PLATFORM9

Case Study

Data services provider taps Platform9 for easy and cost-effective private cloud management

Automated orchestration of VMs at scale keeps workloads running cost-effectively on existing infrastructure.

A major data services vendor provides a software platform for data engineering, data warehousing, machine learning, and analytics that runs in the cloud or on premises. They accelerate digital transformation for the world's largest enterprises via a data cloud platform that lets them:

- Ingest, curate, and analyze real-time streaming data.
- Bring together data from new and diverse sources.
- Build, deploy, and scale ML and AI apps anywhere.

The senior IT manager heads a team of nine that's responsible for the company's infrastructure IT services. They manage two co-location data center facilities from the bare metal up and, at the application layer, handle OpenStack and Linux administration. "We serve the engineering, professional services, sales, and support teams, making sure their services are all up and running and that users are able to launch VMs," says the manager. "We don't typically support things inside of VMs, but we definitely help if we can."

The Challenges

The company has quite a bit going on in their data centers. For one, the engineering, QA, and core teams scale-test customer solutions. Anywhere between 8,000 to 10,000 VMs could spin up within a

The Challenges

- Open-source software such as CloudStack and OpenStack was cumbersome and difficult to scale.
- Outsourced OpenStack management performed unevenly.
- Using a public cloud while servers were being configured was expensive.

The Solution

- A SaaS-based management plane for managing OpenStack.
- Fast scale testing and build automation.
- Easy-to-setup POC and onboarding within days.

The Results

- Scalability for hundreds of hypervisors and thousands of VMs.
- Configuring in twenty minutes what could take up to six weeks.
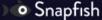- Minimal use of public clouds.

"Running workloads in public clouds can cost 4x what our private cloud costs, that's why we have one! Using Platform9 on-premises, we add new services and fix issues in minutes and consistently avoid racking up substantial public cloud fees."

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24-hour period and be destroyed within 20 minutes. According to the manager, "Our products simply have to work at scale, so nearly everyone gets involved."

Managing on-premises, private DevOps clouds isn't easy

Early on, the IT team used CloudStack and OpenStack to manage things on their own. However, at times they'd have 500 hypervisors running in one cloud, and neither tool had the scalability the company needed. The IT team was more bare-bones at the time, and the management overhead with these open-source tools was getting to be too much.

They worked with a managed service provider for several years, a smaller company with a good reputation for support and responsiveness. However, over time, its quality of service dropped off significantly. Tickets took longer and longer to get processed and responses for basic questions were increasingly delayed and not always useful.

The manager says, "We'd put an OS on a bare-metal server and ask the service provider to configure it for OpenStack, and it could take literally six weeks to get it on the control plane. The delay was just unbelievable." They were waiting for infrastructure resources rather than testing and running revenue-generating code. That was, of course, unsustainable, so they moved workloads to a public cloud as a stop-gap.

A public cloud can be 4x the cost of an on-premises data center

But every day they spent on a public cloud was a day they weren't using their on-premises data center, and for six weeks, that added up to real money. "Based on all the math we've done, a public cloud is about four times as expensive as using our own infrastructure," says the manager.

After a company merger, the need to quickly reconfigure servers increased. They needed runway on their private cloud for bigger workloads, and being able to move the workloads and servers around easily was critical to maximizing utilization. For example, it wasn't unusual to suddenly take 20 servers from one cluster and move them into OpenStack.

They hadn't found a solution that solved their three fundamental needs:

- Scalability
- Responsive support
- Cost efficiency

CloudStack and OpenStack were not providing scalability and stability. They didn't want to risk unresponsive or slow performance from external service vendors. Plus, with OpenStack managed services, they still had to rebuild their own clouds and perform migrations. Using CSPs such as AWS meant wasting the value of their existing data center infrastructure, and adding full-time employees would be even more expensive.

The manager had heard about Platform9 from industry colleagues, and after checking out platform9.com, he booked an intro call from the home page.

The Solution

"Unlike most others, Platform9 responded immediately," says the manager. In an intro call with two sales engineers, they discussed different offerings and scheduled an in-depth technical review to talk through the use case and the company's specific details. Everything looked like a good fit, so they scheduled a POC.

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Deploying the POC was itself very instructive for the company. They did it in less than a day and experienced, first hand, what it was like working side-by-side with the Platform9 team. According to the manager, "What caught my attention right off was the SaaS management plane. It's really smart, it's standardized, everything's predictable, and it's polished. Anyone who can make OpenStack easy to use is pretty impressive."

After extensive vendor security assessments, IT quickly onboarded Platform9. And after nearly a year of smooth sailing, the manager says, "It's amazing that as complex as OpenStack is to run, Platform9 has made it extraordinarily easy for admins. A Linux administrator who hasn't touched OpenStack before can pick up Platform9 and get things up-and-running in no time." And SaaS helps. Since starting with Platform9, there've been a number of upgrades to the management plane — but because it's SaaS, no one in the IT staff has noticed.

The Results

"So far, Platform9 has been a perfect fit for our on-premises data centers," says the manager. "It just works. We spend a lot less time worrying about OpenStack and scaling. It's out of sight, out of mind now." The team appreciates the Platform9 "polish," such as the predictable ways they can set up API endpoints and the clear documentation.

Platform9 polish results from the SaaS-based management plane's monitoring and alerting capabilities. For example, IT performed an extensive network maintenance session and suppressed alerts in one environment but missed another environment. When Platform9 detected the issue on a large number of servers, instead of sending out an alert for each host, it sent one message summarizing the downed network.

"Platform9 has freed up considerable time so we can focus more on business-critical initiatives rather than maintaining and troubleshooting our private cloud."

The team recently wanted to configure hypervisors to enable extra CPU features in workload VMs. They weren't sure of the implications, so they opened a support ticket. Platform9's response was immediate. After some fairly easy changes and testing, the workload was back online. "I called an account rep just to make sure I understood exactly what was going on. The level of responsiveness throughout was outstanding," says the manager.

Platform9's ease-of-use has freed up considerable time for the team to concentrate on clearing up backlogged projects. They've been able to focus more on business-critical initiatives rather than maintaining and troubleshooting their cloud. The manager adds, "It's incredibly important to factor in the cost of lost opportunities when you're spending time doing backend work that should really be automated."

It's clearly less expensive to run workloads on-premises with existing infrastructure rather than on a public cloud. What might be less obvious are the savings from the fast turnarounds Platform9 enables. A production workload can't just stop, and whatever time it takes to get servers configured will be expensive time the workload will be running on the public cloud.

Looking forward

The company doesn't have an elastic workload, their servers are running hot 24/7. Yet occasionally they need to roll out a DMZ or require high global availability, and the public cloud is the best option despite the expense. Fortunately, Platform9 works just as easily across public and hybrid clouds with virtually every popular enabling technology for Kubernetes, VM, and bare-metal, and the company will soon be evaluating the Platform9 Kubernetes Management platform (PMK).

Book a demo at platform9.com/contact