



SOLUTION BRIEF



Alkira and F5 Technologies

Revolutionizing Multicloud Load Balancing with Seamless Service Integration

About Alkira

Alkira offers global network infrastructure as-a-service. With Alkira, enterprises can have a consistent and significantly simplified experience deploying a global cloud network for end-to-end and any-to-any network connectivity across users, sites, and clouds with integrated network and security services, full day-2 operational visibility, advanced controls, and governance.



Overview

The technology integration between Alkira and F5 Technologies delivers a transformative Load Balancer-as-a-Service (LBaaS) solution that addresses the growing complexity of multicloud and hybrid environments. By combining Alkira's Cloud Exchange Points (CXP) with F5's industry-leading BIG-IP Virtual Edition, enterprises gain access to a unified, scalable, and secure traffic management solution that simplifies global application delivery while maintaining enterprise-grade performance and security standards.

This technology integration leverages F5's proven expertise in application delivery controllers with Alkira's innovative network infrastructure as-a-service platform to provide seamless high availability and load sharing services for cloud, multicloud, and data center application environments.



The Challenge

Modern enterprises face unprecedented complexity in managing application traffic across distributed, on-premise, hybrid and multicloud environments. Traditional load balancing approaches present several critical challenges:

- **Operational Complexity:** Managing multiple load balancers across different cloud providers and on-premises environments requires specialized expertise and creates operational silos that are difficult to maintain and scale.
- **Infrastructure Sprawl:** Deploying dedicated load balancers in each environment leads to significant infrastructure costs, licensing overhead, and management complexity, making it difficult to achieve economies of scale.
- **Security Gaps:** Disconnected load balancing solutions create security blind spots and inconsistent policy enforcement across environments, leaving applications vulnerable to threats and compliance issues.
- **Limited Visibility:** Fragmented traffic management tools provide insufficient insights into application performance, user experience, and security posture across the entire infrastructure stack.
- **Scaling Challenges:** DIY load balancing solutions struggle to provide elastic scaling and high availability across multi-environment deployments, leading to performance bottlenecks and potential service disruptions.

Benefits

The Alkira-F5 technology integration delivers comprehensive benefits that transform how enterprises approach load balancing in multicloud environments:

- ✓ **Simplified Global Deployment**
- ✓ **Automated Lifecycle Management**
- ✓ **Enterprise-Grade Security and Performance**
- ✓ **Consolidated Traffic Distribution**
- ✓ **Enhanced Operational Visibility**
- ✓ **Significant Cost Savings**



Solution

The Alkira-F5 technology integration provides a comprehensive Load Balancer-as-a-Service platform built on four core pillars:

- **Seamless Service Insertion:** F5 BIG-IP integrates as a fully managed service within Alkira CXP, providing uninterrupted connectivity and operational simplicity without requiring manual network configurations. The solution automatically handles all underlying infrastructure complexity while maintaining enterprise-grade performance and security.
- **Network Segmentation and Traffic Isolation:** Advanced network segmentation capabilities enable traffic isolation for different use cases, minimizing the risk of traffic overlap and enhancing security. Alkira network segments are automatically mapped to load balancer route domains, ensuring seamless routing between the load balancer and the Alkira CXP.
- **Active-Active Scaling Architecture:** Deploy multiple F5 instances in Active-Active mode to meet scaling demands. This architecture provides seamless application delivery with built-in high availability.
- **Granular Policy Control:** Implement flexible policy frameworks that enable traffic steering based on specific requirements. Customers can enhance application security by seamlessly integrating firewalls and security appliances inline within Alkira CXP, with granular control over traffic inspection and security policy enforcement.
- **Comprehensive Traffic Management:** The solution provides real-time visibility into all traffic traversing the CXP, enabling enterprises to monitor, analyze, and optimize network performance. Advanced analytics and reporting capabilities ensure efficient traffic management, enhanced security, and seamless application delivery.
- **Flexible Deployment Models:** Connectivity support for both cloud-native and hybrid deployments ensures the solution adapts to existing infrastructure while providing a clear path for network modernization initiatives.



