



# TigerGraph On Kubernetes

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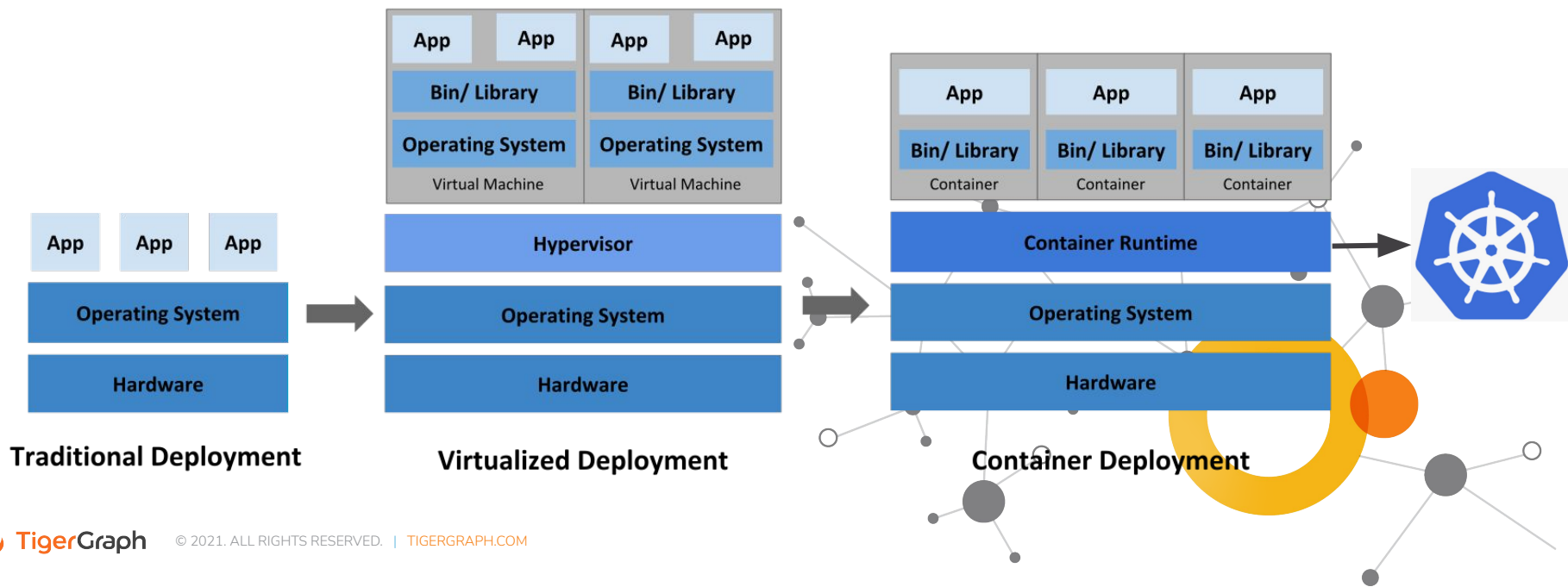
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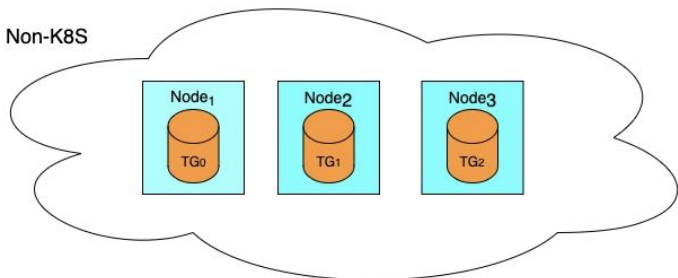
# Kubernetes (K8S)

- Container-orchestration System
- Automating application deployment, scaling, and management

