asked to:

- Use the previous deployment
- Deploy an nginx deployment of 3 replicas
- Create an nginx service of type clusterip
- Create an ingress service /apache to apache service /nginx to nginx service

Download Attachment

```
root@ip-172-31-25-208:~# kubectl get deployment
```

NAME	READY	UP-TO-DATE	AVAILABLE	AGE
apache	0/1	1	0	60m
apache2	0/1	1	0	68m
apache3	1/1	1	1	54m
jenkins	0/1	1	0	26h
jenkins1	1/1	1	1	26h
kubernetes-bootcamp	1/1	1	1	2d
nginx	2/2	2	2	27h
nginx1	5/5	5	5	26h

```
root@ip-172-31-25-208:~# kubectl scale deployments nginx1 --replicas=3
```

```
deployment.apps/nginx1 scaled
```

```
root@ip-172-31-25-208:~# kubectl get rs
```

NAME	DESIRED	CURRENT	READY	AGE
apache-7cd4d4d49	1	1	0	61m
apache2-7bb4f968bc	1	1	0	69m
apache3-7b4964b898	1	1	1	55m
jenkins-7b4ccb558f	1	1	0	26h
jenkins1-574d8dd68	1	1	1	26h
kubernetes-bootcamp-59d54f7f6f	1	1	1	2d
nginx-74d589986c	2	2	2	27h
nginx1-7568844dcd	3	3	3	26h

```
root@ip-172-31-25-208:~# kubectl get svc
```

NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
apache3	LoadBalancer	10.103.224.78	<pending>	80:30924/TCP	49m
jenkins1	LoadBalancer	10.98.35.154	<pending>	8080:30325/TCP	25h
kubernetes	ClusterIP	10.96.0.1	<none>	443/TCP	2d1h
kubernetes-bootcamp	LoadBalancer	10.100.84.86	<pending>	8080:30092/TCP	26h
nginx	LoadBalancer	10.103.188.241	<pending>	8080:31101/TCP	26h
nginx1	LoadBalancer	10.101.162.192	<pending>	80:31996/TCP	26h



```
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NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
apache3	LoadBalancer	10.103.224.78	<pending>	80:30924/TCP	49m
jenkins1	LoadBalancer	10.98.35.154	<pending>	8080:30325/TCP	25h
kubernetes	ClusterIP	10.96.0.1	<none>	443/TCP	2d1h
kubernetes-bootcamp	LoadBalancer	10.100.84.86	<pending>	8080:30092/TCP	26h
nginx	LoadBalancer	10.103.188.241	<pending>	8080:31101/TCP	26h
nginx1	LoadBalancer	10.101.162.192	<pending>	80:31996/TCP	26h

```
root@ip-172-31-25-208:~# curl 10.101.162.192:80
```

```
<!DOCTYPE html>
<html>
<head>
<title>Welcome to nginx!</title>
<style>
html { color-scheme: light dark; }
body { width: 35em; margin: 0 auto;
font-family: Tahoma, Verdana, Arial, sans-serif; }
</style>
</head>
<body>
<h1>Welcome to nginx!</h1>
<p>If you see this page, the nginx web server is successfully installed and
working. Further configuration is required.</p>

<p>For online documentation and support please refer to
<a href="http://nginx.org/">nginx.org</a>.<br/>
Commercial support is available at
<a href="http://nginx.com/">nginx.com</a>.</p>

<p><em>Thank you for using nginx.</em></p>
```



```
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```

NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
apache3	LoadBalancer	10.103.224.78	<pending>	80:30924/TCP	57m
jenkins1	LoadBalancer	10.98.35.154	<pending>	8080:30325/TCP	26h
kubernetes	ClusterIP	10.96.0.1	<none>	443/TCP	2d1h
kubernetes-bootcamp	LoadBalancer	10.100.84.86	<pending>	8080:30092/TCP	26h
nginx	LoadBalancer	10.103.188.241	<pending>	8080:31101/TCP	26h
nginx1	LoadBalancer	10.101.162.192	<pending>	80:31996/TCP	26h

```
root@ip-172-31-25-208:~# kubectl get deployment
```

