

Name – Anup Kore

Topic – Running application on Kubernetes(in progress)

Date – 28-04-2023

```
Microsoft Windows [Version 10.0.19045.2846]
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C:\Users\LENOVO>
C:\Users\LENOVO>docker login
Authenticating with existing credentials...
Login Succeeded

Logging in with your password grants your terminal complete access to your account.
For better security, log in with a limited-privilege personal access token. Learn more at https://docs.docker.com/go/access-tokens/

C:\Users\LENOVO>
C:\Users\LENOVO>docker tag spring-compose-image spring-boot-project/spring-compose-image

C:\Users\LENOVO>
C:\Users\LENOVO>docker push spring-boot-project/spring-compose-image
Using default tag: latest
The push refers to repository [docker.io/spring-boot-project/spring-compose-image]
7c22c659a42f: Preparing
dc9fa3d8b576: Preparing
27ee19dc88f2: Preparing
c8dd97366670: Preparing
denied: requested access to the resource is denied

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C:\Users\LENOVO>docker push spring-boot-project/spring-compose-image
Using default tag: latest
The push refers to repository [docker.io/spring-boot-project/spring-compose-image]
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dc9fa3d8b576: Preparing
27ee19dc88f2: Preparing
c8dd97366670: Preparing
denied: requested access to the resource is denied

C:\Users\LENOVO>
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```
Command Prompt - docker push anup1207/spring-boot-project:tag

C:\Users\LENOVO>
C:\Users\LENOVO>docker tag spring-compose-image anup1207/spring-boot-project:tag

C:\Users\LENOVO>docker push anup1207/spring-boot-project:tag
The push refers to repository [docker.io/anup1207/spring-boot-project]
7c22c659a42f: Pushed
dc9fa3d8b576: Pushing [=====>] 172.7MB/321.3MB
27ee19dc88f2: Pushed
c8dd97366670: Pushed
```

```
Command Prompt
C:\Users\LENOVO>
C:\Users\LENOVO>docker tag spring-compose-image anup1207/spring-boot-project:testtag
C:\Users\LENOVO>docker push anup1207/spring-boot-project:testtag
The push refers to repository [docker.io/anup1207/spring-boot-project]
7c22c659a42f: Pushed
dc9fa3d8b576: Pushed
27ee19dc88f2: Pushed
c8dd97366e70: Pushed
testtag: digest: sha256:dce9f9ae32b2ffca8fef48ff50c40464d37594969576d44436b6c488312afc0c size: 1166
C:\Users\LENOVO>
C:\Users\LENOVO>docker tag mysql anup1207/spring-boot-project:testtag2
C:\Users\LENOVO>
C:\Users\LENOVO>docker push anup1207/spring-boot-project:testtag2
The push refers to repository [docker.io/anup1207/spring-boot-project]
a4f094a19913: Mounted from anup1207/deployment_001
ac2f3d433b8e: Mounted from anup1207/deployment_001
44eaf2264b91: Mounted from anup1207/deployment_001
82a375517098: Mounted from anup1207/deployment_001
bd6b6a89e10a: Mounted from anup1207/deployment_001
1c585189e67f: Mounted from anup1207/deployment_001
08745f0c18ca: Mounted from anup1207/deployment_001
3f772020efc1: Mounted from anup1207/deployment_001
a9805d41c46a: Mounted from anup1207/deployment_001
5ed69eb31cd7: Mounted from anup1207/deployment_001
caefa4e45110: Mounted from anup1207/deployment_001
testtag2: digest: sha256:b45a7c3e6fb15526e8bf62ebb940cd460617e36f46155b8514fd9c9388231817 size: 2618
C:\Users\LENOVO>
C:\Users\LENOVO>
C:\Users\LENOVO>
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```
Command Prompt
C:\Users\LENOVO>kubectl get pods
No resources found in default namespace.
