

# Utilize Persistent and Ephemeral Volumes

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# Agenda



**Understanding Persistent and Ephemeral Volumes**

**Working with Persistent and Ephemeral Volumes**

**Exam Scenarios**

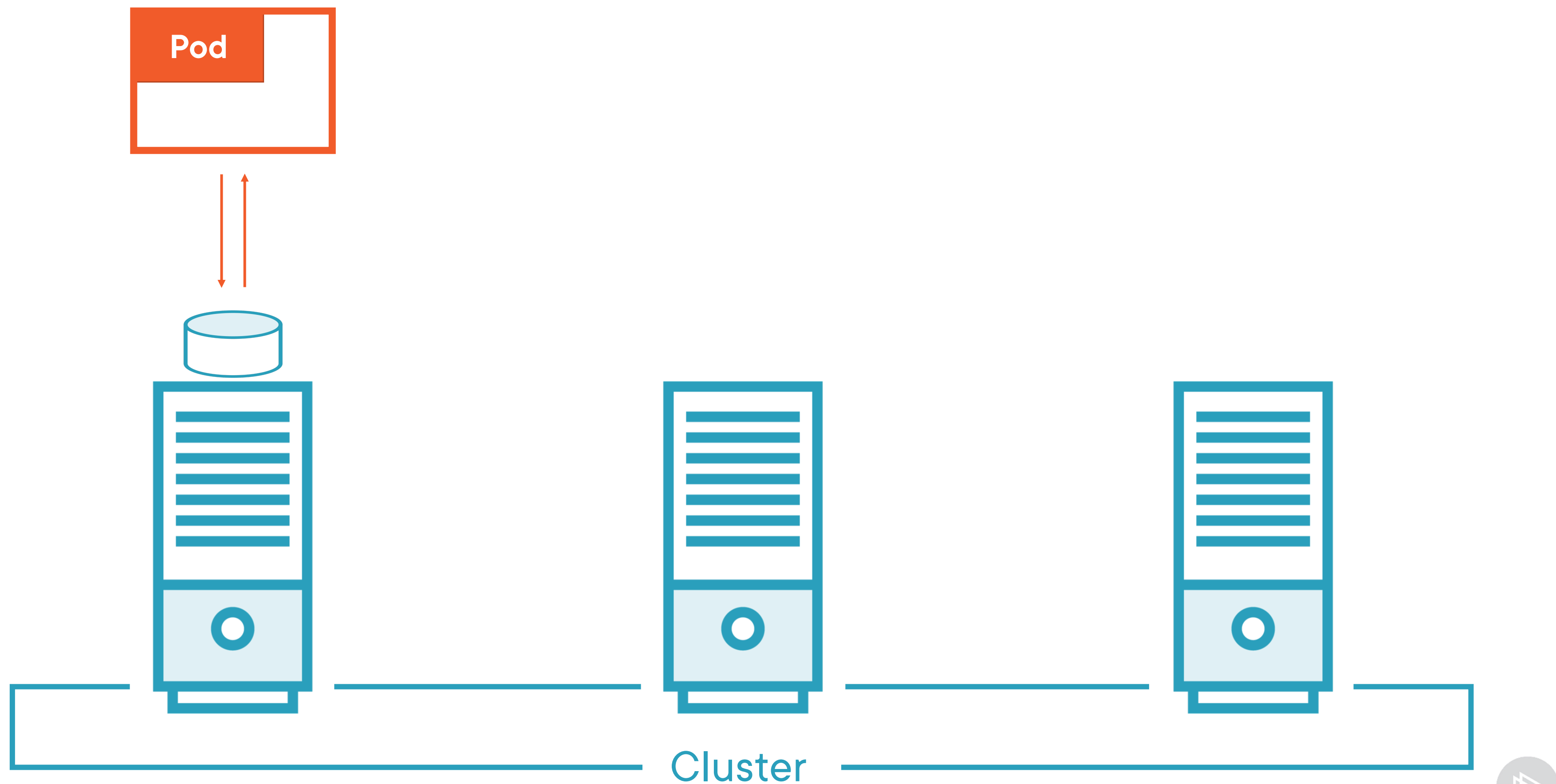
**Recap and Test Yourself**

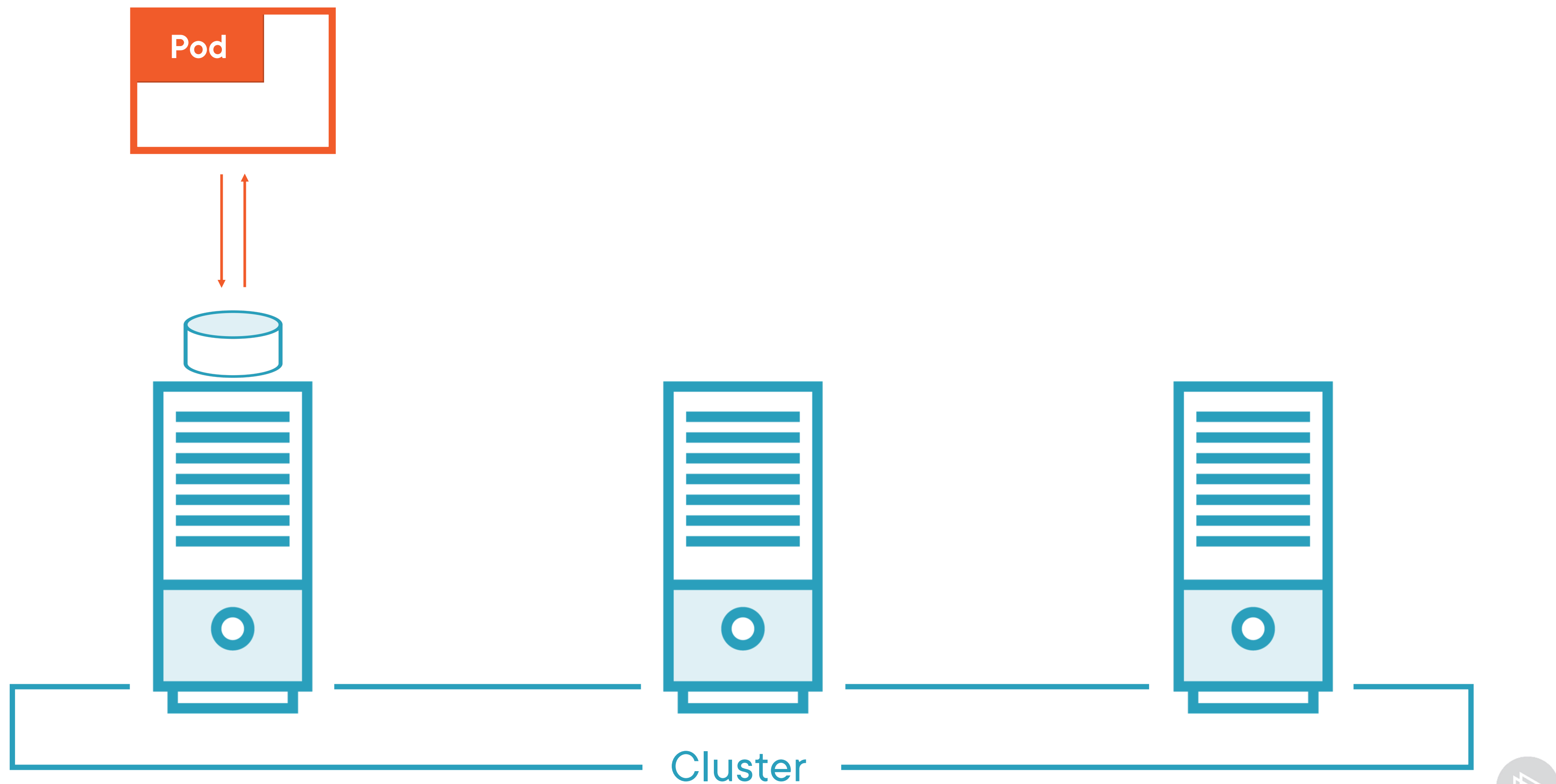


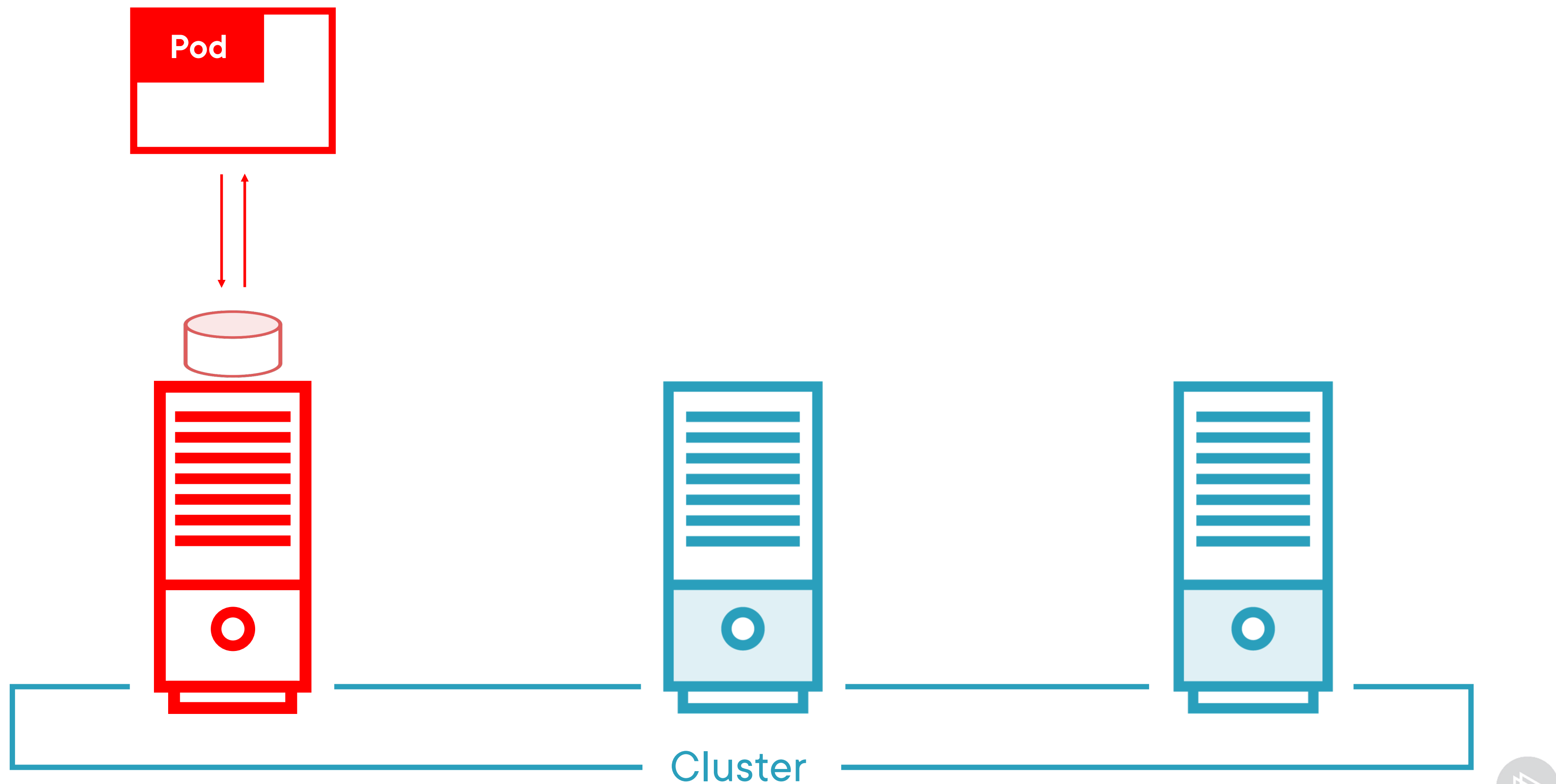
# Understanding Persistent and Ephemeral Volumes

