Kubermatic Kubernetes Platform

Automate Multi-Cloud Kubernetes with Consistency from Cloud to Core to Edge



What is Kubermatic Kubernetes Platform?

Kubernatic Kubernates Platform is used by IT teams worldwide to operate hundreds or even thousands of clusters. Its Kubernates in Kubernates architecture automates deployments, Day 2 operations, policy and governance, security, management, and user experience. Combined with unparalleled density and resilience, Kubernatic Kubernates Platform is the simplest and most effective software to manage the new era of cloud native IT infrastructure and accelerate the enterprise journey to automated multi-cloud operations.

Key Features

Self-healing HA Kubernetes in Kubernetes architecture

- · Based on Kubernetes CRDs and Operators for simplified management
- "KubeOps" operate every cluster with standard Kubernetes tooling like kubectl
- Fully API driven
- Automation based on end-to-end tested stateless operator no stateful untested scripts needed

Free choice of infrastructure stack

- · Native support of AWS, Azure, GCP, DigitalOcean, Alibaba Cloud, OpenStack, VMware, bare metal, and more
- Integrate new cloud provider in days not in months
- Fast switching between clouds / on-prem by using one common default layer

Multi-cloud abstraction layer

- Identity Management (OAuth, OpenID Connect, Active Directory)
- Centralized multi-cluster Logging, Monitoring, and Consumption Metering
- Abstract cloud dependencies from the cluster consumer using preset environments

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Automated lifecycle management

- Provisioning, scaling, updating, and clean up of clusters with just an API call
- Immutable infrastructure simplifies upgrades of all clusters on every cloud by eliminating in-place upgrades
- Decide between enforced upgrades (security fixes) and user controlled upgrades (new Kubernetes feature release)
- Automatic roll out and roll back of upgrades

Containerized User Cluster Control Plane

- Automatic scaling of control plane components
- · Superfast provisioning in seconds instead of minutes
- · Minimized management cost and overhead

Runs 100% conformant Kubernetes and OpenShift

- Rollout of bugfix versions immediately after release only by config change
- · Latest Kubernetes release supported in 4-6 weeks

Multi-tenancy and user management

- Separate cloud providers and preset environments by organizational units
- Datacenter separation decide where the data is stored
- · Multi-cluster separation lowers effort for in-cluster policy enforcement

Cluster blueprints, presets, and add-ons for governance and policy enforcement

- · Central management of policy enforcement with automatic updates to all clusters
- Flexible policy management for individual datacenters and clusters
- Customizable add-on distribution of enforced and selectable add-ons

Self Service Portal

- · Deliver Kubernetes-as-a-Service to end users
- Eliminate ticket workflows needed for cluster management
- SSO support for all components and clusters

Automated backup and recovery

- Centralized multi-cluster and multi-cloud backup handling
- Customizable backup locations

Multi-cluster Infrastructure Logging & Monitoring

- · Monitoring: Prometheus, Grafana, Thanos, Karma
- Logging: Elastic Search, Fluentbit, Kibana

Manage multiple OpenShift clusters with Kubermatic Kubernetes Platform

- No need to write own on-prem automation
- Automation of provisioning and policy handling without Ansible
- · Reduce license fees with a Kubernetes OpenShift Dual Stack

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Kubermatic Kubernetes Platform Benefits at a Glance



Automated operations allow teams to increase productivity and focus on customer value



Platform density minimizes total infrastructure costs



Self-healing infrastructure reduces manual intervention and downtime



Platform ensures compliance with enterprise policies, governance, and security



Accelerates self service Kubernetes platform time to market

Why Kubermatic?



Kubermatic is our supplier of choice because they understand Kubernetes to the core. Kubermatic Kubernetes Platform allows us to manage thousands of clusters with ease. The best part is that they are approachable for us, even developing the absolutely latest technology.

We choose Kubermatic as our premium partner to bring all the advantages of Kubermatic Kubernetes Platform to the edge and manage thousands of Kubernetes clusters beyond the cloud.

Sascha Haase, iNNOVO Cloud



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