6.14. LABS



Exercise 6.6: Domain Review



Very Important

The source pages and content in this review could change at any time. IT IS YOUR RESPONSIBILITY TO CHECK THE CURRENT INFORMATION.

Revisit the CKAD domain list on Curriculum Overview and locate some of the topics we have covered in this chapter.

- Understand SecurityContexts
- Understand ServiceAccounts
- Demonstrate basic understanding of NetworkPolicies

Figure 6.2: Domain

Focus on ensuing you have all the necessary files and processes understood first. Repeat the review until you are sure you have bookmarks of necessary YAML samples and can complete each step quickly, and ensure each object is running properly.

- 1. Create a new deployment which uses the nginx image.
- 2. Create a new LoadBalancer service to expose the newly created deployment. Test that it works.
- 3. Create a new NetworkPolicy called netblock which blocks all traffic to pods in this deployment only. Test that all traffic is blocked to deployment.
- 4. Update the netblock policy to allow traffic to the pod on port 80 only. Test that you can access the default nginx web page.
- 5. Find and use the security-review1.yaml file to create a pod.

```
student@ckad-1:~$ kubectl create -f security-review1.yaml
```

- 6. View the status of the pod.
- 7. Use the following commands to figure out why the pod has issues.

```
student@ckad-1:~$ kubectl get pod securityreview
student@ckad-1:~$ kubectl describe pod securityreview
student@ckad-1:~$ kubectl logs securityreview
```

- 8. After finding the errors, log into the container and find the proper id of the nginx user.
- 9. Edit the pod such that the securityContext is in place and allows the web server to read the proper configuration files.
- 10. Create a new serviceAccount called securityaccount.
- 11. Create a ClusterRole named secrole which only allows create, delete, and list of pods in all apiGroups.
- 12. Bind the clusterRole to the serviceAccount.
- 13. Locate the token of the securityaccount. Create a file called /tmp/securitytoken. Put only the value of token: is equal to, a long string that may start with eyJh and be several lines long. Careful that only that string exists in the file.
- 14. Remove any resources you have added during this review

