

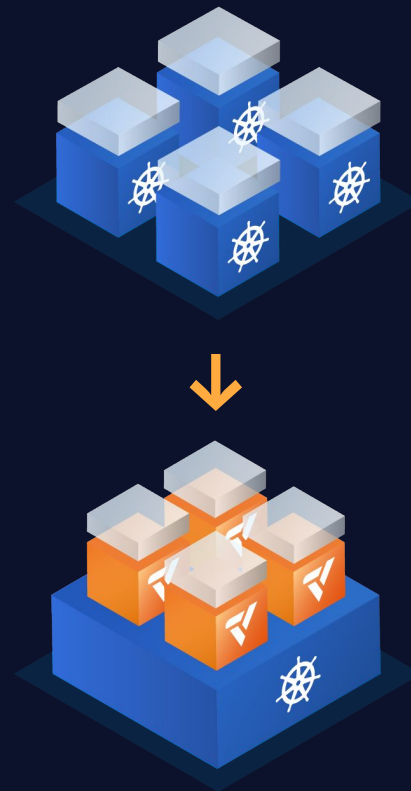


# Virtual Kubernetes Clusters

Next-Gen Kubernetes Architecture for  
Maximum Efficiency & Cost Savings

 **40 Million+**  
Virtual Clusters

 **5,000+**  
GitHub Stars



# We all love K8s, but 10 years later, it still has its challenges..

## **Extremely inefficient**

- ✗ Huge fleets of clusters
- ✗ Lots of tools to manage
- ✗ Security concerns
- ✗ Resource wastage

70% of organizations identified **overprovisioned Kubernetes** as the leading cause for their surge in spend.



**CLOUD NATIVE**  
COMPUTING FOUNDATION

2023 Cloud Native & K8s  
Finops Microsurvey

# Inefficient & overprovisioned K8s is killing your budget.

Without vCluster

Cluster 1

Tenant Workloads

Platform Stack 1

Cert Manager

OPA

Istio



Cluster 2

Tenant Workloads

Platform Stack 2

Cert Manager

OPA

Istio



Cluster 3

Tenant Workloads

Platform Stack 3

Cert Manager

OPA

Istio



✗ Workloads run 24x7

✗ Duplicated tools

- A. How many clusters do you run today?
- B. How expensive are these clusters?
- C. How many are pre-production and how often do they run idle?

