

Deliver cloud-native, revenue-generating 5G services faster



Solution Brief

Easily manage differentiated 5G services

Telco 5G operators deploy and operate thousands of radio towers and networks while managing software applications across the access layer, aggregate layer, and core data centers. They need the ability to quickly and dynamically relocate services to optimize network performance, improve latency, and reduce costs of operations.

As a result, 5G architectures must be services-based with hundreds and thousands of network services in the form of virtual or container network functions (VNF/CNFs) deployed in geographically distributed remote environments.

Platform9 lets operators deploy and manage cloud-native 5G RAN, IMS, packet core, and edge VNFs and CNFs without the management burden.

- Get 5G sites operational in days instead of weeks or months.
- Eliminate the overhead of operating the underlying 5G infrastructure stack with a SaaS-based management plane.
- Speed time-to-market for 5G network services with hyper-automation across all layers.

Run 5G application stacks with confidence

Platform9 optimizes:

- Network slicing for MVNOs.
- Application layer app bundles, marketplaces, and OSS/BSSs.
- Cloud layer cores, 5G radios, and configuration management.

Automate deploying complete 5G infrastructure stacks

- Manage Grafana, Prometheus, Fluent Bit, and App Catalog.
- Use advanced networking services such as MACVLAN, IPVLAN, SR-IOV, and DPDK.
- Optimize VNFs and CNFs in large-scale distributed deployments using Kubernetes and KubeVirt.
- Automate OS deployments on bare metal using PXE, IPXE, and IPMI.

"Platform9 and Kubernetes are providing key technology and support capabilities to optimize service delivery for our cloud-native software products and services. We expect to see benefits in simplifying our service delivery and operations and in optimizing footprint, lowering costs, and adding tangible value to our customer community."

— Bejoy Pankajakshan
Chief Strategy Officer, Mavenir

High-performance 5G network deployment features

- Advanced networking with Multus, IPV6, and IPAM support; network accelerators: SR-IOV, DPDK, MACvLAN, IPvLAN; host config automation.
- Centralized management with single sign-on for distributed infrastructure locations; cluster profiles to ensure consistency of deployment across large numbers of clusters and customers; centralized management of tooling, APIs, and the App Catalog to simplify application management at scale.
- Advanced resource binding with CPU management pinning and NUMA; topology management; monitoring and visibility.
- Fully automated bare metal life-cycle management for full stack deployments with no need for 3rd-party hypervisors such as VMware ESXi.

Realize immediate value

- Quickly and easily deploy Kubernetes-managed containers and VMs at a fraction of the cost of on-prem solutions.
- Efficiently monitor and maintain 1000s of nodes with an automated management plane.
- Integrate with existing infrastructure.
- Install easily with no proprietary lock-in.
- Speed application delivery for faster go-to-market
- Eliminate the high cost of Kubernetes platform engineers — as well as the high cost of sidelining DevOps with backend management tasks.

Platform9 — the best fit for 5G environments

Platform9 is specifically designed to work in the types of distributed clouds typically used in 5G deployments. Other tools such as Rancher, OpenShift, and Anthos do not provide a similar, vendor-agnostic management plane for central operations.

[Book a demo at platform9.com/contact](https://platform9.com/contact)

SaaS architecture for managing private, hybrid, and edge clouds

Platform9's SaaS-based management plane eases deploying, scaling, and operating cloud-native infrastructure and applications.

The fully managed service eliminates the complexity and IT overhead of operating cloud-native infrastructure. Enterprises of any size — with distributed clouds of any size — plug in their own infrastructure, log in from anywhere, and start managing their containers and apps with a public cloud-like experience. DevOps admins can centrally manage a hundred sites as easily as they manage one site.

The Platform9 SaaS-based management plane is:

- Right for a wide variety of distributed cloud and infrastructure environments — it extends across any on-premises, edge, or public cloud, decoupling apps from infrastructure.
- A better experience for developers — apps can be deployed against consistent open-source APIs such as Kubernetes and CNCF services.
- Scalable for any size cloud — from a few public cloud regions and data centers to thousands of 5G gateways and retail stores.

Rely on 24/7/365, proactive technical support

With Platform9, you're not on your own. All our support engineers are Certified Kubernetes Administrators (CKA) and they ensure 99.9% management plane availability with a financially backed SLA. And if issues arise and the unexpected happens, we are solely focused on keeping your clouds up and running.

When you register a node with the Platform9 service, an agent starts monitoring and reporting every important performance metric about the environment. When something is off, Platform9 automatically alerts you and Platform9 engineers and begins debugging, troubleshooting, and if necessary, rebooting servers. If a disk crashes or there's a fatal condition in the customer-owned infrastructure, proactively minded Platform9 support teams are poised to help.

