Module-4: Orchestration in Docker

Demo Document - 6

edureka!

DEMO-6: Rolling Updates and Rollback

Note: All commands are executed as root.

Rolling Update

We will first deploy a tomcat v8.0 container and then apply a rolling update with parallelism value of 2

1. Deploying a tomcat:8.0 service

```
$ docker service create \
  --name <serviceName> \
  --replicas 6 \
  tomcat:8.0
```

```
root@docker-1:~# docker service create \
> --name rolltomcat \
> --replicas 7 \
> tomcat:8.0
s9c5jpplis1tx7ei2ssl4xt05
overall progress: 7 out of 7 tasks
1/7: running   [==================================================>]
2/7: running   [==================================================>]
3/7: running   [==================================================>]
4/7: running   [==================================================>]
5/7: running   [==================================================>]
6/7: running   [==================================================>]
7/7: running   [==================================================>]
verify: Service converged
```

2. To apply a rolling update on the service we will use the update option and update the image to tomcat:9.0. Two tasks will be updated parallelly

```
$ docker service update --image tomcat:9.0 --update-parallelism 2 <serviceName>
```

We can see the service is updating two at a time

```
root@docker-1:~# docker service update --image tomcat:9.0 --update-parallelism 2 rolltomcat
rolltomcat
overall progress: 2 out of 7 tasks
1/7: running   [============================================>]
2/7: running   [============================================>]
3/7: ready     [================================>            ]
4/7: preparing [============================>                ]
5/7:
6/7:
7/7:
```

```
$ docker service ps <serviceName>
```

```
$ docker service ps <serviceName>
```

```
root@docker-1:~# docker service ps rolltomcat
ID                NAME             IMAGE         NODE         DESIRED STATE     CURRENT STATE
   ERROR                PORTS
8cmg4rpf0wwu      rolltomcat.1     tomcat:9.0    docker-1     Running           Running about a minute ago
zcimvltovixr       \_ rolltomcat.1  tomcat:8.0    docker-3     Shutdown          Shutdown about a minute ago
no6wobj0977y      rolltomcat.2     tomcat:9.0    docker-3     Running           Running about a minute ago
fu5t7bs390lp       \_ rolltomcat.2  tomcat:8.0    docker-3     Shutdown          Shutdown about a minute ago
loxt4sgyfx6p      rolltomcat.3     tomcat:9.0    docker-2     Running           Running 57 seconds ago
sr7zx46qgjqp       \_ rolltomcat.3  tomcat:8.0    docker-1     Shutdown          Shutdown 59 seconds ago
e9kemszffd0k      rolltomcat.4     tomcat:9.0    docker-2     Running           Running about a minute ago
8fdu21w0dtcl       \_ rolltomcat.4  tomcat:8.0    docker-2     Shutdown          Shutdown about a minute ago
0vvsxumh0d8i      rolltomcat.5     tomcat:9.0    docker-3     Running           Running about a minute ago
c58agnnl5qij       \_ rolltomcat.5  tomcat:8.0    docker-3     Shutdown          Shutdown about a minute ago
3s5vrxobuhs9      rolltomcat.6     tomcat:9.0    docker-1     Running           Running about a minute ago
z5zknfzsmkty       \_ rolltomcat.6  tomcat:8.0    docker-1     Shutdown          Shutdown about a minute ago
bhhj3iw8ehcd      rolltomcat.7     tomcat:9.0    docker-2     Running           Running about a minute ago
i68fsmdqwgk9       \_ rolltomcat.7  tomcat:8.0    docker-2     Shutdown          Shutdown about a minute ago
```

Rollback

1.   We will demonstrate rollback using the rollback command

```
$ docker service rollback <serviceName>
```

```
root@docker-1:~# docker service rollback rolltomcat
rolltomcat
rollback: manually requested rollback
overall progress: rolling back update: 2 out of 7 tasks
1/7: running    [>                                            ]
2/7:
3/7:
4/7: starting   [=====>                                       ]
5/7:
6/7:
7/7: running    [>                                            ]
```