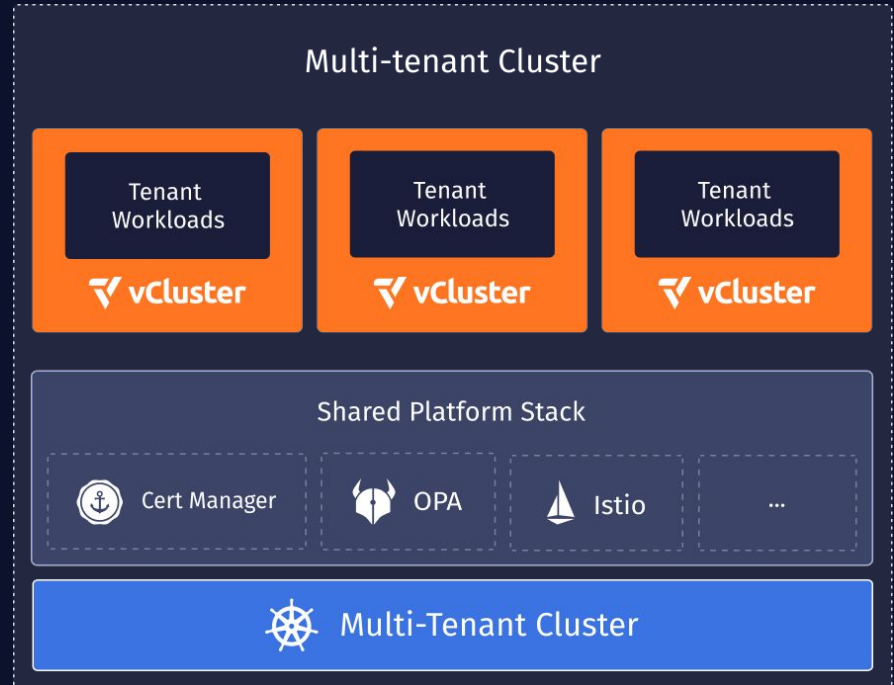
✗ Too many clusters

# Optimize your Kubernetes infra with **virtual clusters**

Without vCluster



With vCluster



# What are **virtual clusters**?

Virtual clusters are a Kubernetes concept that enables isolated clusters to be run within a single physical Kubernetes cluster.

Maximize K8s efficiency and performance



## Tenant Isolation

Better security



## Self-Service K8s

Faster provisioning



## Developer Autonomy

Faster velocity



## Cluster Sharding

Better scalability



## Sleep Mode

Reduce idle workloads cost by putting clusters to sleep when not in use.



## Shared Platform Stack

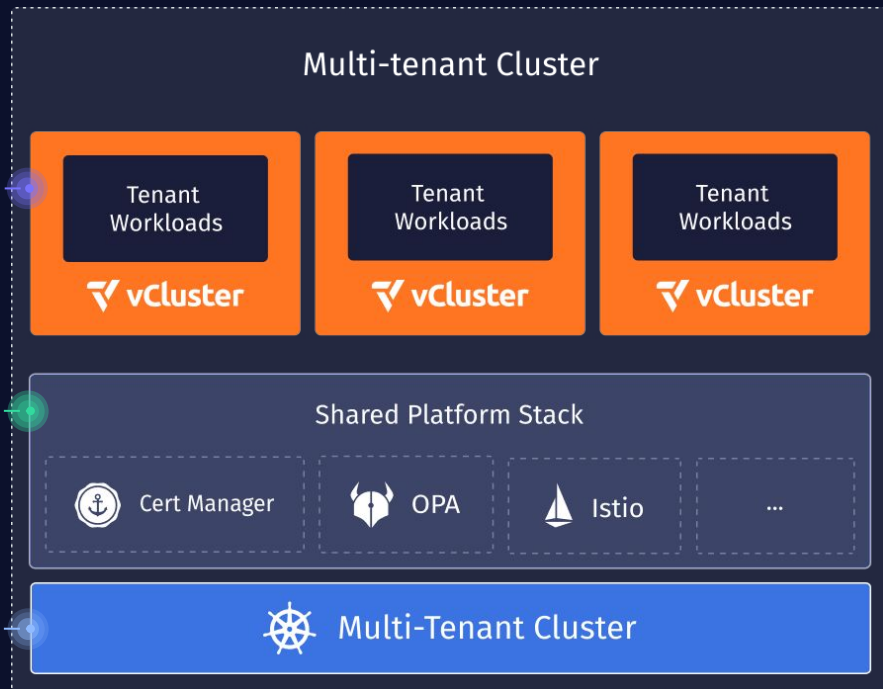
Run fewer duplicates of tools like Istio, Cert Manager, OPA, Datadog and Vault.



## Multi-Tenant Clusters

Run fewer clusters by isolating multiple tenant workloads within a single cluster.

With vCluster



# Maximize efficiency & cut cost with **virtual clusters**.

**+50%**  
Cost Savings

## Key Features

### Sleep Mode

Reduce idle workloads cost by putting clusters to sleep when not in use.