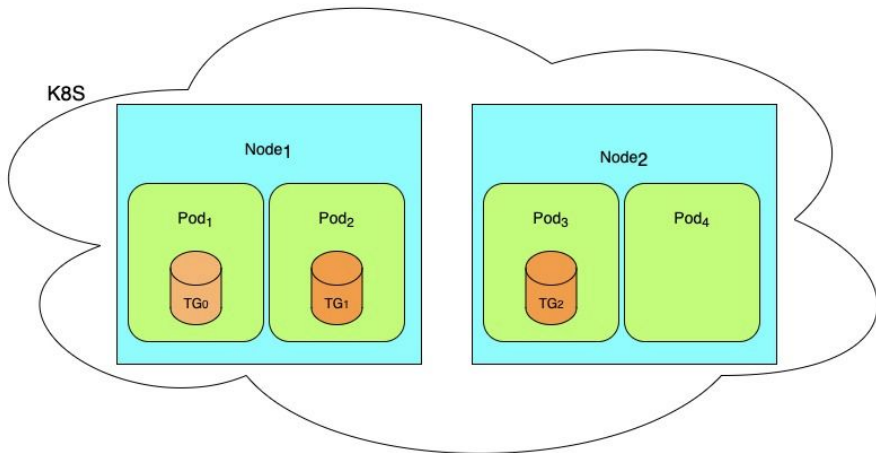


# TigerGraph Non-K8S vs K8S Deployment

Non-K8S



K8S



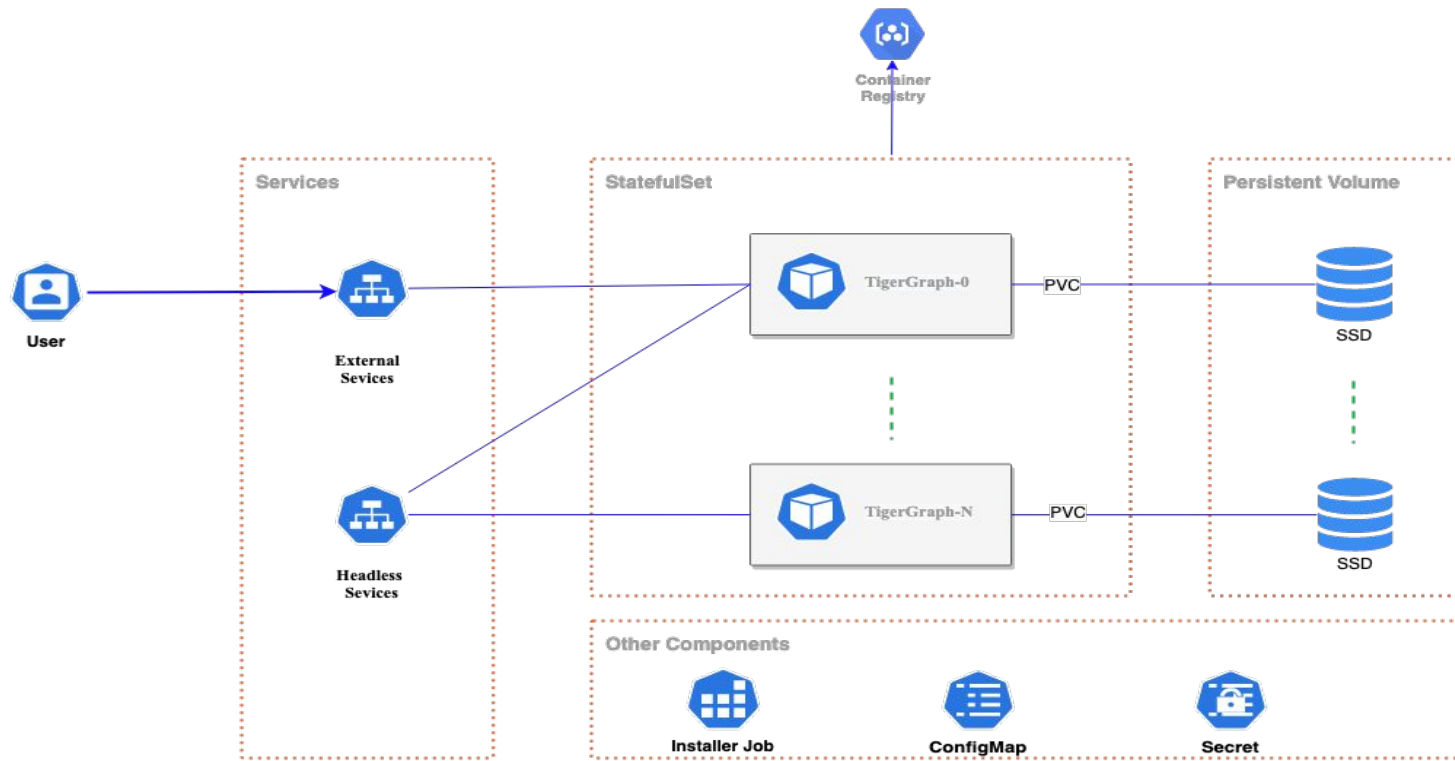
## Pods

*Pods* are the smallest deployable units of computing that you can create and manage in Kubernetes.

A *Pod* (as in a pod of whales or pea pod) is a group of one or more containers, with shared storage and network resources, and a specification for how to run the containers.



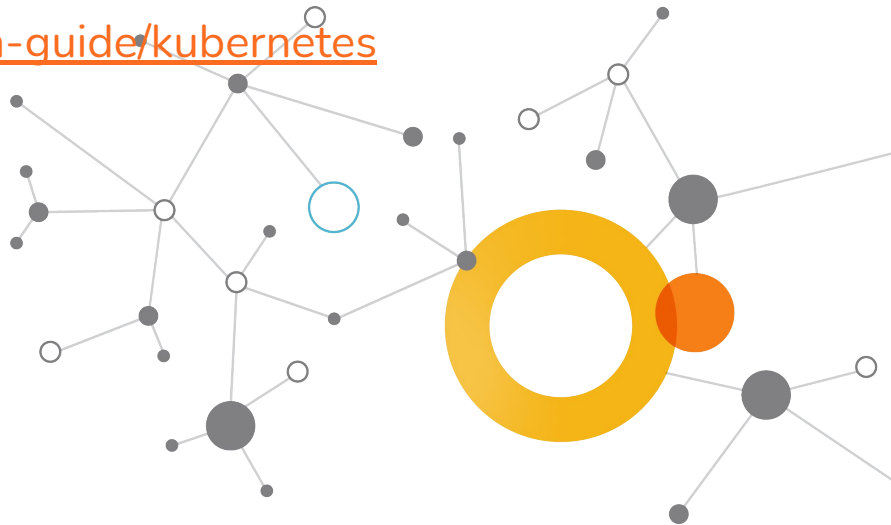
# TigerGraph K8S Architecture



# TigerGraph(3.2) K8S Supported Features

- Single command deployment
- Cluster deployment
- Disaster auto healing
- Out-of-box load balancing
- Customizable deployment manifest, e.g. replication factor
- See details:

<https://docs.tigergraph.com/admin/admin-guide/kubernetes>



# Support all Public Kubernetes Providers

## EKS

- Amazon Elastic Kubernetes Service



Amazon EKS

## GKE

- Google Kubernetes Engine



Google  
Container Engine

## AKS

- Azure Kubernetes Engine



Azure Kubernetes Service (AKS)

# Demo: TG Cluster Deployment with GKE

## Objectives:

- Deploy Three Nodes TG Cluster in GKE
- Function Test with GSQL 101
- TG Nodes Failover Test

Deployment Guide:

<https://docs.tigergraph.com/admin/admin-guide/kubernetes>

# Q&A