C:\Users\LENOVO>
C:\Users\LENOVO>kubectl create deployment test --image=anup1207/spring-boot-project:testtag
deployment.apps/test created
C:\Users\LENOVO>
C:\Users\LENOVO>kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
test-868bd7b54d-5kpps   1/1     Running   0           4s
C:\Users\LENOVO>
C:\Users\LENOVO>kubectl docker tag mysql anup1207/spring-boot-project:testtag2
error: unknown command "docker" for "kubectl"
C:\Users\LENOVO>docker tag mysql anup1207/spring-boot-project:testtag2
C:\Users\LENOVO>
C:\Users\LENOVO>docker push anup1207/spring-boot-project:testtag2
The push refers to repository [docker.io/anup1207/spring-boot-project]
a4f094a19913: Layer already exists
ac2f3d433b8e: Layer already exists
44eaf2264b91: Layer already exists
82a375517098: Layer already exists
bd6b6a89e10a: Layer already exists
1c585189e67f: Layer already exists
08745f0c18ca: Layer already exists
3f772020efc1: Layer already exists
a9805d41c46a: Layer already exists
5ed69eb31cd7: Layer already exists
caefa4e45110: Layer already exists
testtag2: digest: sha256:b45a7c3e6fb15526e8bf62ebb940cd460617e36f46155b8514fd9c9388231817 size: 2618
C:\Users\LENOVO>
C:\Users\LENOVO>
C:\Users\LENOVO>
```

```
Command Prompt

C:\Users\LENOVO>kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
test-868bd7b54d-5kpss  0/1     CrashLoopBackOff   6 (61s ago)    8m17s
test2-98fbf4f4-bnsqk   0/1     CrashLoopBackOff   4 (36s ago)    3m9s

C:\Users\LENOVO>kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
test-868bd7b54d-5kpss  0/1     CrashLoopBackOff   6 (66s ago)    8m22s
test2-98fbf4f4-bnsqk   0/1     CrashLoopBackOff   4 (41s ago)    3m14s

C:\Users\LENOVO>kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
test-868bd7b54d-5kpss  0/1     CrashLoopBackOff   6 (77s ago)    8m33s
test2-98fbf4f4-bnsqk   0/1     CrashLoopBackOff   4 (52s ago)    3m25s

C:\Users\LENOVO>kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
test-868bd7b54d-5kpss  0/1     CrashLoopBackOff   6 (79s ago)    8m35s
test2-98fbf4f4-bnsqk   0/1     CrashLoopBackOff   4 (54s ago)    3m27s

C:\Users\LENOVO>
C:\Users\LENOVO>
C:\Users\LENOVO>kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
test-868bd7b54d-5kpss  0/1     CrashLoopBackOff   6 (83s ago)    8m39s
test2-98fbf4f4-bnsqk   0/1     CrashLoopBackOff   4 (58s ago)    3m31s

C:\Users\LENOVO>kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
test-868bd7b54d-5kpss  0/1     CrashLoopBackOff   6 (3m10s ago)   10m
test2-98fbf4f4-bnsqk   0/1     CrashLoopBackOff   5 (74s ago)    5m18s

C:\Users\LENOVO>kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
test-868bd7b54d-5kpss  0/1     CrashLoopBackOff   6 (3m22s ago)   10m
test2-98fbf4f4-bnsqk   0/1     CrashLoopBackOff   5 (86s ago)    5m30s

C:\Users\LENOVO>kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
test-868bd7b54d-5kpss  0/1     CrashLoopBackOff   6 (3m43s ago)   10m
test2-98fbf4f4-bnsqk   0/1     CrashLoopBackOff   5 (107s ago)    5m51s

C:\Users\LENOVO>
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Command Prompt

Host Port:      <none>
State:          Waiting
Reason:         CrashLoopBackOff
Last State:     Terminated
Reason:         Error
Exit Code:      1
Started:        Fri, 28 Apr 2023 15:12:00 +0530
Finished:       Fri, 28 Apr 2023 15:12:01 +0530
Ready:          False
Restart Count:  6
Environment:    <none>
Mounts:
  /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-k2stk (ro)
Conditions:
  Type             Status
  Initialized       True
  Ready             False
  ContainersReady   False
  PodScheduled      True
Volumes:
  kube-api-access-k2stk:
    Type:          Projected (a volume that contains injected data from multiple sources)
    TokenExpirationSeconds: 3607
    ConfigMapName:    kube-root-ca.crt
    ConfigMapOptional: <nil>
    DownwardAPI:      true
QoS Class:         BestEffort
Node-Selectors:    <none>
Tolerations:       node.kubernetes.io/not-ready:NoExecute op=Exists for 300s
                   node.kubernetes.io/unreachable:NoExecute op=Exists for 300s
Events:
  Type     Reason      Age    From          Message
  ----     -
  Normal   Scheduled   7m29s  default-scheduler  Successfully assigned default/test2-98fbf4f4-bnsqk to minikube
  Normal   Pulling     7m28s  kubelet         Pulling image "anup1207/spring-boot-project:testtag2"
  Normal   Pulled      6m35s  kubelet         Successfully pulled image "anup1207/spring-boot-project:testtag2" in 52.321117752s (52.321126352s including waiting)
  Normal   Created     4m56s  kubelet         Created container spring-boot-project
  Normal   Started     4m56s  kubelet         Started container spring-boot-project
  Normal   Pulled      4m56s  kubelet         Container image "anup1207/spring-boot-project:testtag2" already present on machine
  Warning   BackOff     2m18s  kubelet         Back-off restarting failed container spring-boot-project in pod test2-98fbf4f4-bnsqk_default(d3f22901-6754-411d-ad36-ee2288ef2f00)

C:\Users\LENOVO>
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```
Command Prompt - minikube dashboard
C:\Users\LENOVO>minikube dashboard
* Enabling dashboard ...
