Containers are quickly replacing virtual machines (VMs), with usage projected to increase by 89% in the next 2 years.

**Container Advantages**

- Containerization allows IT to define base images without DevOps requirements. Meanwhile, development teams can use container images to build their own stacks.
- With microservices architecture, application components are broken into small, independent units that can be assigned to different teams.
- In traditional storage and VMs, storage layers are hard to separate. Containers use image layers that can have different owners, and they can be stacked on top of each other.

**Developer Agility**

- Cloud-Native Microservices
- Decoupling of Layers
- Stateless vs. Stateful
- Organizational Alignment of Cloud Services

**The Data Protection Challenges of Containers**

- Containerized apps running the container image, a microservice running in its own context, and the underlying operating system platform are all separate environments.

**The New Kubernetes Paradigm**

- Developers need access to the services they need while IT at-large maintains overall responsibility.
- After protecting the running state, organizations still need to protect persistent application data.

**Zerto for Kubernetes (Z4K)**

- Zerto for Kubernetes offers protection and support across leading platforms, such as:
  - Microsoft Azure Kubernetes Service (AKS)
  - Amazon Elastic Kubernetes Service (EKS)
  - Red Hat OpenShift
  - IBM Cloud Kubernetes Service
  - Google Kubernetes Engine (GKE)

**Ensure Application Resilience**

- Zerto for Kubernetes protects your application’s persistent data, ensuring resilient operations.

**Avoid Gaps in Protection from Snapshots**

- Zerto for Kubernetes replication and journaling technology allows you to simply rewind to a previous checkpoint, for low recovery point objectivies and high flexibility and availability.

**Protect All Data—Including Persistent**

- Zerto for Kubernetes protects your application’s persistent data, ensuring resilient operations.

**Avoid Vendor Lock-in**

- Zerto for Kubernetes offers protection and support across leading platforms, such as:
  - Microsoft Azure Kubernetes Service (AKS)
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  - Red Hat OpenShift
  - IBM Cloud Kubernetes Service
  - Google Kubernetes Engine (GKE)