NAME	READY	UP-TO-DATE	AVAILABLE	AGE
apache	0/1	1	0	70m
apache2	0/1	1	0	78m
apache3	1/1	1	1	63m
jenkins	0/1	1	0	26h
jenkins1	1/1	1	1	26h
kubernetes-bootcamp	1/1	1	1	2d
nginx	2/2	2	2	27h
nginx1	3/3	3	3	26h

```
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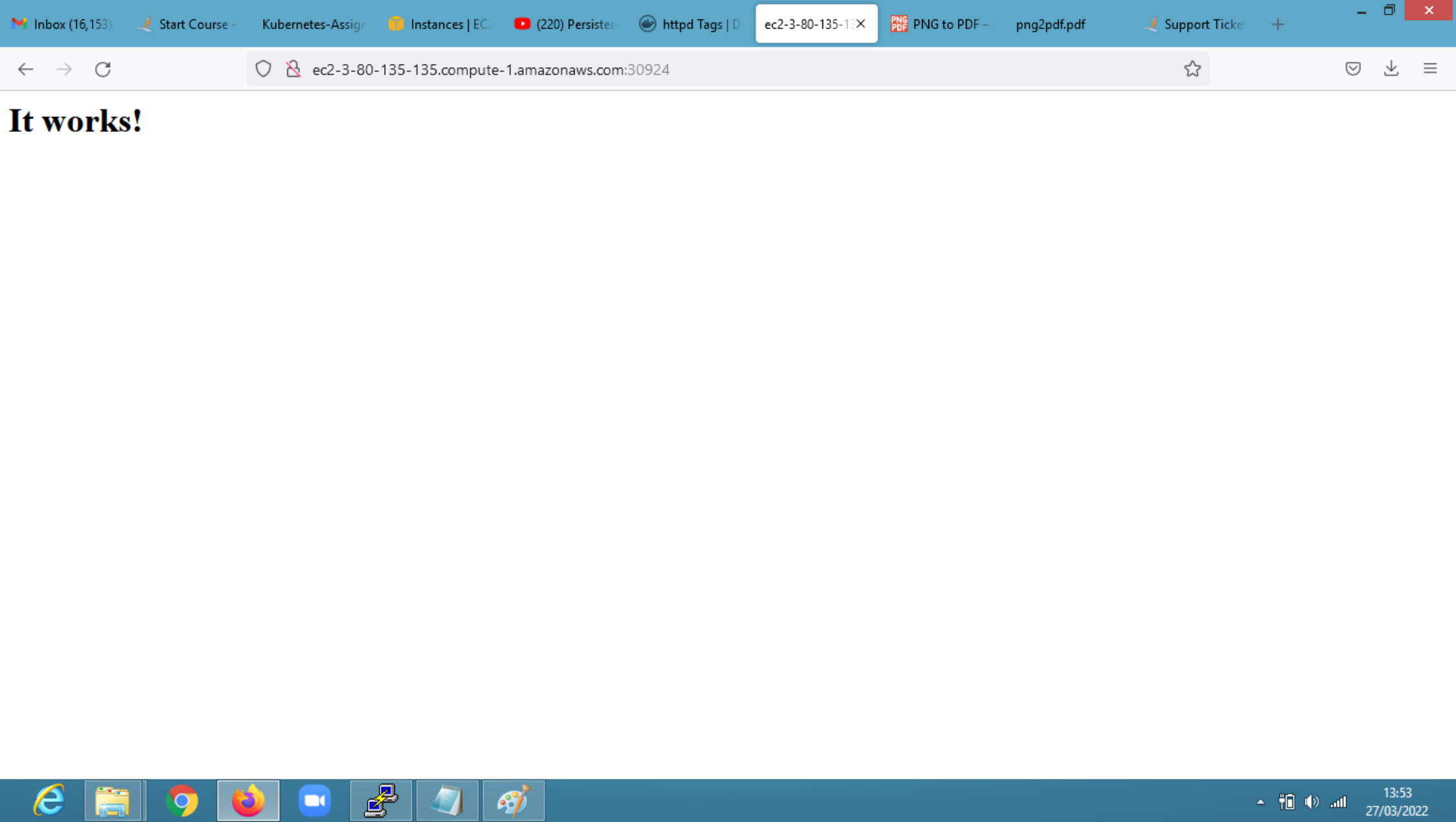
NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
apache3	LoadBalancer	10.103.224.78	<pending>	80:30924/TCP	57m
jenkins1	LoadBalancer	10.98.35.154	<pending>	8080:30325/TCP	26h
kubernetes	ClusterIP	10.96.0.1	<none>	443/TCP	2d1h
kubernetes-bootcamp	LoadBalancer	10.100.84.86	<pending>	8080:30092/TCP	26h
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nginx1	LoadBalancer	10.101.162.192	<pending>	80:31996/TCP	26h

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root@ip-172-31-25-208:~# curl 10.103.224.78:80
```

```
<html><body><h1>It works!</h1></body></html>
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<html><body><h1>It works!</h1></body></html>
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It works!