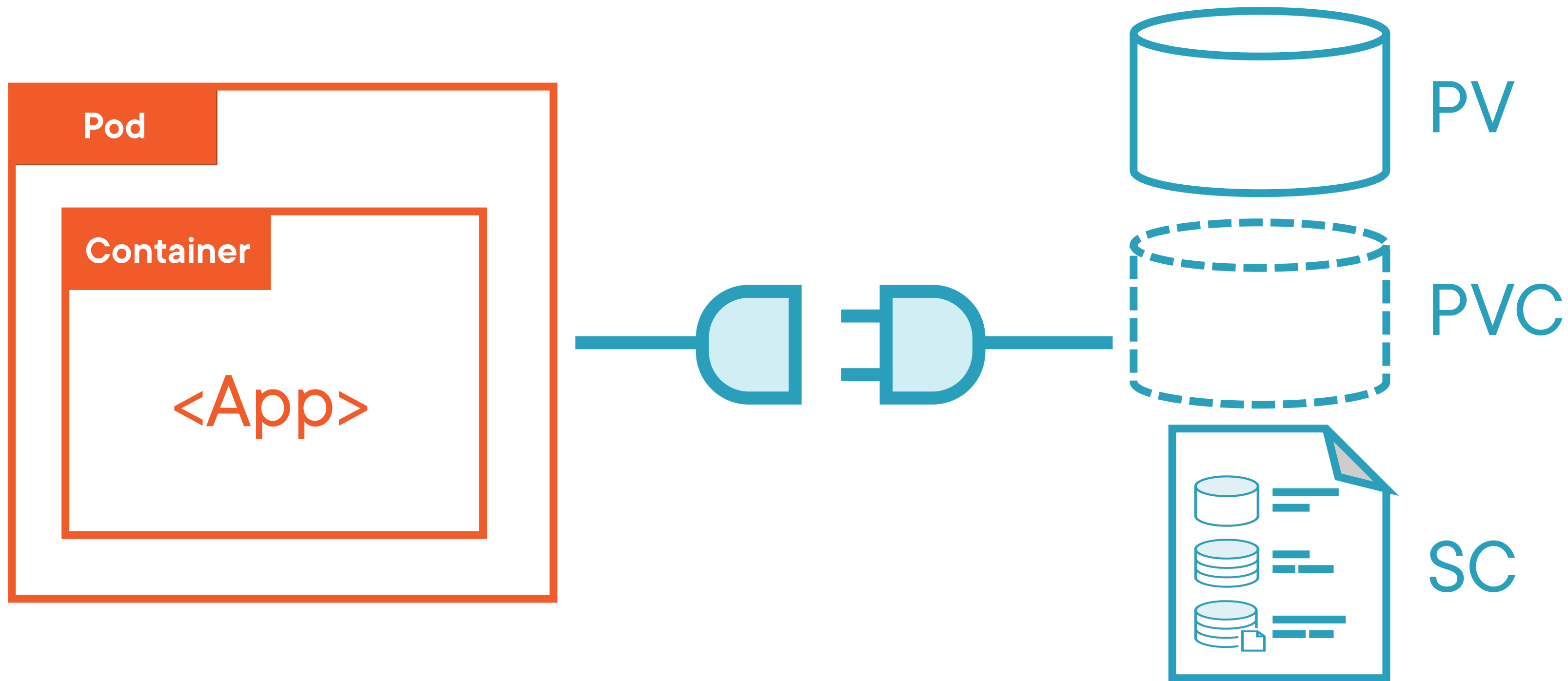
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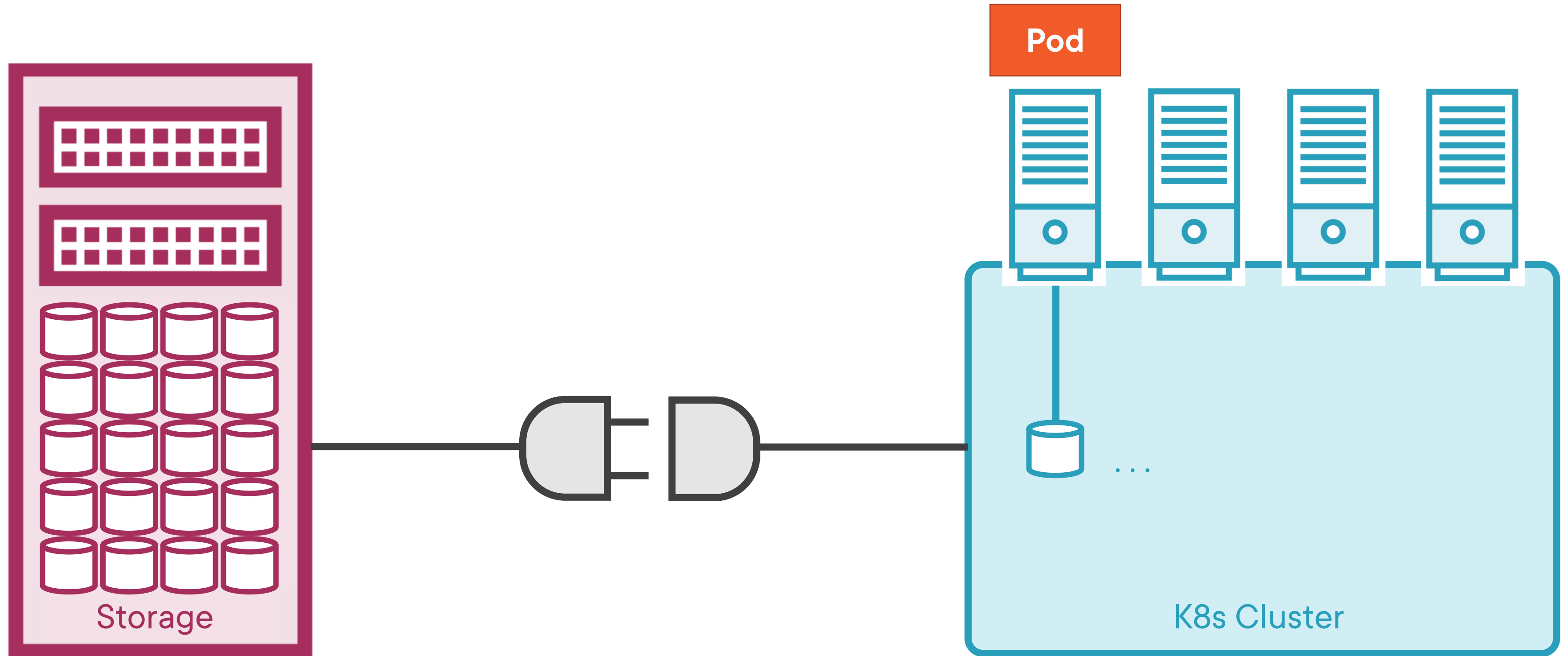




