Datacenter

Managed Kubernetes

Managed Kubernetes (K8s) is a future-oriented container orchestration solution

Containers provide a solution to a common problem in IT operations: operating software reliably and consistently, regardless of the deployment target.

Before containers, virtual machines (VMs) were the primary method used to run multiple isolated applications on a single server. VMs require a host with an operating system and a hypervisor that provides access to the host's resources. The VMs, on which many applications and services are provided for different business processes, also require a guest operating system.

Containers, on the other hand, do not require their own operating system. The container engine provides access to the host operating system's kernel. Containers provide individually executable, independent microservices. Each service can be set up, implemented, scaled, and renewed separately. This method has the advantage that containers can be quickly deployed, started, and stopped. If more capacity is needed for a service, new containers are provided. Conversely, containers can be deleted immediately when they are no longer needed.

Advantages of container use

Speed

Unlike virtual machines, which typically take several minutes to start, containers do not need to wait for the operating system to start and can be started in a few seconds.

DevOps

The speed, small footprint, and resource efficiency make containers ideal for use in automated development environments and enable optimization of the CI/CD pipeline.

Availability

Containers only package the app and its dependencies. This allows for easy operation on a wide variety of platforms.

Scalability

Containers are usually small because they do not need a separate operating system like virtual machines and can therefore scale freely.

Consistency

Because containers contain all dependencies and configurations internally, they ensure that developers can work in a consistent environment regardless of where the containers are deployed.

Managed Kubernetes - We orchestrate your container workloads

Kubernetes has several features and brings many benefits. However, implementation, maintenance, continuous updating, and monitoring can often be very complex and time-consuming. With a container-centric management environment, computer, network, and storage infrastructure are coordinated. This provides much of the simplicity of Platform as a Service (PaaS) combined with the flexibility of Infrastructure as a Service (IaaS). To run Kubernetes efficiently and productively, reliable management is needed. With Managed Kubernetes on VMware Tanzu/CSE together with the well-known Medialine Self-Service Portal, we offer a simple and secure way to manage your container infrastructure.

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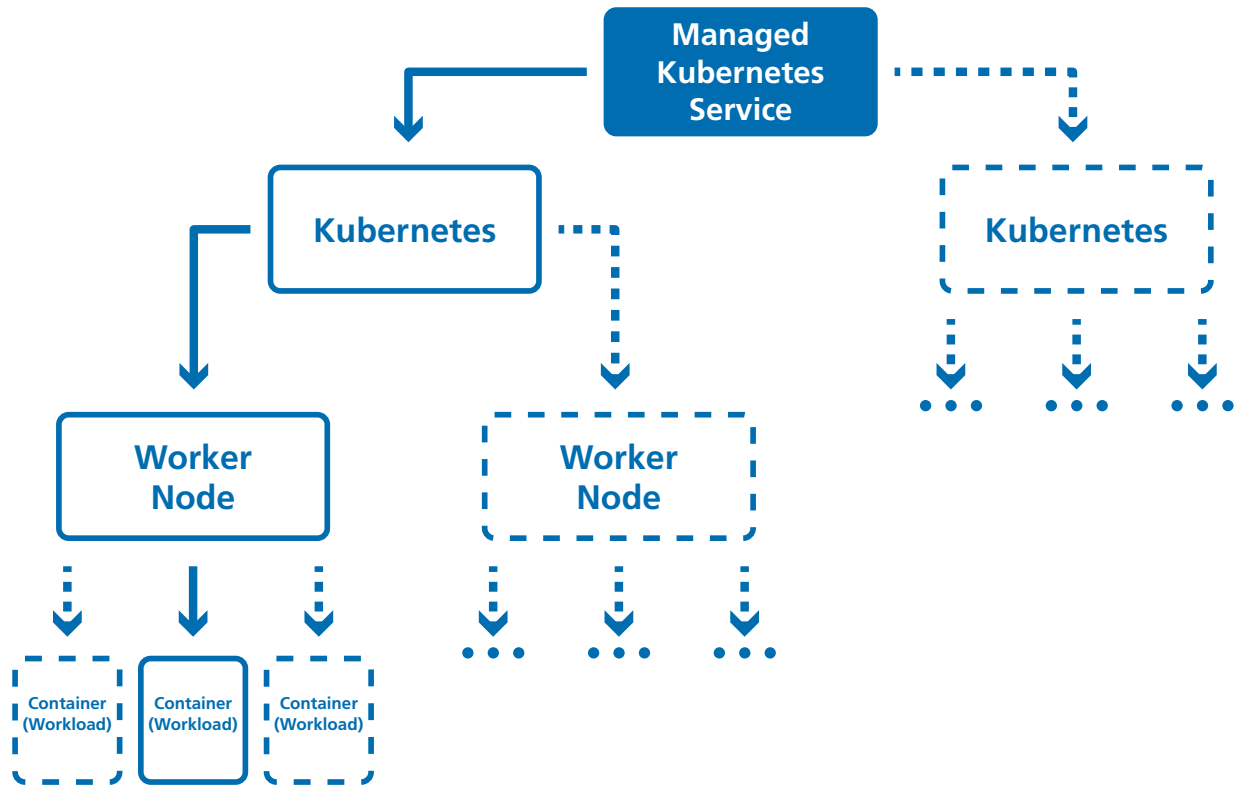
We manage your Kubernetes using VMware Tanzu/CSE

- Unified platform for containers and VMs
- Easy management through the CompanyCloud Self-Service Portal
- Uncomplicated integration into your own systems through SaaS applications from the Company-Cloud
- A Kubernetes setup as simple and compatible as possible (upstream-compliant Kubernetes)
- Permanent storage (Integrated Persistent Storage) on a highly available and scalable platform

- German data center, EU-GDPR data protection
- Integrated update & patch management by our specialists for structured security & function management
- High availability and, if desired, geo-redundant data center setup across multiple locations
- Relief for your DevOps teams
- Support with dedicated contact person

Would you like to find out more about this solution and how to maximize your business success? Contact us now at **sales@medialine.com** and we'll find out together.

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