

EX280 Practice Questions

This document contains 22 practice questions for the EX280 exam.

Question 1

Q1. Configure an HTPasswd identity provider named `htpass-exam` with a secret `htpass-secret`.

- `neil` with password `moonwalk`
- `buzz` with password `eaglehaslanded`

Ensure users can log in and verify with `oc whoami`.

Question 2

Q2. Grant user `neil` full cluster-admin rights.

Restrict user `buzz` to only create projects but not modify cluster-wide resources.

Remove `kubeadmin` from the cluster.

Question 3

Q3. In project `apollo`, create a quota named `apollo-quota`:

- Max 2 CPUs
- Max 1Gi memory
- Max 3 pods
- Max 2 services

Question 4

Q4. In project `titan`, create a LimitRange named `titan-limits`:

- Pod memory: 100Mi-300Mi
- Pod CPU: 10m-500m
- Container default request: 100m CPU, 100Mi memory

Question 5

Q5. Deploy an app named `rocky` in project `bluewills` using image `quay.io/redhattraining/hello-op`
Expose it via route: `http://rocky.apps.ocp4.example.com`

Question 6

Q6. In project `area51`, deploy app `oxcart` with a secure route using a self-signed cert:

- CN: `oxcart.apps.ocp4.example.com`

Use `newcert` or `openssl` to generate certs

Question 7

Q7. In project `lerna`, scale app `hydra` to 5 replicas manually.

Question 8

Q8. In project `gru`, configure autoscaling for app `scala`:

- Min: 6, Max: 40 replicas
- CPU threshold: 60%
- CPU request: 25m, limit: 100m

Question 9

Q9. In project ``math``, create a secret ``magic`` with:
- ``Decoder_Ring=ASDA142hfh-gfrhhueo-erfdk345v``

Question 10

Q10. Configure app `qed` in `math` to use the above secret as environment variable.

Question 11

Q11. In project `apples`, create service account `ex280-sa` with `anyuid` SCC. Deploy app `oranges` using this service account.

Question 12

Q12. In project `space`, deploy app `gamma` using image `quay.io/redhattraining/hello-world-nginx`. Mount a PVC `gammapvc` (1Gi, RWX) backed by PV `gamma-pv` using NFS at `192.168.50.254:/`.

Question 13

Q13. In project `marathon`, create a cronjob `scaling` using image `quay.io/redhattraining/scaling`.
Schedule: `4:05 AM` every 2nd day of the month.
Use service account `ex280-ocpsa` with cluster-admin rights.

Question 14

Q14. In project `space`, configure liveness probe for app `gamma`:

- TCP socket on port 8080
- Initial delay: 3s, Timeout: 10s

Question 15

Q15. In project `atlas`, create:

- A deny-all network policy
- A policy to allow traffic from `rocky` pod in `bluewills` to `mercury` pod in `atlas` on TCP port 8080

Question 16

Q16. Install File Integrity operator in the openshift-file-integrity project. Operator should have stable
Operator should automatically update itself through OLM.

Question 17

Q17. Deploy an application called `voyager` in the project `path-finder`.
Don't add any new configuration.
Application should produce a valid output.

Question 18

Q18. Deploy an application called `mercury` in the project `atlas`.

Don't add any new configuration.

Application should produce a valid output.

Create a deny-all network policy in the `atlas` project.

Create a network policy to allow traffic to the `mercury` pod in the `atlas` project from the `rocky` pod in the `rocky` project.

Question 19

Q19. Create a PV `gamma-pv` (1Gi, RWX) backed by NFS.
Then bind it to a PVC `gamma-pvc` in project `space`.
Mount it at `/data` in a deployment.

Question 20

Q20. Create a bootstrap project template that automatically creates the limit range and adds quota. For example, a project named `test` has the quota and limit range as `test-quota` and `test-limitrange`. Project should have default LimitRange and ResourceQuota.

Question 21

Q21. Use the must-gather tool for collecting log files and diagnostic information about your cluster. Store the result at `/root/ex280-clusterdata.tar.gz`.

Activate liveness probes for the application in `space`` project. It should utilize the TCP socket port. Probe parameters: `initial-delay-seconds=3` and `timeout-seconds=10`.

Question 22

Q22. Deploy an application called ``gamma`` in the project ``space`` using image ``quay.io/redhattraini`
Provision storage for the filesystem ``/srv``.
Application should be reachable at the following URL: ``http://space.apps.ocp4.example.com``.