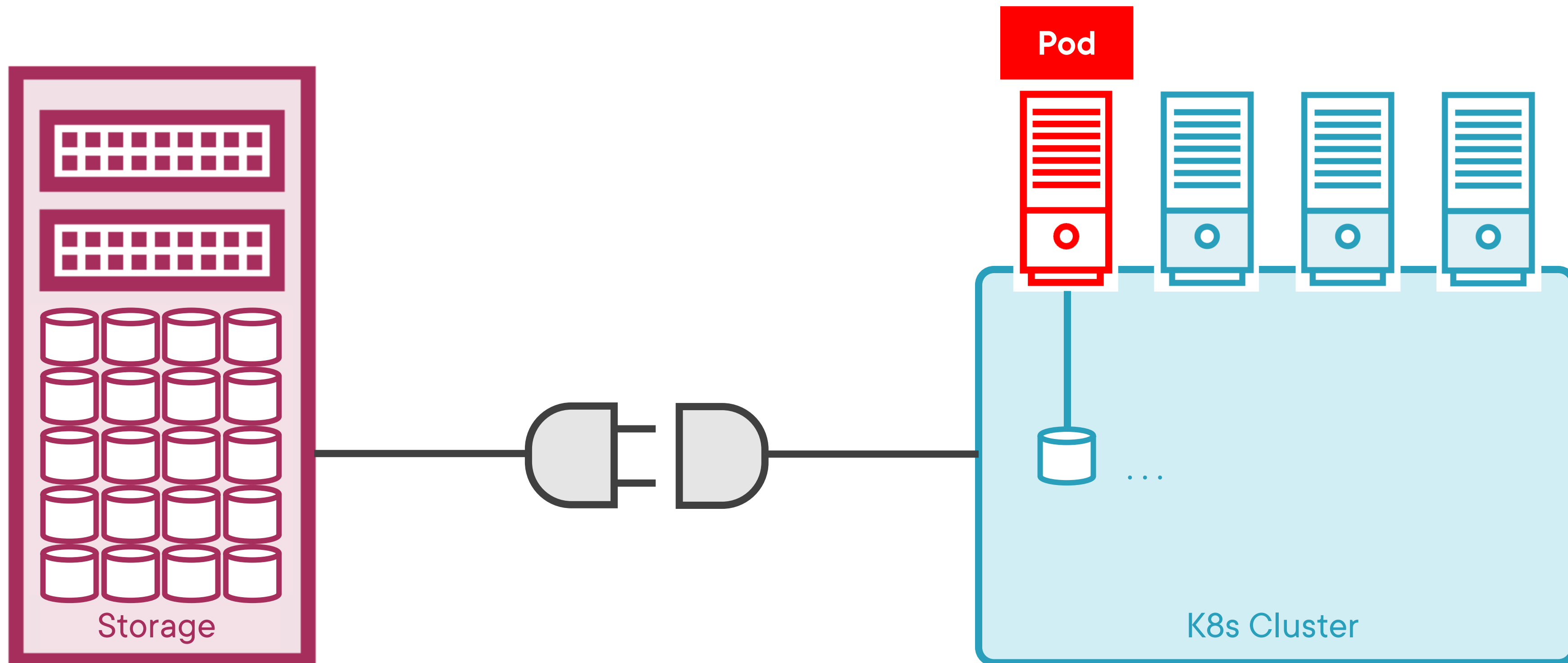


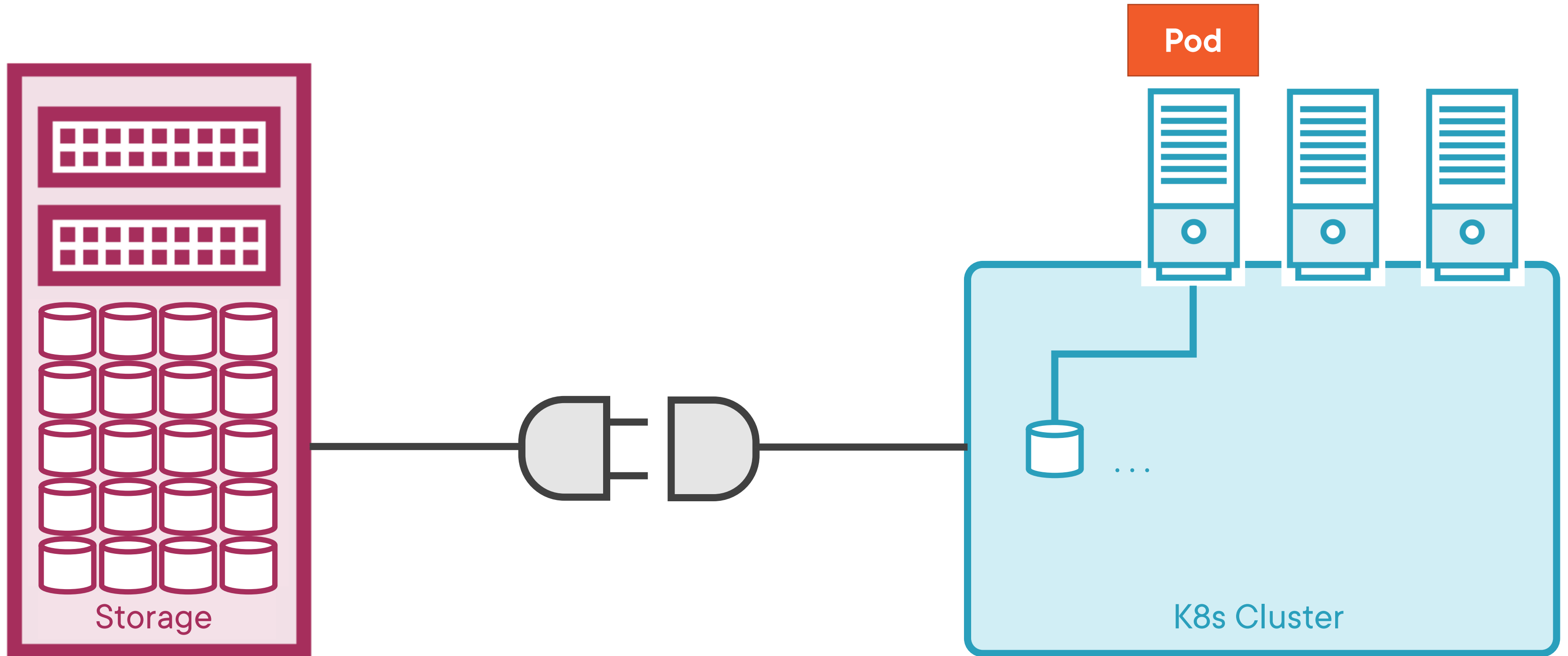


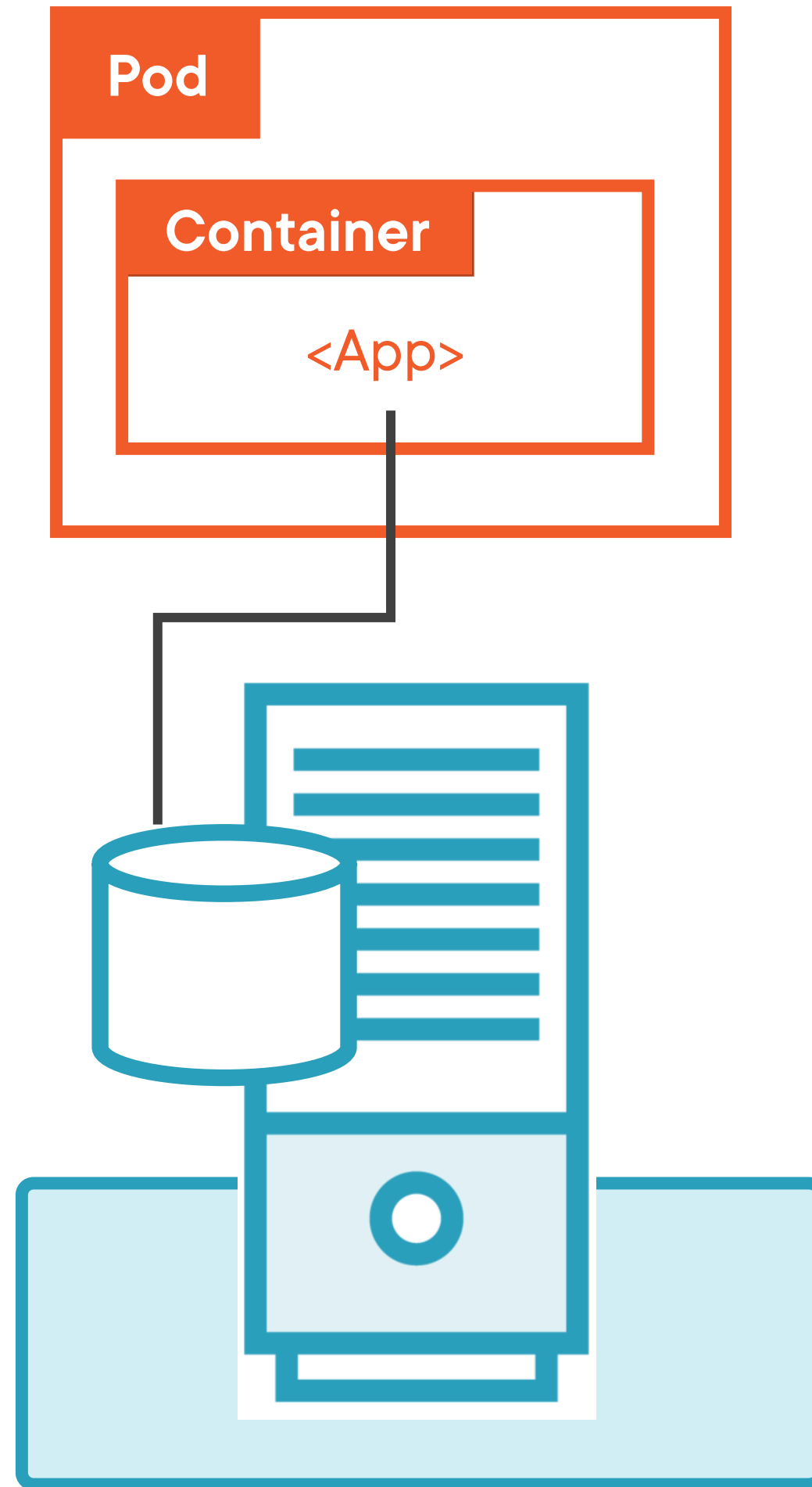


