

1. Understand what kubernetes doesn't do from here (<https://kubernetes.io/docs/concepts/overview/>) and explain in your own words.

Kubernetes, or k8s, is an open source platform that automates Linux container operations. It eliminates many of the manual processes involved in deploying and scaling containerized applications," Haff and Henry write. "In other words, you can cluster together groups of hosts running Linux containers, and Kubernetes helps you easily and efficiently manage those clusters.

2. What other Orchestration tools are available other than Kubernetes

Docker Swarm: Docker Swarm is a native clustering and orchestration solution for Docker containers. It is simpler to set up and use compared to Kubernetes and is integrated directly into the Docker ecosystem.

Apache Mesos: Mesos is a general-purpose cluster manager that can orchestrate both containers and non-containerized applications. It provides resource isolation and sharing across distributed applications.

Amazon ECS (Elastic Container Service): ECS is a fully managed container orchestration service provided by AWS. It simplifies the deployment and management of containers, especially in the Amazon cloud environment.

HashiCorp Nomad: Nomad is a lightweight and flexible orchestration tool that supports both containers and non-containerized workloads. It focuses on simplicity and ease of use.

OpenShift: OpenShift is an enterprise Kubernetes platform provided by Red Hat. It includes additional tools and features, such as source-to-image builds and integrated developer workflows, making it a comprehensive container orchestration solution.

D2iQ (formerly Mesosphere): D2iQ offers DC/OS (Datacenter Operating System), which is built on Apache Mesos. It provides a platform for deploying and managing both containers and non-containerized applications at scale.

Rancher: Rancher is an open-source container management platform that supports multiple orchestrators, including Kubernetes, Docker Swarm, and Apache Mesos. It provides a unified interface for managing containerized workloads.

Nomad by HashiCorp: Nomad is a simple and flexible orchestration tool that can schedule and manage applications across multiple environments.

Google Kubernetes Engine (GKE): While Kubernetes is an orchestration tool, managed Kubernetes services like GKE from Google Cloud provide a simplified experience for deploying and managing Kubernetes clusters.