Kemp Introduces AX Fabric for Multi-Cloud Application Delivery

Kemp Addresses the Full App Delivery Lifecycle with 360 AX Fabric
Kemp, a leading vendor of load balancers and application delivery controllers, announced the Kemp 360 AX Fabric (AX for application experience). This solution introduces an end-to-end approach to the automated delivery and management of application delivery services in any private or public cloud. It includes Kemp’s LoadMaster application delivery controller (ADC); Kemp 360 Central, an orchestration and automation platform for LoadMaster and third-party load balancers; and Kemp 360 Vision, an analytics platform that monitors and analyzes Layers 4 through 7 network and application performance.

The Cloud Requires App Delivery Orchestration, Automation, and Advanced Analytics
Enterprise Management Associates (EMA) research has found that enterprises are increasingly deploying hybrid cloud and multi-cloud architectures to support digital initiatives and IT transformation. Thirty-five percent of network managers say public cloud initiatives are a major driver of their decision-making today, and another 35 percent say private cloud initiatives are a major driver. In addition, the average enterprise claims that 45 percent of its network traffic is attributable to public cloud applications. These cloud solutions provide enterprise with the agility, elasticity, and scalability required to address the modern business environment. They also allow enterprise to replace or augment aging on-premises data center infrastructure with on-demand cloud capacity.

However, these hybrid cloud and multi-cloud environments introduce significant complexity, especially with respect to network infrastructure. Traditional load balancers and ADCs are designed for static environments where a monolithic appliance serves application services to dozens of applications. The cloud requires something more dynamic and streamlined. Cloud-native applications need higher performance virtual load balancers that are deployed with individual workloads on a per-application basis. Furthermore, as application delivery networking becomes more cloud-native, complexity is inevitable. Enterprises need sophisticated orchestration and analytics tools to streamline and optimize engineering and operations.

Kemp’s new architecture addresses these evolving application delivery requirements. It includes three core components:

- The Kemp LoadMaster is a flexible, high-performance load balancer/ADC/Web application firewall (WAF) that can be deployed on a per-application basis in cloud, virtual, and hardware form factors.
- Kemp 360 Central is a management platform that features zero-touch provisioning across multi-cloud and hybrid cloud environments. This includes health checks and analytics into Kemp ADCs/load balancers, as well as several third-party load balancers including AWS Elastic Load Balancer (ELB), F5 Networks’ Big-IP platforms, and open source solutions like NGINX and HAProxy. This automation and orchestration framework enables automated deployment of application delivery services on load balancers and ADCs across public and private clouds. It also offers a northbound REST API that integrates with higher-level orchestration platforms like Ansible, Chef, and Puppet for DevOps organizations.
- Kemp 360 Vision is a monitoring and analytics platform that collects telemetry from ADCs and from application components to provide insight into user application experience and network performance. It is a cloud-based solution that collects data via an agent deployed in the infrastructure. It combines advanced analytical heuristics and telemetry to automatically detect application problems and resolve them before they cause a service disruption. Kemp 360 Vision can also alert IT operations to issues as they emerge for those who are uncomfortable with closed-loop operations. This analytics platform also offers security analytics. It can produce predictive security insights by analyzing traffic across multiple customers’ networks to identify potential DDoS attacks, malicious intrusion, or emerging vulnerabilities.

Kemp positions this new 360 AX Fabric as a fully-managed load balancer lifecycle solution for any private data center, cloud, or mixed environment.

EMA Perspective

Enterprises are migrating away from monolithic load balancer appliances in favor of virtual software that can deliver services on a per-application basis across the private and public cloud. For instance, 70 percent of enterprises engaged in transforming their data center networks are virtualizing ADCs. EMA research has found that the top two requirements of such virtualized deployments are scalability and resource efficiency; e.g., feature sets tuned to application requirements.²

ADC virtualization introduces significant complexity. In fact, 42 percent of enterprises that are adopting virtual ADCs say they struggle with incompatibility within cloud and network orchestration platforms. Furthermore, 33 percent are struggling with license management complexity, and 32 percent struggle with service chaining complexity.³ Enterprises need a fabric solution that orchestrates and automates application delivery services across cloud environments.

Automation is especially critical. At least 92 percent of enterprise network engineering and operations professionals have an initiative in place to expand their use of network automation, and 70 percent say this automation is a high priority. This automation expansion is focused on a number of use cases, including network optimization (49 percent), network capacity planning (40 percent), fault and performance troubleshooting and remediation (36 percent), and cost optimization (36 percent).⁴

Kemp’s 360 AX Fabric offers an end-to-end architecture that addresses many of the issues mentioned above. EMA recommends that enterprise infrastructure operations leaders evaluate this architecture to determine if it meets their emerging multi-cloud and hybrid cloud requirements. EMA also recommends DevOps and line-of-business teams evaluate Kemp’s per-application ADC consumption model as a means to reduce deployment friction and costs tied to load balancing for specific application use cases.