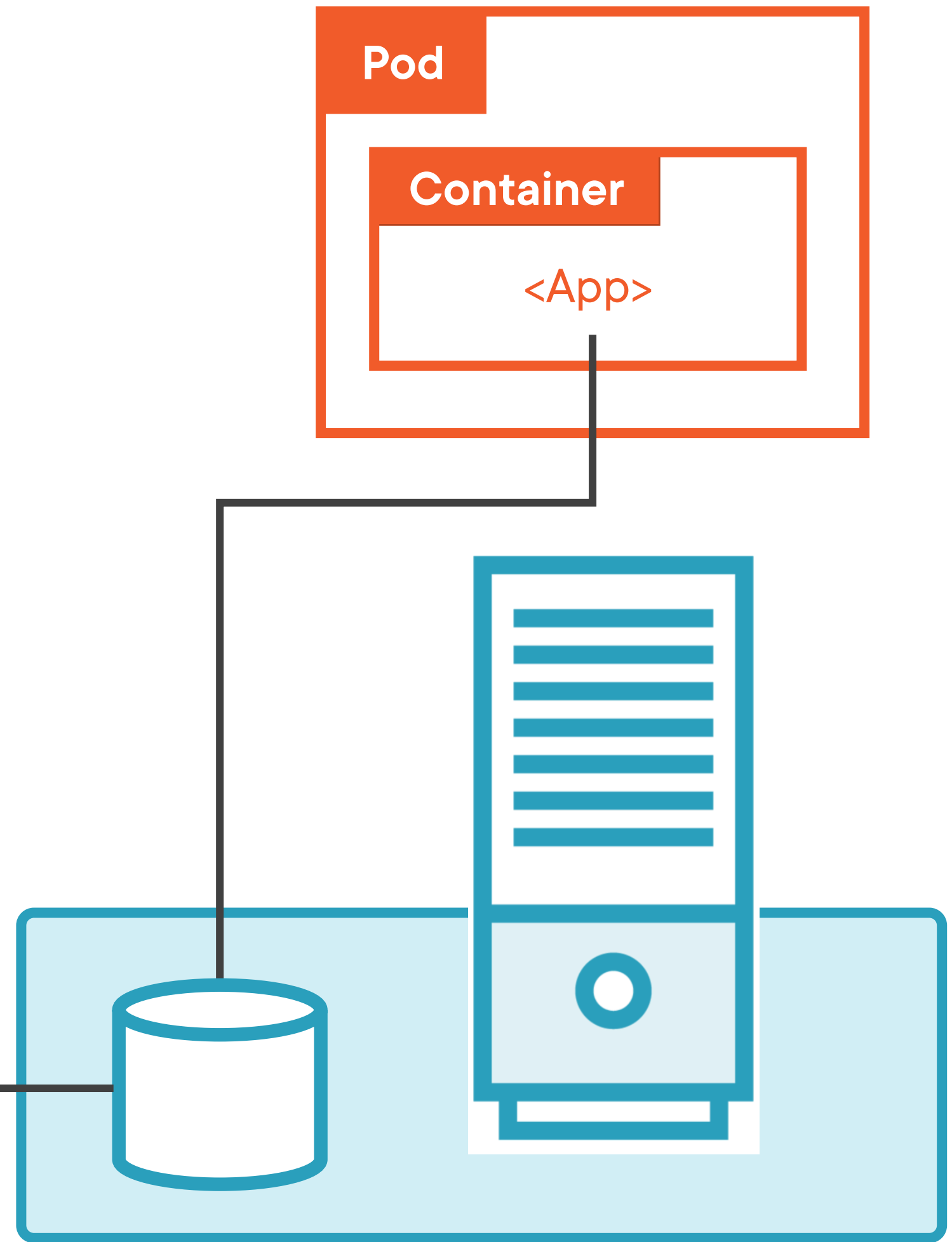
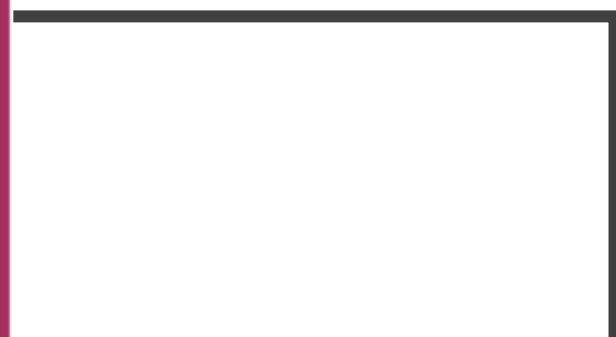
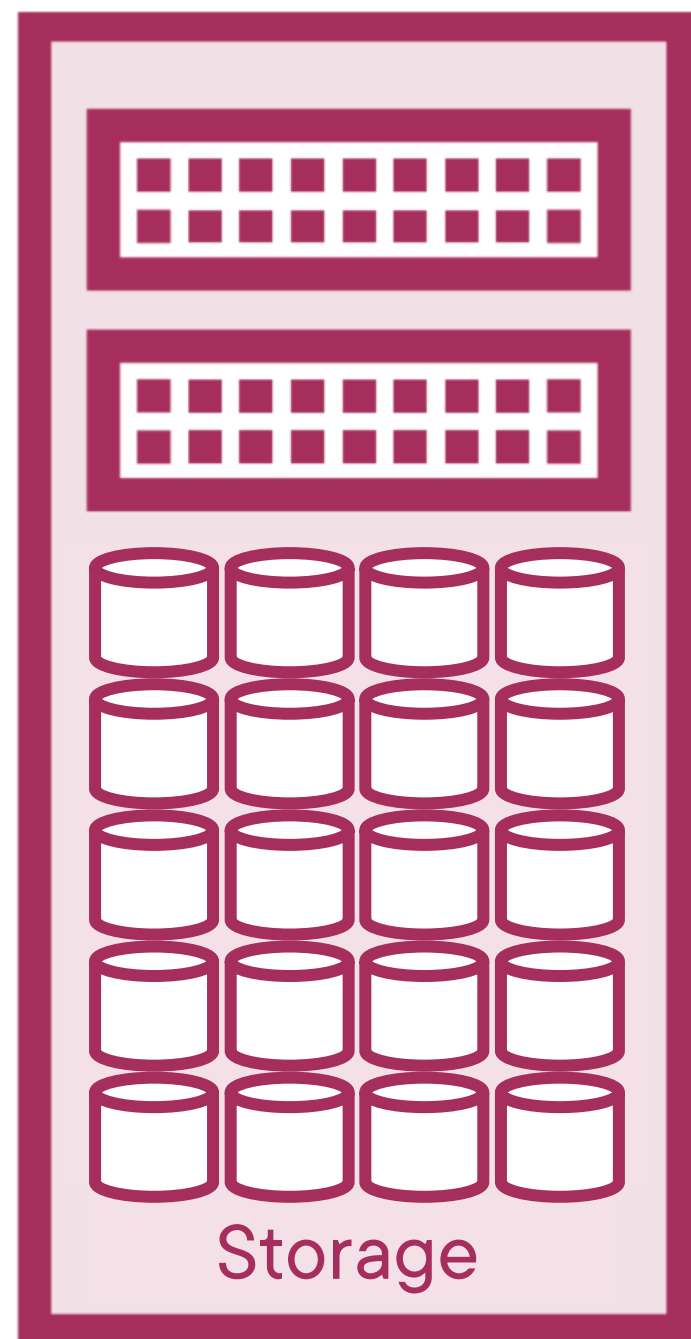


