PLATFORM9

Solution Brief

Kubernetes-as-a-Service for Multicloud Environments

Fully managed KaaS across providers eliminates operational complexity

Organizations use several cloud vendors for many reasons. They can reduce costs, choose the best possible service for different types of workloads, avoid lock-in, plus meet business needs such as compliance and security. According to Flexera, "92% of surveyed companies have a multicloud strategy, averaging 4.9 clouds in use or under development."

Yet the challenges of deploying and centrally managing multicloud Kubernetes clusters and apps are significant. For example, there's applying the right security and RBAC policies across all clusters. And there's automating patching and upgrading — both clusters and the many tools and components that support them — at scale across diverse environments. In multicloud, complexity grows very quickly.

Skills and complexity challenges with current multicloud solutions

Paying public-cloud vendors to run your tech stacks is convenient but can quickly grow prohibitively expensive. If you tie in your private clouds and configure bursting, your IT team will expand and get much more involved. And when you get to tasks like using a service mesh to orchestrate containers in multiple locations, you'll need skills and resources that are outside the scope or expertise of many IT teams.

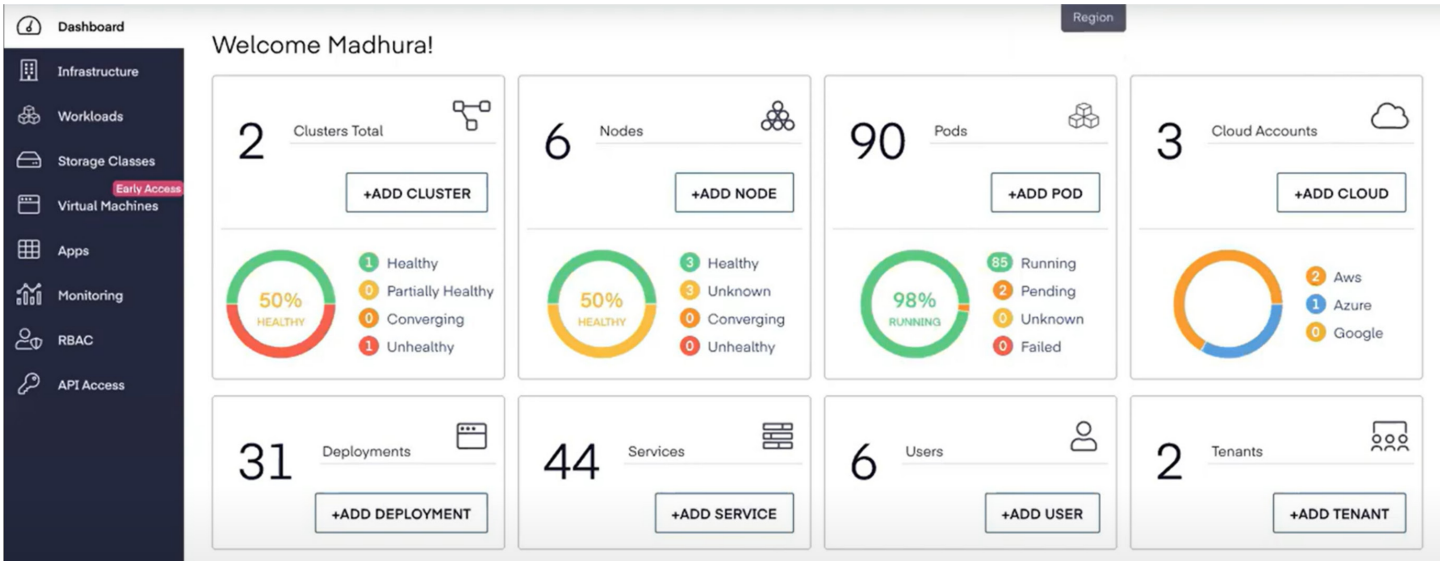
An in-house, DIY approach can be complicated:

- DIY typically means hiring multiple, difficult-to-find cloud engineers with expertise in your different vendors' solutions.
- They'll have to automate processes such as auto-scaling and CI/CD across multiclouds that all use different methods and tools.
- Access and user rights to all the various components of a distributed Kubernetes infrastructure need to be integrated with enterprise IAM platforms.
- All-in-all it's a huge, specialized job, and even some of the largest organizations choose to outsource it.

