

Platform9 Edge Cloud — Integrated Management of Edge Deployments



Manage infrastructure and apps at thousands of edge locations from a central location.

Platform9 Edge Cloud provides administrators with end-to-end orchestration of containers, VMs, bare metal, and governance and observability features for the edge. In addition, Edge Cloud helps run latency-sensitive applications with advanced [Luigi networking](#) technologies and includes [CPU resource](#) and [Docker Registry](#) management capabilities.

Available both as a fully-managed cloud service and for air-gapped, on-premises deployments, Edge Cloud is architected for customer-specific needs in media/CDN, telco 5G, private 5G/LTE, and retail industries. It leverages open source, cloud-native technologies such as Kubernetes, KubeVirt, Ironic, and Metal³ to enable best-of-breed automation at the edge. Edge Cloud integrates three proven Platform9 capabilities:

- [Managed Kubernetes](#)
- [Managed Bare Metal](#)
- [Managed KubeVirt](#)

End-to-End Automation, Observability, and Governance

Edge Cloud automates deploying and managing all layers of infrastructure end-to-end from bare metal to edge apps. It remotely bootstraps servers, installs operating systems, deploys Kubernetes and virtualization software stacks, and installs your applications as VMs, containers, or both. All processes can be programmed via APIs and incorporated into CI/CD pipelines.

As the number of edge sites increases, it becomes more difficult to ensure consistent policies and

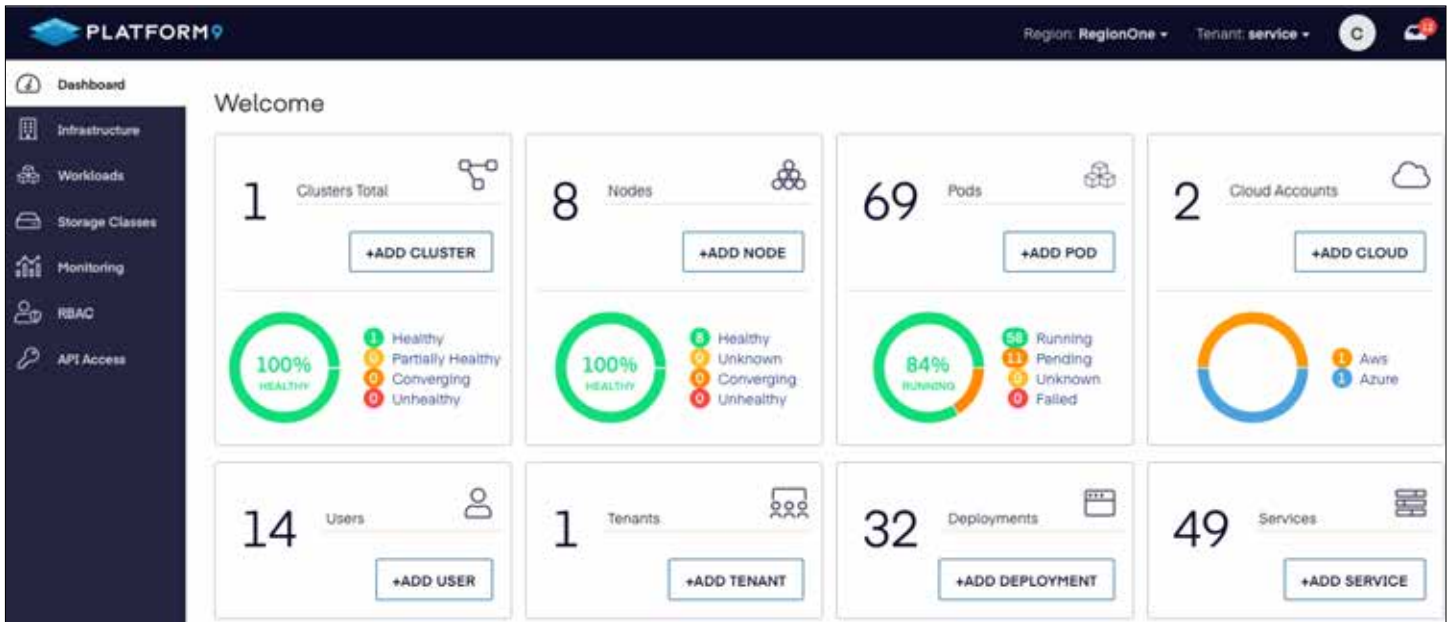
configurations. The Platform9 Profile Engine is a cluster governance and policy management feature that ensures cluster conformance with templated configurations and policies to meet requisite enterprise standards. It enables edge-ready GitOps operations with zero touch. Once clusters are running, the Platform9 Managed Add-Ons feature ensures add-ons are configured correctly and that any policies are maintained in an approved and compliant state.