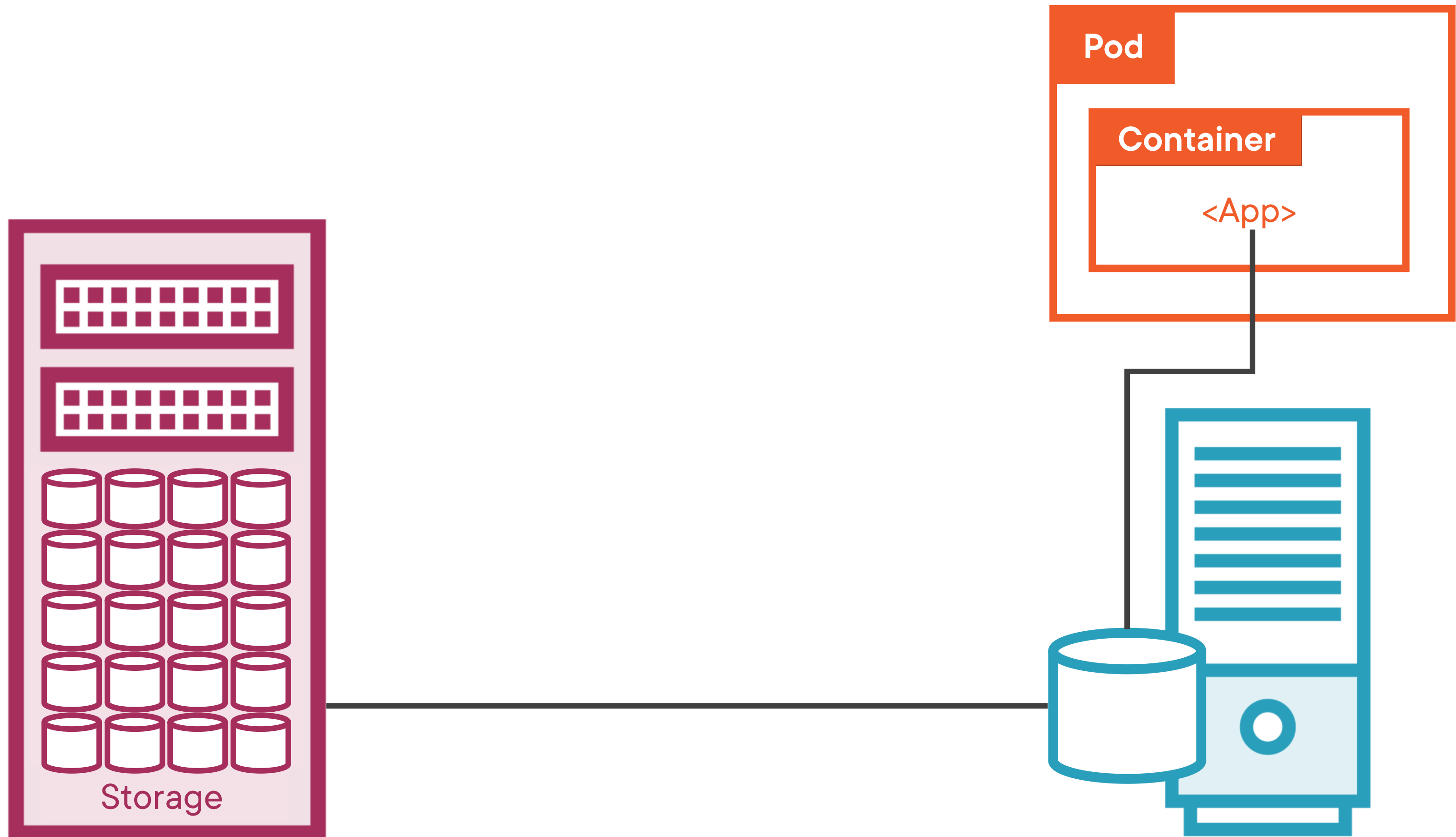


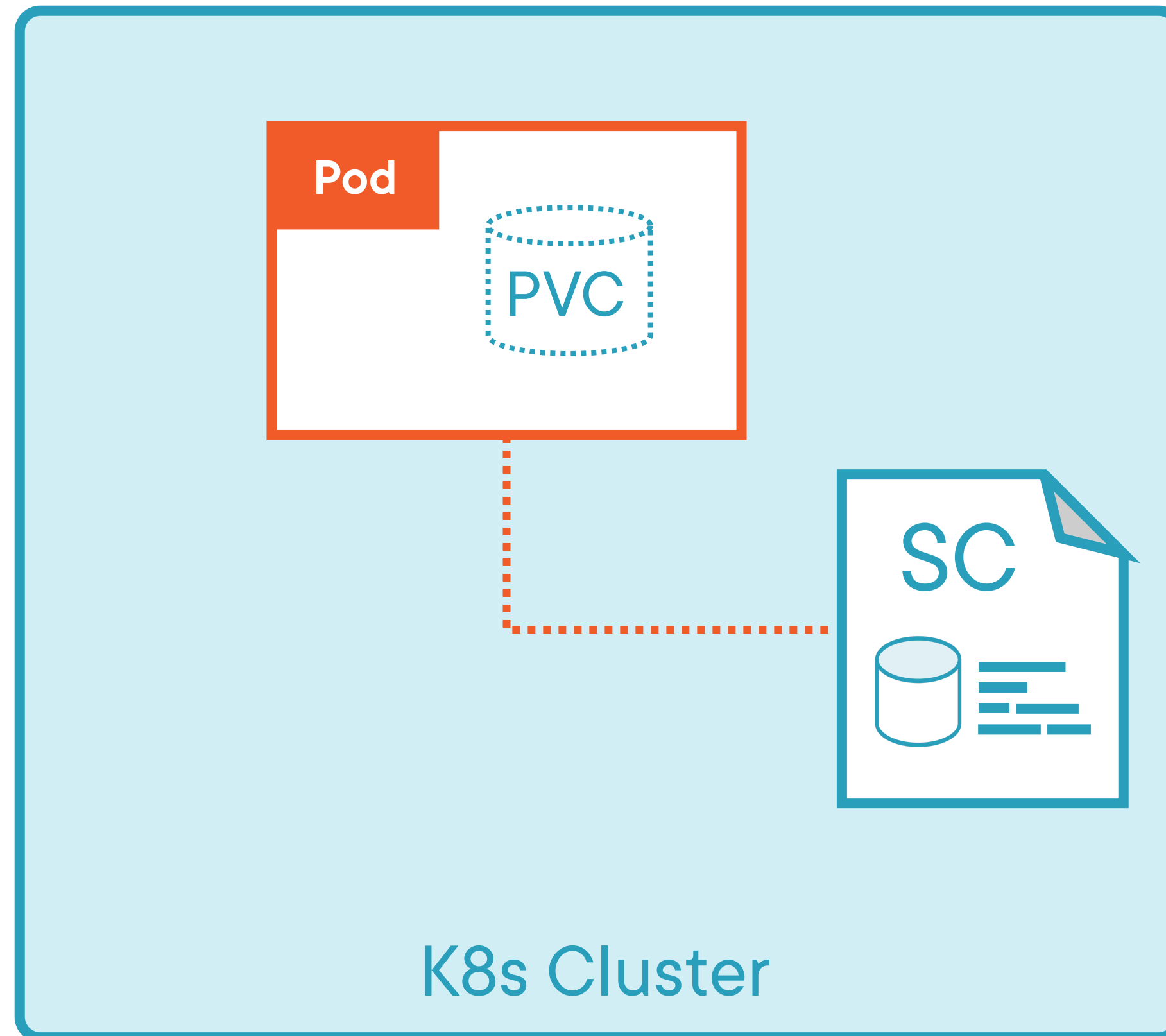


