

## DEPLOYING CONSISTENT APPLICATION SERVICES IN MULTI-CLOUD ENVIRONMENTS

Innovation and speed to market have become critical to success for many organizations. With F5's cloud-native ADC solution, NGINX, you don't need to trade security or performance for rapid delivery.



**Most organizations prioritize cloud flexibility**—and let application teams choose the best environment for each application—over the organizational benefits of common environments, processes, and tools. This leads to 87% of organizations supporting multiple clouds, selecting best-of-breed capabilities from each platform.<sup>1</sup>

As applications proliferate, it becomes more challenging to implement consistent cross-cloud application performance policies, security, and regulatory compliance leaving organizations with concerns about long-term operability.

The key for IT is to strike the right balance between freedom and flexibility for application development teams, while enabling the easy and consistent inheritance of corporate security, compliance, performance, and operability requirements. That means standardizing on core application services across cloud environments—without slowing down CI/CD deployment velocity.

BALANCING FLEXIBILITY AND CONSISTENCY

As you deploy applications on multiple cloud platforms, the challenges in achieving consistent performance across different environments increase. Built-in load balancing services offered by public cloud providers provide only basic services—and relying on these native load balancers results in inconsistent application performance across disparate cloud environments. Plus, using load balancing services offered by public cloud service providers results in unpredictable costs, especially when there are traffic spikes.

To reduce complexity and control costs, you can standardize on core application services (e.g., traffic management, application security) across cloud environments. By using the same load balancing solution across multiple clouds, you achieve predictability in costs as well as consistency in app performance. A policy-based approach to load balancing entails applying performance and security policies on a per-app or per-tenant basis. These app-specific policies can then be propagated across any cloud environment—as well as across any deployment environment such as development and production—thus eliminating irregularities in performance and maintaining or accelerating CI/CD deployment velocity.

## YOU DON'T NEED TO TRADE SECURITY OR PERFORMANCE FOR RAPID DELIVERY.

<sup>&</sup>lt;sup>1</sup> F5 State of Application Services Report 2019

With this approach, application development teams have the freedom and flexibility to choose the right environment to host their applications, as well as deploy load balancers closer to their apps, while still achieving consistent performance and ensuring a great customer experience.

## **HOW IT WORKS**

MAXIMIZE THE BENEFITS

AND MINIMIZE THE RISKS.

Designed for applications born and developed in the cloud, F5's cloud-native ADC solution, NGINX, is a lightweight, flexible software load balancer that delivers high performance and multi-cloud versatility.

You can use NGINX Controller's Load Balancing Modules to enable your DevOps and I&O teams to achieve policy-based management of NGINX Plus load balancers at scale across a multi-cloud environment—from initial configuration to ongoing management. It's easy to define configuration policies, reuse these policies across different environments, and ensure compliance with these policies with the intuitive GUI. Plus, you can quickly revert to a "golden version" if there are any issues.

Because it's extremely lightweight, you can load balance on a per-app or a per-tenant basis using NGINX Plus ADCs by applying policies that are tailor-made for every app—which results in optimal performance. Rich monitoring and alerting capabilities provide deep visibility into 200 key metrics and pre-emptive recommendations based on best practices, enabling IT and DevOps teams to avoid performance issues in the first place and quickly troubleshoot any issues that may arise.



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## CONCLUSION

Multi-cloud is here to stay. If you want to maximize the benefits and minimize the risks, you need a cloud-native ADC solution to deliver consistent, high-quality application performance and security services in all your private and public cloud locations. F5's ADC solution, NGINX, is here to help.

To learn more, contact your F5 representative, or visit f5.com/cloud



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