Platform9 — The cloud-agnostic KaaS alternative

Platform9 eliminates the complexity and IT overhead of managing multicloud Kubernetes deployments. It creates clusters on public-cloud IaaS layers, providing open-source equivalents of all a vendor's native features such as monitoring and load balancing. You can import existing clusters from EKS, AKS (validated for Azure Arc-enabled Kubernetes), and GKE, deploy apps, and apply consistent RBAC policies. And it all works via a central management plane with single-pane access for all users and built-in multitenancy to separate different groups and use cases.

Importantly, you maintain control — for example, Platform9 lets you specify which Kubernetes version to use rather than force you to stage and test your apps with new releases.



A single-pane-of-glass dashboard shows all your Kubernetes clusters across all clouds.

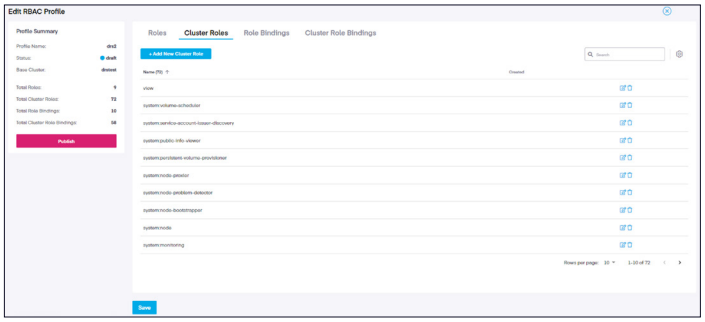
Multicloud cluster governance and policy management with Profile Engine

As the number of distributed clusters increases, it becomes more difficult to ensure consistent policies and configurations. The Profile Engine ensures consistency, compliance, and standardization to combat sprawl, security holes, and a lack of policy conformance. For example, the RBAC Profile is a collection of Roles, ClusterRoles, RoleBindings, and ClusterRoleBindings stored with Platform9. The profiles can be customized and deployed to any attached Platform9 cluster on any target cloud environment. The deployment process updates the target cluster's RBAC policies to ensure it conforms to the profile.

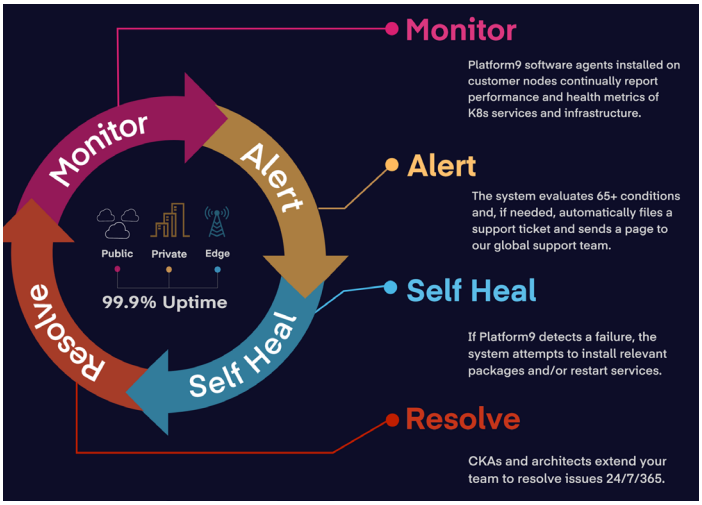
Closed-loop automation ensures 99.9% uptime across all clouds

After registering nodes with Platform9 KaaS, an agent reports every important performance metric of the deployment and the underlying IaaS cloud infrastructure. When it detects a failure, it automatically attempts to self-heal the environment by installing packages or restarting services. It alerts our support engineers — 100% Certified Kubernetes Administrators — who proactively start debugging and troubleshooting the issue and often resolve a problem without any customer involvement. If a disk crashes or there's a fatal condition in the customer-owned infrastructure, Platform9 acts as an extension of your own team, partnering to ensure correct remediation.

Contact Platform9 to discuss our fully managed service for your multicloud clusters.



Profile Engine ensures consistent policies and configurations.



Closed-loop automation optimizes deployment uptime.

Learn more about Platform9 here:

- On EKS, But Need to Go Multicloud?
- Building and Operating Cloud Platforms at the Edge
- Managing Kubernetes: kops vs. AWS EKS vs. Platform9 KaaS

PLATFORM9

Platform9 North America — Mountain View, CA
800 W El Camino Real #180, Mountain View, CA 94040
650-898-7369 • info@platform9.com