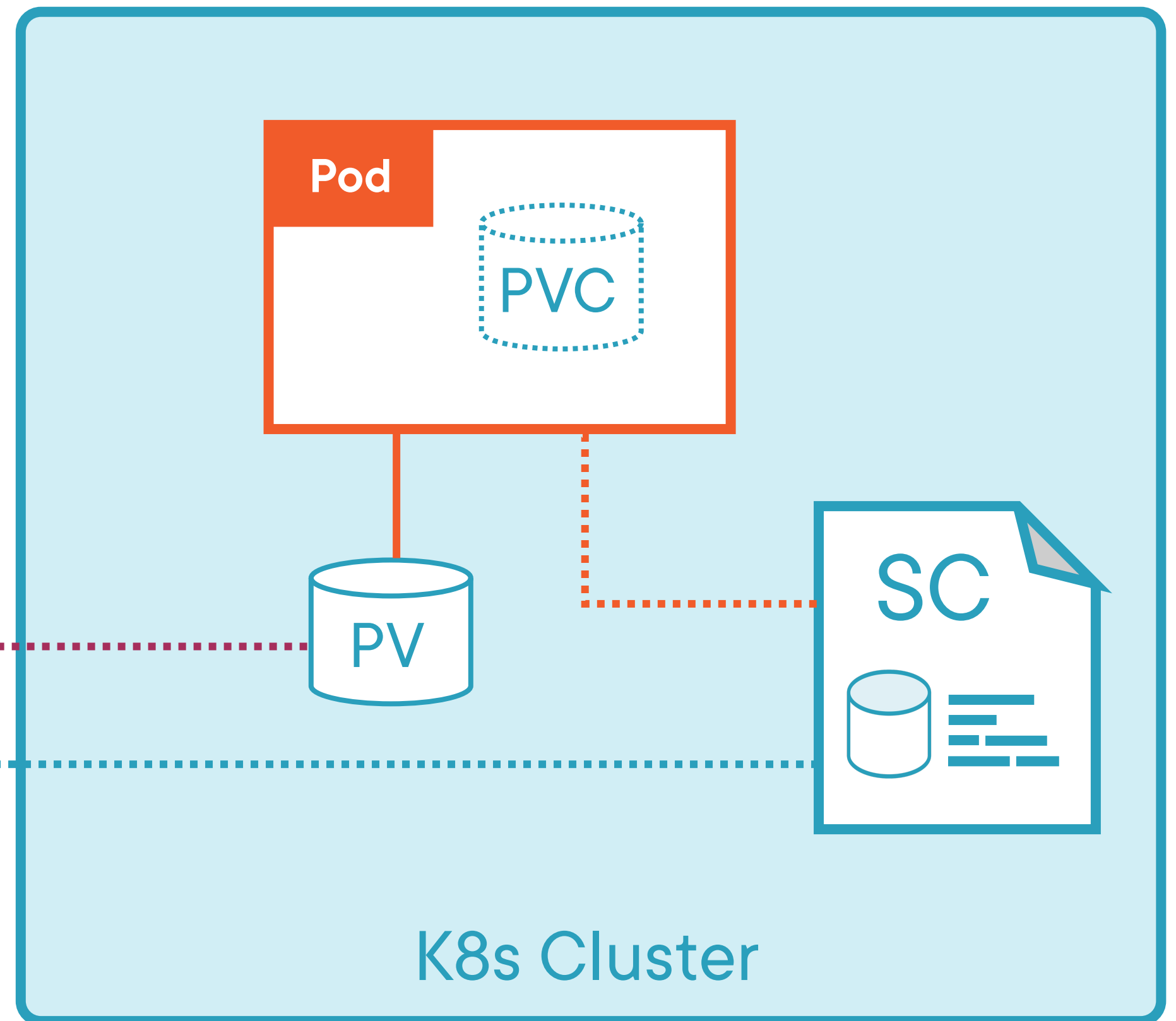
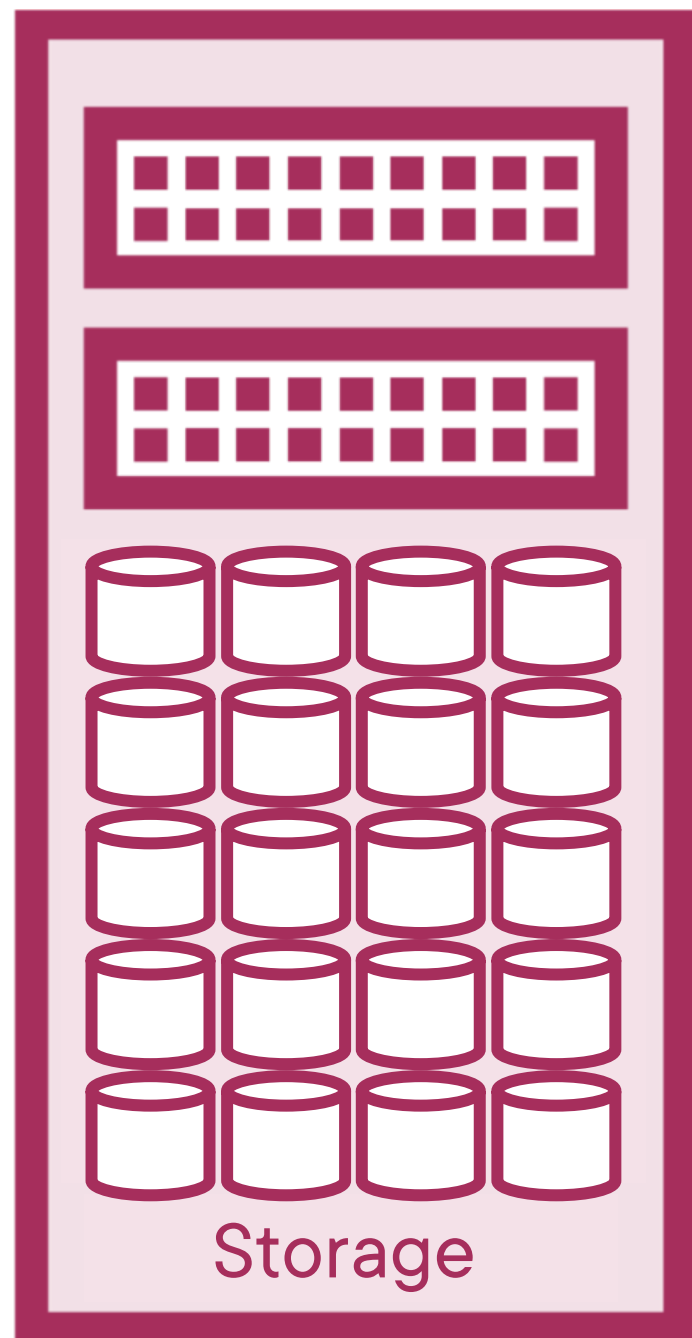












