

1. What Kubernetes does not do?

Kubernetes is not a one-size-fits-all platform like traditional PaaS systems. It doesn't enforce a rigid set of features but offers flexibility by allowing users to choose and plug in their preferred solutions for various functionalities like logging and monitoring.

It also doesn't restrict the types of applications it can handle. It's designed to support a wide range of applications, whether they are stateless, stateful, or involve data processing, as long as they can run in containers.

Additionally, Kubernetes doesn't handle the deployment of source code or the building of applications. It assumes that organizations have their own practices and tools for Continuous Integration, Delivery, and Deployment (CI/CD).

While Kubernetes provides a framework for managing containers, it doesn't include built-in services like databases, message buses, or data-processing frameworks. Users are free to run these services alongside Kubernetes. Moreover, Kubernetes doesn't force users to use specific logging, monitoring, or alerting solutions. Instead, it provides integrations as examples, and users can choose and implement the solutions that best fit their needs. Finally, Kubernetes doesn't dictate a specific configuration language or system and doesn't provide an all-encompassing solution for machine configuration. Nevertheless, Kubernetes offers a declarative API, allowing users to specify the desired state of their applications without specifying how to achieve it, giving them flexibility in configuration. For the comprehensive solutions for machine configuration, maintenance, management, or self-healing, users will be free to use their preferred tools for machine-related tasks.

2. What other Orchestration tools are available other than Kubernetes

Three common orchestration tools other than Kubernetes were mentioned below.

Docker Swarm mode is one of the Orchestration tools that is built into Docker. The swarm mode allows users to schedule new containers onto the other machines in the swarm. It also supports users to load balancing, service discovery, rolling updates, and declarative scaling.

OpenShift is another common orchestration tool. It is a Kubernetes-based container platform that adds additional developer and operational tools. It provides an integrated solution for building and deploying containerized applications.

Nomad is also an orchestration tool developed by HashiCorp. Nomad supports both containerised and non-containerised applications and can be part of HashiCorp's border infrastructure automation solutions.