Use Cases

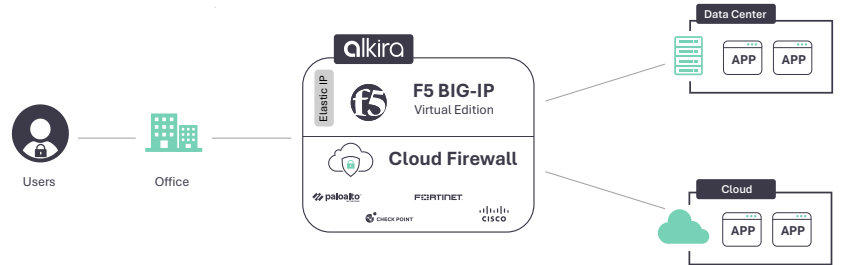
External Load Balancer

The F5 as an external load balancer integrated into the Alkira CXP delivers global application access through automatic elastic IP provisioning and intelligent traffic routing across multiple clouds and data centers. With flexible pool member placement and integrated firewall inspection, enterprises gain complete control over traffic distribution while maintaining enterprise-grade security—all managed through a unified platform that eliminates traditional multi-cloud complexity.



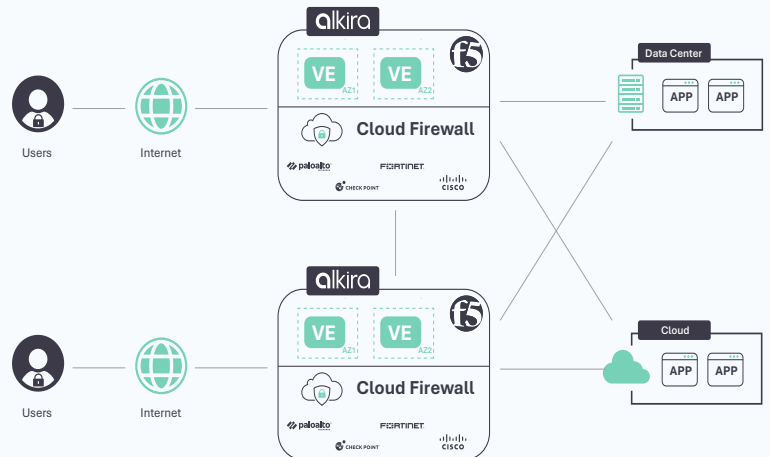
Internal Load Balancer

The F5 as an internal load balancer integrated into the Alkira CXP, provides secure connectivity between office networks and cloud applications. Similar to the external load balancer, customers have the ability to configure flexible pool members in multicloud environments along with enterprise-grade firewall integration.



Deployment models

The F5 integration with Alkira scales from single-region deployments to global, multi-cloud architectures without requiring infrastructure rebuilds. Whether deploying across multiple cloud providers or connecting on-premises data centers, the consistent management experience and unified policy framework simplifies operations while enabling digital transformation initiatives.





Conclusion

The Alkira-F5 integration represents a paradigm shift in how enterprises approach load balancing in multicloud and hybrid environments. By combining F5's proven application delivery and security expertise with Alkira's innovative Network-as-a-Service platform, organizations can achieve unprecedented simplicity, scalability, and cost-effectiveness in their traffic management strategies.

This technology integration eliminates the traditional trade-offs between functionality and operational complexity, delivering enterprise-grade capabilities through a unified, automated platform. Organizations can reduce infrastructure costs, enhance security posture, and improve application performance while maintaining full control over their load balancing policies and traffic management strategies.

The F5 integration enables enterprises to modernize their network infrastructure with confidence, knowing they have access to industry-leading technologies that scale with their business needs. As organizations continue to embrace multicloud strategies and digital transformation initiatives, the Alkira-F5 technology integration provides the foundation for reliable, secure, and efficient application delivery across any environment.

For organizations seeking to simplify network complexity while maintaining enterprise-grade performance and security, the Alkira-F5 integration offers a compelling path forward in the journey toward network modernization and operational excellence.



Addresses the growing complexity of multicloud and hybrid environments