The Profile Engine for RBAC simplifies RBAC governance and compliance across multiple clusters. It lets clients create RBAC profiles based on existing clusters and edit profiles to ensure they contain the exact policies required. It then deploys them and lets you analyze clusters for non-conformance using built-in Drift Analytics to quickly identify and resolve any non-compliant RBAC policy changes.

Flexible Deployment Models: SaaS and Air-Gapped

You can deploy Platform9 Edge Cloud either as SaaS fully managed by Platform9 or as an on-premises, air-gapped, self-managed solution. As fully-managed SaaS, you offload complex setups and greatly simplify Day-2 operations. Plus, Platform9 closed-loop automation maintains edge sites with a guaranteed 99.9% uptime SLA. After registering nodes with Platform9 KaaS, a software agent reports every important performance metric of the deployment and the underlying IaaS cloud infrastructure.

When it detects a failure, Edge Cloud automatically attempts to self-heal the environment by installing



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

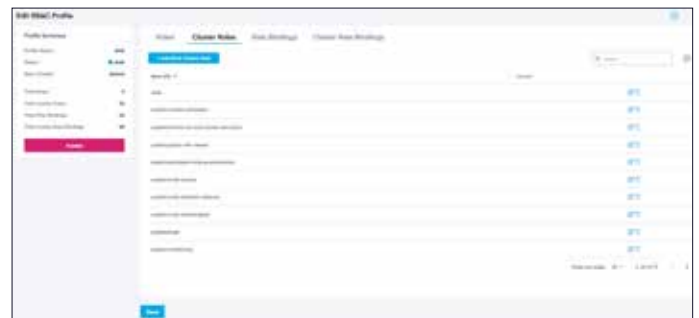
packages or restarting services. It alerts our support engineers — 100% Certified Kubernetes Administrators — who proactively start debugging and troubleshooting the issue and often resolve a problem without any customer involvement. If a disk crashes or there’s a fatal condition in the customer-owned infrastructure, Platform9 acts as an extension of your own team, partnering to ensure correct remediation.

Edge Cloud can also operate in a fully air-gapped, on-premises environment without relying on network connectivity to install any of the required components or packages. This configuration leverages Aircctl, Platform9’s on-premises orchestrator that comprises a command-line utility (CLI) and components that manage the lifecycle of the on-premises management plane. Edge Cloud also enables managing DNS, Docker images, RPM packages, and system state backup and recovery.

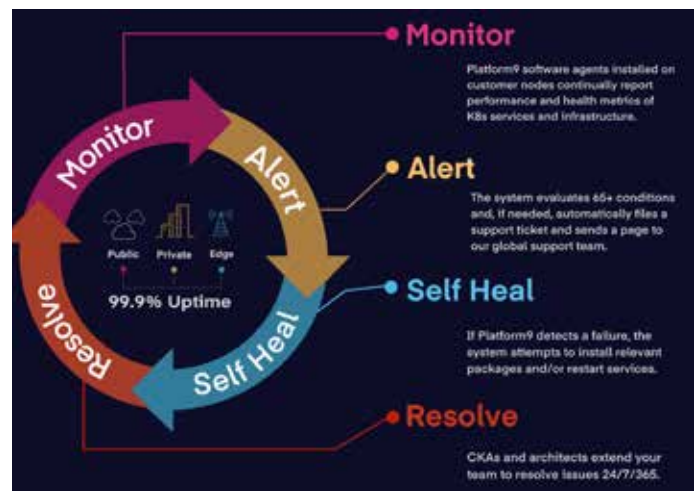
Edge-Enhanced Virtualization and Advanced Networking

Edge Cloud uses KubeVirt to power a virtualization layer that is enhanced and tuned to accommodate networking requirements at edge locations. You can use the virtualization capability either as a flexible IaaS layer for running Kubernetes and your containerized applications, run your applications as VMs, or both. Edge Cloud supports Multus, IPV6, and IPAM.

You can configure VMs with one or more network interfaces to fully leverage Edge Cloud high-performance networking features. Just bring a compatible VM image and we do the rest. Edge Cloud includes several network acceleration features such as SRIOV, DPDK, MACvLAN, and IPvLAN and automates host configuration with Luigi Operator.



Profile Engine ensures consistent policies and configurations.



Closed-loop automation optimizes deployment uptime.

Learn more about Platform9 Edge Cloud:

- [Solutions for telco 5G and retail](#)
- [Bring your VMs to Kubernetes](#)
- [Build bare metal clouds anywhere](#)