  - Using image docker.io/kubernetesui/dashboard:v2.7.0
  - Using image docker.io/kubernetesui/metrics-scraper:v1.0.8
* Some dashboard features require the metrics-server addon. To enable all features please run:

    minikube addons enable metrics-server

* Verifying dashboard health ...
* Launching proxy ...
  > kubect1.exe.sha256: 64 B / 64 B [-----] 100.00% ? p/s 0s
  > kubect1.exe: 46.49 MiB / 46.49 MiB [-----] 100.00% 5.73 MiB p/s 8.3s
* Verifying proxy health ...
* Opening http://127.0.0.1:52377/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/ in your default browser...
```

```
Command Prompt - minikube service test3
Microsoft Windows [Version 10.0.19045.2846]
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C:\Users\LENOVO>kubectl create deployment test3 image mysql
error: required flag(s) "image" not set

C:\Users\LENOVO>kubectl create deployment test3 --image mysql
deployment.apps/test3 created

C:\Users\LENOVO>kubectl expose deployment test3 --type=LoadBalancer --port=3308
service/test3 exposed

C:\Users\LENOVO>minikube service test3
-----
| NAMESPACE | NAME | TARGET PORT | URL |
|-----|-----|-----|-----|
| default | test3 | 3308 | http://192.168.49.2:30836 |
|-----|-----|-----|-----|
* Starting tunnel for service test3.
e0428 15:32:12.447015 5592 service_tunnel.go:66] error starting ssh tunnel: exec: "ssh": executable file not found in %PATH%
-----
| NAMESPACE | NAME | TARGET PORT | URL |
|-----|-----|-----|-----|
| default | test3 | 3308 | http://127.0.0.1:52521 |
|-----|-----|-----|-----|
* Opening service default/test3 in default browser...
! Because you are using a Docker driver on windows, the terminal needs to be open to run it.
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127.0.0.1:52377/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/#/deployment?namespace=default

kubernetes default Search +

Workloads > Deployments

Workloads N

- Cron Jobs
- Daemon Sets
- Deployments
- Jobs
- Pods
- Replica Sets
- Replication Controllers
- Stateful Sets

Service

- Ingresses N
- Ingress Classes
- Services N

Config and Storage

Config Maps N

Deployments

Name	Images	Labels	Pods	Created ↑
test3	mysql	app: test3	1 / 1	13 minutes ago
test2	anup1207/spring-boot-project:testtag2	app: test2	1 / 1	34 minutes ago
test	anup1207/spring-boot-project:testtag	app: test	1 / 1	39 minutes ago

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127.0.0.1:52377/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/#/discovery?namespace=default

kubernetes default Search +

Service

Workloads N

- Cron Jobs
- Daemon Sets
- Deployments
- Jobs
- Pods
- Replica Sets
- Replication Controllers
- Stateful Sets

Service

- Ingresses N
- Ingress Classes
- Services N

Config and Storage

Config Maps N

Services

Name	Labels	Type	Cluster IP	Internal Endpoints	External Endpoints	Created ↑
test3	app: test3	LoadBalancer	10.98.10.170	test3:3308 TCP test3:30836 TCP	-	9 minutes ago
kubernetes	component: apiserver provider: kubernetes	ClusterIP	10.96.0.1	kubernetes:443 TCP kubernetes:0 TCP	-	a day ago

Windows taskbar: Type here to search, 15:39, 28-04-2023