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| Lab 7 |

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| Portable Technologies in Cloud |  |  |
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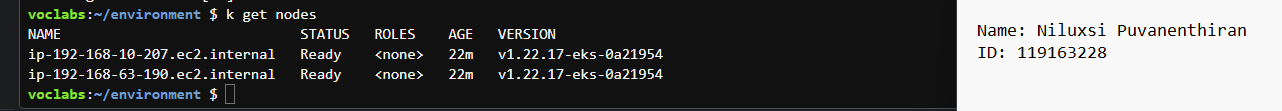
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# WEEK 9 – Lab 7

## Workshop 1 - Exploring hostPath



Screenshot running cluster nodes verified

A screen shot of a computer program

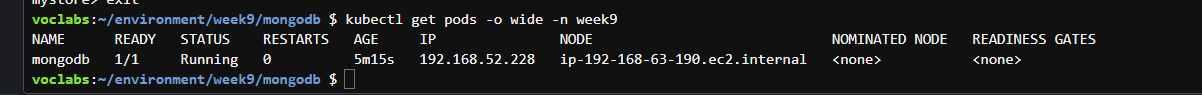
Description automatically generated

Screenshot Mongodb app backed by the hostpath was deployed

A screenshot of a computer program

Description automatically generated

Screenshot Sample json document was added to DB



Screenshot node that the pod is scheduled to was examined

A computer screen shot of a black background

Description automatically generated

Screenshot MongoDB pod was recreated and scheduled

it's noted that the data appears to be persisted. However, the potential inconsistency or "hit and miss" behavior of data persistence could be due to the use of hostPath as the storage mechanism for MongoDB.

When using hostPath, the data is stored directly on the node's file system. If the Pod gets rescheduled to a different node (e.g., due to a node failure or cluster scaling), the data stored on the previous node will not be available on the new node. Therefore, data persistence is not guaranteed across node rescheduling.

A black screen with white text

Description automatically generated

Screenshot EBS volume was provisioned

A screenshot of a computer

Description automatically generated

Screenshot kube-proxy was examined

## Workshop 2– PV, PVC, StorageClasses

A screenshot of a computer

Description automatically generated

Screenshot created redis deployment, service and PVC

A black screen with a black background

Description automatically generated

Screenshot Data stored in redis and pod was recreated

## Workshop 3 - Statefulsets

A black screen with text

Description automatically generated

Screenshot statefulset was created

A screen shot of a computer

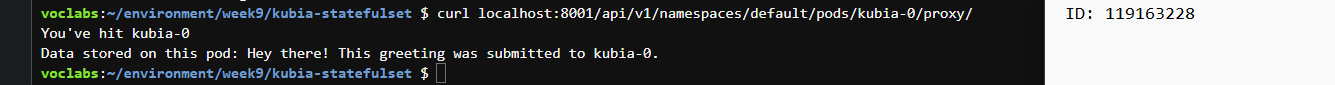
Description automatically generated

Screenshot Get po

A screen shot of a computer

Description automatically generated

Screenshot Communicating with the application via proxy



Screenshot persistent volume gets re-attached to a "new" kibia-0 pod

A black background with many colorful lights

Description automatically generated

Screenshot kubia-1 was hit as that was default

A screenshot of a computer program

Description automatically generated

Screenshot discovering peers

A screenshot of a computer screen

Description automatically generated

Screenshot Updated container image

A screen shot of a computer

Description automatically generated

Screenshot Post was sent to a random pod

# References

Geiman, I. (2023, Summer). Lectures and Slides, CLO835\_Portable Technologies in cloud. Seneca Newham Campus, North York.

*Learner Lab*. (2023). Retrieved from https://awsacademy.instructure.com/.