



# kubernetes

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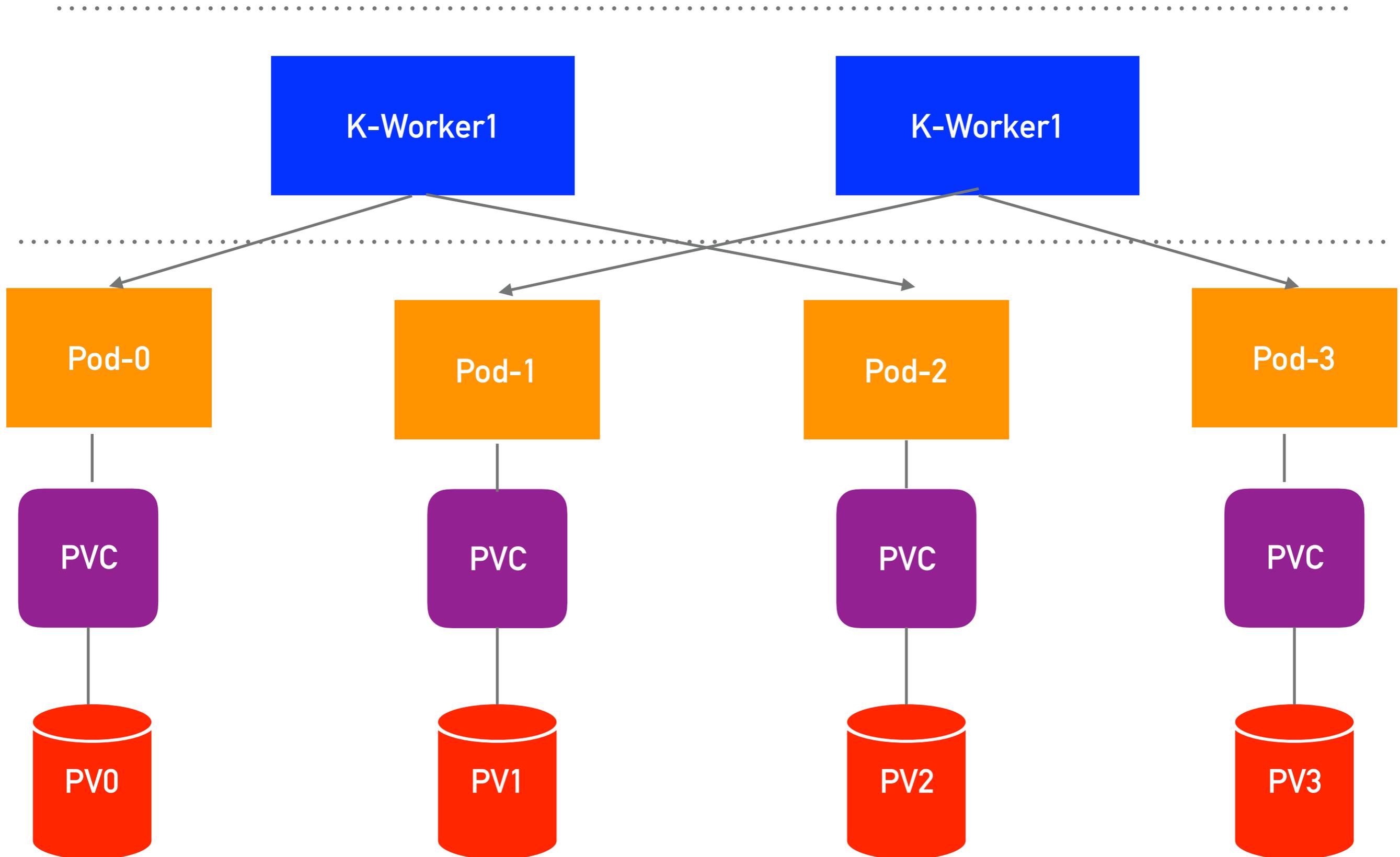
*Kubernetes: Stateful Sets*

## *KUBERNETES : Advance of Kuebernetes*

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- **StatefulSets** work much like a Deployment does.
- Manages the deployment and **scaling of a set of Pods**, and provides guarantees about the **ordering and uniqueness** of these Pods.
- Unlike a Deployment, a StatefulSet maintains a **sticky identity for each of their Pods**. These pods are created from the same spec, but are not interchangeable: each has a **persistent identifier** that it maintains across any rescheduling.
- StatefulSets deploy the containers in sequential order where the first pod is deployed and ready before the next pod starts.

# *KUBERNETES : Advance of Kuebernetes*



## *KUBERNETES : Advance of Kuebernetes*

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- StatefulSets currently require a “**headless**” service to manage the identities. This is a service that has the same selectors that you’re used to, but won’t receive a **clusterIP address**, meaning that you can’t route traffic to the containers through this service object.

## *KUBERNETES : Advance of Kuebernetes*

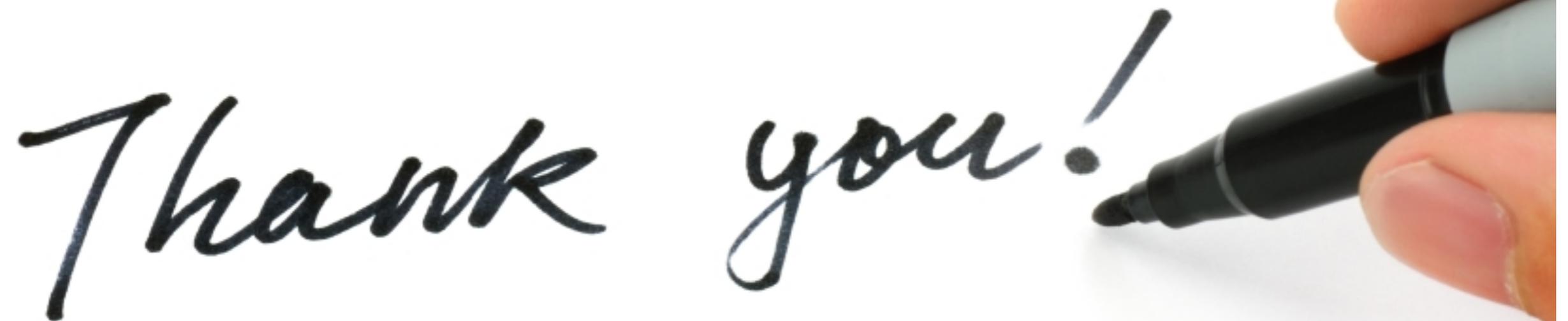
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- **StateFul Sets Limitations:**
- This is not available Kube Release upto 1.5 and Beta Version is available in 1.9
- The storage for a given Pod must either be provisioned Storage-Class or Pre-Provisioned.
- Deleting or making StatefulSet down **will *not* delete the volumes** associated with the StatefulSet. This is done to ensure data safety.
- StatefulSets do not provide any **guarantees on the termination** of pods when a StatefulSet is deleted.
- To achieve ordered and graceful termination of the pods in the StatefulSet, it is possible to scale the **StatefulSet down to 0 prior to deletion.**

*Will see you in Next Lecture...*

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*Thank you!*

A close-up photograph of a hand holding a black marker, writing the words 'Thank you!' in a cursive script on a white surface. The hand is positioned on the right side of the frame, with the fingers gripping the marker. The text is written in a fluid, handwritten style.

*See you in next lecture ...*