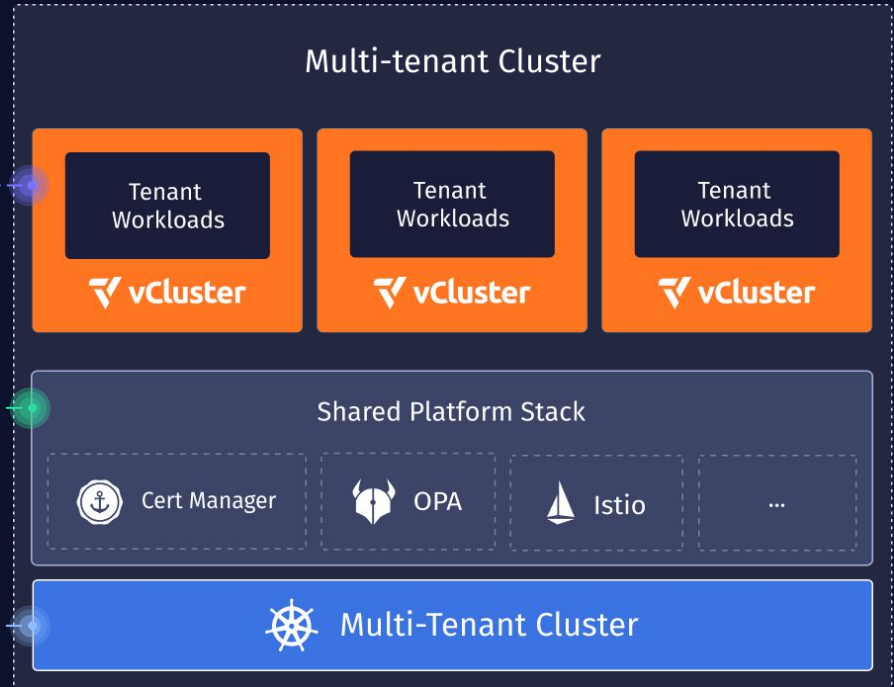
### Shared Platform Stack

Run fewer duplicates of tools like Istio, Cert Manager, OPA, Datadog and Vault.

### Multi-Tenant Clusters

Run fewer clusters by isolating multiple tenant workloads within a single cluster.

With vCluster



# Reduce Kubernetes cost with **virtual clusters**

## Making the business case for vCluster



**Multi-Tenancy** reduces the number of Kubernetes clusters you pay for.



**Shared Platform Stack** with less duplication of infra components like Istio, Cert Manager, OPA, and others.

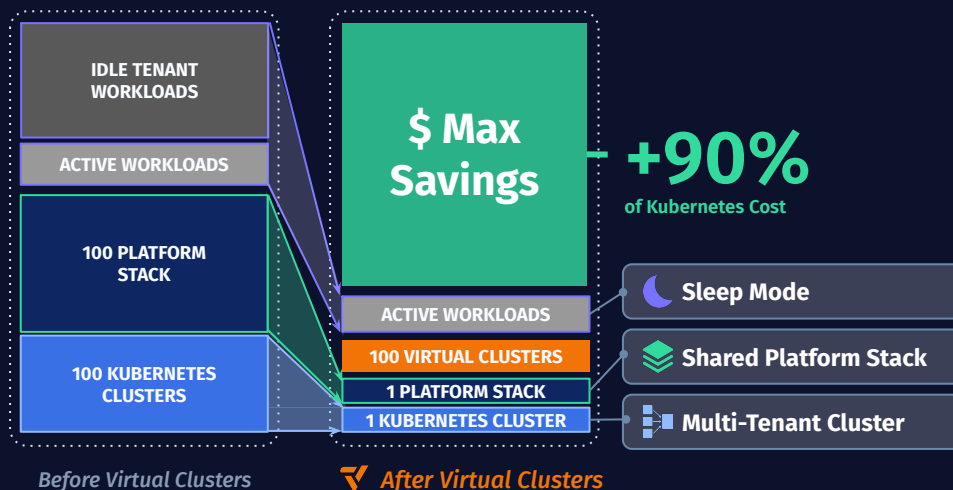


**Sleep Mode** ensures that you only pay for active workloads instead of idle time.



Combine all features for **max savings**

### Combined Savings



# Next-Gen Kubernetes Architecture **with vCluster**

## Cost Savings Features

### Sleep Mode

Less idle workloads

### Shared Platform Stack

Less duplication

### Multi-Tenant Clusters

Less clusters

## Performance Features

### Tenant Isolation

Better security

### Self-Service K8s

Faster provisioning

### Developer Autonomy

Faster velocity

### Cluster Sharding

Better scalability