# Working with Persistent and Ephemeral Volumes

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# Exam Scenarios

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← Prev.

☒ ☐ ☐ Task 1 of X

Next →

Task weight: 4%



Complete this task in XYZ environment.  
The command to connect is blah blah blah...

## Task

There's an app deployed to the **backend Namespace** of your cluster. It's failing to start.

Use the files in your working directory to troubleshoot the issue.

When you've resolved the issue, deploy the app and ensure the Pods enter the running state.



← Prev.

☒ ☐ ☐ Task 1 of X

Next →

Task weight: 8%



Complete this task in XYZ environment.  
The command to connect is blah blah blah...

## Task

Perform all tasks in the **prod1 Namespace**.

The **web1** application is deployed in the **prod1 Namespace**. It's defined in the **web1.yml** file and consists of a main application container and a sidecar.

The app was designed for both containers to share an **emptyDir** ephemeral volume called **html**.

The main application container serves content from the shared volume and the sidecar synchronises content from a remote GitHub repo.

The app is not working. Troubleshoot the problem, fix it, and re-deploy the app.



# Recap and Test Yourself

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## Persistent Volumes

For important data that can't be lost



## Ephemeral Volumes

For caching and other temp data

\*Both deployed via CSI plugins

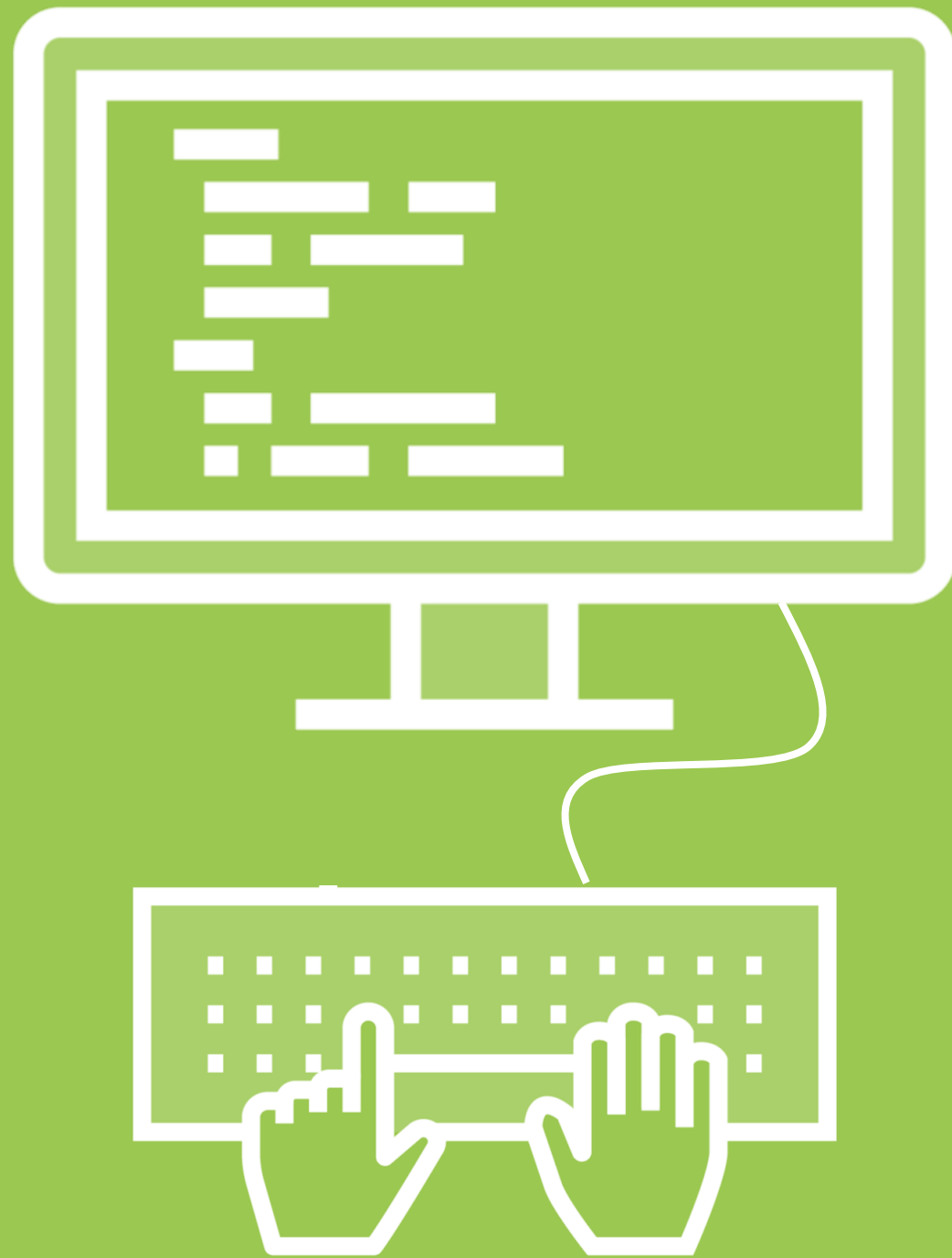


Expect to work with  
StorageClass YAML



Expect to work with  
PersistentVolumeClaim YAML





# GitHub Repo

<https://github.com/nigelpoulton/ckad>

## Navigate to:

- 1 Application Design and Build
- 5 Utilize Persistent and Ephemeral Volumes
- Test Yourself







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Up Next:  
Recap and What's Next

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