

# Kubernetes

Google Container Engine (GKE) has been officially renamed to Google Kubernetes Engine.

## Kubernetes Engine Overview

Kubernetes Engine works with containerized applications: applications packaged into hardware independent, isolated user-space instances, for example by using Docker. In Kubernetes Engine and Kubernetes, these containers, whether for applications or batch jobs, are collectively called workloads. Before you deploy a workload on a Kubernetes Engine cluster, you must first package the workload into a container.

Google Cloud Platform provides continuous integration and continuous delivery tools to help you build and serve application containers. You can use Google Container Builder to build container images (such as Docker) from a variety of source code repositories, and Google Container Registry to store and serve your container images.

## Features

- Workload portability within and across cloud providers.
- Load balancing.
- Node pools to designate subsets of nodes within a cluster.
- Automatic scaling.
- Automatic upgrades with zero downtime.
- Node auto-repair to maintain node health and availability.
- Persistent storage abstracting details of provision and consumption.
- Multi-zone clusters.