

Jenkins Integration Microservices Using Maven

```
master@master-vm:~/Microservices$ docker-compose up -d --build
WARN[0000] /home/master/Microservices/docker-compose.yml: the attribute 'version' is obsolete, it will be ignored, please remove it
to avoid potential confusion
Compose can now delegate builds to bake for better performance.
To do so, set COMPOSE_BAKE=true.
[+] Building 2.6s (31/31) FINISHED                                docker:default
=> [user-service internal] load build definition from Dockerfile    0.0s
=> => transferring dockerfile: 131B                                0.0s
=> [product-service internal] load build definition from Dockerfile 0.1s
=> => transferring dockerfile: 365B                                0.0s
=> [user-service internal] load metadata for docker.io/library/openjdk:2 1.8s
=> [user-service auth] library/openjdk:pull token for registry-1.docker. 0.0s
=> [payment-service internal] load metadata for docker.io/library/openjd 2.2s
=> [payment-service internal] load build definition from Dockerfile 0.0s
=> => transferring dockerfile: 291B                                0.0s
=> [order-service internal] load build definition from Dockerfile    0.0s
=> => transferring dockerfile: 365B                                0.0s
=> [user-service internal] load .dockerignore                        0.0s
=> => transferring context: 2B                                       0.0s
=> [user-service 1/3] FROM docker.io/library/openjdk:21@sha256:af9de795d 0.0s
=> [user-service internal] load build context                        0.0s
=> => transferring context: 86B                                       0.0s
=> CACHED [user-service 2/3] WORKDIR /app                           0.0s
=> CACHED [user-service 3/3] COPY target/*.jar app.jar              0.0s
=> [user-service] exporting to image                                0.0s
=> => exporting layers                                              0.0s
=> => writing image sha256:0db9ffd0a3f91422b91c3d68409f2dffb29ae8bd8870 0.0s
=> => naming to docker.io/bhargavakulla/user-service               0.0s
=> [user-service] resolving provenance for metadata file            0.0s
=> [order-service internal] load .dockerignore                      0.1s
=> => transferring context: 2B                                       0.0s
=> [product-service internal] load .dockerignore                    0.0s
=> => transferring context: 2B                                       0.0s
=> [payment-service internal] load .dockerignore                    0.1s
```

```
✓ order-service          Built          0.0s
✓ payment-service        Built          0.0s
✓ product-service        Built          0.0s
✓ user-service           Built          0.0s
✓ Container order-service Started        8.4s
✓ Container postgres_db  Started        2.5s
✓ Container zookeeper    Started        2.5s
✓ Container kafka_broker Started        3.0s
✓ Container product-service Started        4.3s
✓ Container user-service Started        4.5s
✓ Container payment-service Started        3.1s
```

```
master@master-vm:~/Microservices$ docker ps
```

| CONTAINER ID | IMAGE | COMMAND | CREATED | STATUS |
|--------------|-------|---------|---------|--------|
|--------------|-------|---------|---------|--------|

```

master@master-vm:~/Microservices$ docker ps

