**Kubernetes** is a portable, extensible, open-source platform for managing containerized applications, workloads and services, that facilitates both declarative ...

**Kubernetes** (K8s) is an open-source system for automating deployment, scaling, and management of containerized applications. It groups containers that make ...

Why you need Kubernetes and what it can do

Containers are a good way to bundle and run your applications. In a production environment, you need to manage the containers that run the applications and ensure that there is no downtime. For example, if a container goes down, another container needs to start. Wouldn't it be easier if this behavior was handled by a system?

That's how Kubernetes comes to the rescue! Kubernetes provides you with a framework to run distributed systems resiliently. It takes care of scaling and failover for your application, provides deployment patterns, and more. For example, Kubernetes can easily manage a canary deployment for your system.

Kubernetes provides you with: