

Rafay Accelerates SonicWall's Adoption of Kubernetes & Amazon EKS

SonicWall safeguards enterprises, governments and SMBs worldwide with seamless protection that stops the most evasive cyberattacks across various exposure points and increasingly remote, mobile and cloud-enabled workforces. Since the company's founding, SonicWall has offered security products as hardware appliances or as downloadable software. But as SonicWall's customer base migrated their applications to the cloud — and many enterprises and service providers consumed SonicWall offerings within their private cloud environment — SonicWall decided to modernize their backend and management services. To do that, they chose to leverage the latest cloud offerings from Amazon™, including Amazon Elastic Compute Cloud (EC2), Amazon Elastic Kubernetes Service (EKS) and Amazon Elastic Container Registry (ECR). They also standardized on Docker™ containers and Kubernetes to manage their applications.

A summary of SonicWall's successful journey with Rafay is below. Visit [Amazon's blog post](#) for a more detailed discussion of the topic.

SonicWall's Kubernetes Requirements Drove Digital Transformation

SonicWall's cloud operations team was quick to recognize that end-to-end automation would help migrate multiple product lines to the cloud faster. The team identified a clear list of requirements for Kubernetes operations and began evaluating off-the-shelf options that provided end-to-end automation for Kubernetes operations. The team's goal was to speed delivery timeframes by 50% and be operational in just a few months.

With future deployments of their modernized applications expected to take place in partner data centers and possibly on customer premises, the team concluded that support (for hybrid environments), along with deployments in third party networks, was a critical requirement. The service must also provide a fully-managed Kubernetes offering that can be deployed outside of Amazon Web Services (AWS) environments, so operations can deploy EKS clusters in AWS Regions, as well as fully managed upstream Kubernetes clusters in non-AWS environments – all from a single pane of glass.



RAFAY'S VALUE:

- Time to Kubernetes: < 3 months
- App Delivery Speed: 50% increase
- Distros Used: Amazon EKS, Rafay Upstream K8s
- AWS Visibility & Management: Across 6 global regions

SONICWALL'S ENVIRONMENT:

- Infrastructure: Amazon AWS & on-premises
- CI/CD: Jenkins, Gitlab, and CircleCI
- Single Sign-On: Role-based from identity provider with SAML 2.0
- Container Registry: Amazon ECR
- Secrets Management: Amazon Secrets Manager & Hashicorp Vault
- Log & Metrics Management: Fluentd/Elasticsearch

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Jayant Thakre, VP Products, SonicWall

“Our use cases for Kubernetes were complex so in addition to a product, we also needed a partner with deep Kubernetes experience. Rafay not only helped us with a product that can manage all the Kubernetes deployments from one central location but also shared the best practices for running applications.”

Jayant Thakre, VP Products, SonicWall



With deployments taking place in AWS and non-AWS environments, target clusters may be a mix of EKS and upstream Kubernetes. Therefore, any solution must be able to deploy across multi-distro environments and support Kubernetes upgrade workflows for both EKS and upstream Kubernetes-based clusters, making it easy for the operations team to manage cluster lifecycles.

Integration with SonicWall's existing technologies, security model and application workflows were a must, including integration with the following:

- CI/CD: Jenkins™, Gitlab™, and CircleCI™
- Single Sign-On: Role-based from identity provider with SAML 2.0
- Container Registry: Amazon ECR
- Secrets Management: Amazon Secrets Manager and Hashicorp Vault™
- Log & Metrics Management: Fluentd/Elasticsearch™

As SonicWall operates a fleet of Kubernetes clusters in development, pre-production, and production environments, with multiple applications being deployed across clusters, having a single view across the fleet as well as a detailed view into application status and performance was key. Further, all activity must be audited for easy validation and attestation as needed.

Because Kubernetes is a relatively new system that is maturing fast with new features and capabilities, SonicWall also preferred to partner with a vendor who not only provided a solution to the above requirements, but also has Kubernetes experts that engaged directly with DevOps and IT operations teams to ensure success.

Jayant Thakre, VP of Products, described their experience, “Our use cases for Kubernetes were complex so in addition to a product, we also needed a partner with deep Kubernetes experience. Rafay not only helped us with the product that can manage all the Kubernetes deployments from one central location but also shared the best practices for running applications.”

Rafay Provides a Solution for both Amazon EKS and On-Premises Kubernetes

After exploring multiple solutions, SonicWall chose Rafay Systems' Kubernetes Operations Platform. Rafay delivers the deepest integration with Amazon EKS so developers and IT users can easily bring up and manage the lifecycle of EKS clusters across AWS Regions. Rafay also provides a fully managed, upstream compliant Kubernetes service that customers can leverage on-premises or at the edge.

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SonicWall's broad requirements list is typical of mature enterprises running workloads in the cloud and on premises. Rafay was able to meet or exceed them all and provide SonicWall with a self-service model that includes a high level of visibility and governance.

In addition to a differentiated Kubernetes operations solution, Rafay also helped SonicWall jumpstart their Kubernetes journey with a deep bench of Kubernetes experts.



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Jayant Thakre, VP Products, SonicWall

With Rafay, SonicWall could deliver modern applications to market on time, without waiting many months or quarters for internal teams to acquire expertise in Kubernetes and its ecosystem of technologies.

Fully Operational Kubernetes Service in Less than 3 Months

By partnering with Rafay and Amazon, SonicWall successfully met its infrastructure provisioning and application roll-out targets. The company achieved a 50% speed-up in their delivery timelines by rolling out their solution within just three months. Furthermore, SonicWall had expected to hire five additional DevOps engineers to meet these targets. However, now, those resources didn't need to be hired — thus lowering the total cost

of operations — because of improved productivity. SonicWall's applications and supporting clusters are now operational in six AWS Regions around the globe.

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Rafay's operational support team of certified Kubernetes experts continues to support SonicWall as it serves its global customer base. Together, Rafay and Amazon look forward to supporting SonicWall in their transformation goals for years to come.



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