```

| CONTAINER ID | IMAGE | NAMES | COMMAND | CREATED | STATUS | PORTS |
|--------------|---------------------------------|-----------------|----------------------------|----------------|---------------|---|
| 8922510bc9f4 | bhargavakulla/order-service | order-service | "java -jar app.jar" | 16 seconds ago | Up 6 seconds | 8082/tcp, 0.0.0.0:8083->8083/tcp, :::8083->8083/tcp |
| 983584f47388 | bhargavakulla/payment-service | payment-service | "java -jar app.jar" | 16 seconds ago | Up 5 seconds | 0.0.0.0:8084->8084/tcp, :::8084->8084/tcp |
| d8fbad325f4a | bhargavakulla/user-service | user-service | "java -jar app.jar" | 16 seconds ago | Up 11 seconds | 0.0.0.0:8081->8081/tcp, :::8081->8081/tcp |
| 839b8af4375c | bhargavakulla/product-service | product-service | "java -jar app.jar" | 16 seconds ago | Up 11 seconds | 0.0.0.0:8082->8082/tcp, :::8082->8082/tcp, 8083/tcp |
| 9bea0fac4348 | confluentinc/cp-kafka:7.3.2 | kafka_broker | "/etc/confluent/docker..." | 16 seconds ago | Up 10 seconds | 0.0.0.0:9092->9092/tcp, :::9092->9092/tcp |
| 3442be5a05a4 | confluentinc/cp-zookeeper:7.3.2 | zookeeper | "/etc/confluent/docker..." | 17 seconds ago | Up 14 seconds | 2888/tcp, 0.0.0.0:2181->2181/tcp, :::2181->2181/tcp |
| 28e41855a572 | postgres:17.4 | postgres_db | "docker-entrypoint.s..." | 17 seconds ago | Up 14 seconds | 0.0.0.0:5432->5432/tcp, :::5432->5432/tcp |

```

master@master-vm:~/Microservices/k8s$ kubectl get all

```

| NAME | READY | STATUS | RESTARTS | AGE |
|--------------------------------------|-------|-------------------|----------------|------|
| pod/flask-app-694d959f47-65blr | 1/1 | Running | 1 (7m59s ago) | 47h |
| pod/flask-app-694d959f47-7sqrg | 1/1 | Running | 1 (7m59s ago) | 47h |
| pod/flask-app-694d959f47-bvk8f | 1/1 | Terminating | 0 | 6d2h |
| pod/flask-app-694d959f47-fs2c6 | 1/1 | Terminating | 0 | 6d2h |
| pod/flask-app-694d959f47-rlccq | 1/1 | Running | 2 (7m59s ago) | 6d2h |
| pod/flask-app-694d959f47-rwdt5 | 1/1 | Running | 2 (7m59s ago) | 6d2h |
| pod/mysql-66d468f74c-6ggzz | 1/1 | Terminating | 0 | 6d2h |
| pod/mysql-66d468f74c-bws29 | 1/1 | Running | 1 (7m59s ago) | 47h |
| pod/nginx-78b5b78b99-7nwgk | 1/1 | Terminating | 0 | 6d1h |
| pod/nginx-78b5b78b99-shswf | 1/1 | Running | 1 (7m59s ago) | 47h |
| pod/order-service-646676ccbf-m9cx9 | 0/1 | CrashLoopBackOff | 16 (2m23s ago) | 44h |
| pod/order-service-7f79fc8645-h8sht | 0/1 | ImagePullBackOff | 0 | 21s |
| pod/payment-service-5bf96544b8-l5v2m | 0/1 | CrashLoopBackOff | 15 (4m48s ago) | 44h |
| pod/payment-service-7674b6cc6c-tk52c | 0/1 | ContainerCreating | 0 | 21s |
| pod/postgres-656894ccb5-pxz5v | 0/1 | ContainerCreating | 0 | 20s |
| pod/product-service-6f9459ff7-4svvr | 0/1 | CrashLoopBackOff | 15 (2m37s ago) | 44h |
| pod/product-service-7665499cbc-f297c | 0/1 | ContainerCreating | 0 | 20s |
| pod/user-service-67fd4d9c47-5p4q9 | 0/1 | CrashLoopBackOff | 13 (3m59s ago) | 44h |
| pod/user-service-6bbc46cdb-hrrjd | 0/1 | ContainerCreating | 0 | 20s |

| NAME | TYPE | CLUSTER-IP | EXTERNAL-IP | PORT(S) | AGE |
|-------------------------|--------------|----------------|-------------|----------------|------|
| service/flask-service | ClusterIP | 10.107.176.49 | <none> | 5000/TCP | 6d2h |
| service/kubernetes | ClusterIP | 10.96.0.1 | <none> | 443/TCP | 6d2h |
| service/mysql | ClusterIP | 10.110.104.236 | <none> | 3306/TCP | 6d2h |
| service/nginx-service | NodePort | 10.104.43.56 | <none> | 80:30007/TCP | 6d1h |
| service/order-service | LoadBalancer | 10.109.39.214 | <pending> | 8082:32549/TCP | 44h |
| service/payment-service | LoadBalancer | 10.110.136.173 | <pending> | 8084:30485/TCP | 44h |
| service/postgres | ClusterIP | 10.98.83.5 | <none> | 5432/TCP | 21s |
| service/product-service | ClusterIP | 10.107.79.210 | <none> | 8082/TCP | 44h |
| service/user-service | LoadBalancer | 10.99.120.93 | <pending> | 8081:30339/TCP | 44h |

| NAME | TYPE | CLUSTER-IP | EXTERNAL-IP | PORT(S) | AGE |
|-------------------------|--------------|----------------|-------------|----------------|------|
| service/flask-service | ClusterIP | 10.107.176.49 | <none> | 5000/TCP | 6d2h |
| service/kubernetes | ClusterIP | 10.96.0.1 | <none> | 443/TCP | 6d2h |
| service/mysql | ClusterIP | 10.110.104.236 | <none> | 3306/TCP | 6d2h |
| service/nginx-service | NodePort | 10.104.43.56 | <none> | 80:30007/TCP | 6d1h |
| service/order-service | LoadBalancer | 10.109.39.214 | <pending> | 8082:32549/TCP | 44h |
| service/payment-service | LoadBalancer | 10.110.136.173 | <pending> | 8084:30485/TCP | 44h |
| service/postgres | ClusterIP | 10.98.83.5 | <none> | 5432/TCP | 21s |
| service/product-service | ClusterIP | 10.107.79.210 | <none> | 8082/TCP | 44h |
| service/user-service | LoadBalancer | 10.99.120.93 | <pending> | 8081:30339/TCP | 44h |

| NAME | READY | UP-TO-DATE | AVAILABLE | AGE |
|---------------------------------|-------|------------|-----------|------|
| deployment.apps/flask-app | 4/4 | 4 | 4 | 6d2h |
| deployment.apps/mysql | 1/1 | 1 | 1 | 6d2h |
| deployment.apps/nginx | 1/1 | 1 | 1 | 6d1h |
| deployment.apps/order-service | 0/1 | 1 | 0 | 44h |
| deployment.apps/payment-service | 0/1 | 1 | 0 | 44h |
| deployment.apps/postgres | 0/1 | 1 | 0 | 20s |
| deployment.apps/product-service | 0/1 | 1 | 0 | 44h |
| deployment.apps/user-service | 0/1 | 1 | 0 | 44h |

| NAME | DESIRED | CURRENT | READY | AGE |
|--|---------|---------|-------|------|
| replicaset.apps/flask-app-694d959f47 | 4 | 4 | 4 | 6d2h |
| replicaset.apps/mysql-66d468f74c | 1 | 1 | 1 | 6d2h |
| replicaset.apps/nginx-78b5b78b99 | 1 | 1 | 1 | 6d1h |
| replicaset.apps/order-service-646676ccbf | 1 | 1 | 0 | 44h |
| replicaset.apps/order-service-7f79fc8645 | 1 | 1 | 0 | 21s |
| replicaset.apps/payment-service-5bf96544b8 | 1 | 1 | 0 | 44h |
| replicaset.apps/payment-service-7674b6cc6c | 1 | 1 | 0 | 21s |
| replicaset.apps/postgres-656894ccb5 | 1 | 1 | 0 | 20s |
| replicaset.apps/product-service-6f9459ff7 | 1 | 1 | 0 | 44h |
| replicaset.apps/product-service-7665499cbc | 1 | 1 | 0 | 20s |
| replicaset.apps/user-service-67fd4d9c47 | 1 | 1 | 0 | 44h |
| replicaset.apps/user-service-6bbc46cdb | 1 | 1 | 0 | 20s |