

Peak 10



Background

Peak 10 is a managed services and cloud provider with world-class datacenters. It delivers scalable, economical and reliable solutions for hosting and managing complex information technology infrastructure. Peak 10's dedicated team embraces the industry's evolving technologies by adopting and tailoring solutions for cloud and virtualization technologies as part of its robust managed services offering.

Peak 10's Managed Hosting Services, whereby Peak 10 takes full administrative responsibility for a Web-based application and offers up to 100% availability service level agreements (SLAs), which includes several shared infrastructure components. One of these critical components is advanced application load balancing. The functionality is delivered from feature-rich technology which meets the customer's advanced load balancing requirements. It works well in a multi-tenant environment where economies of scale allow multiple customers to share the expense and offset the relatively high price tag of the appliances.

Many of Peak 10's clients, which do not wish to fully outsource the management of their application environment, still need load balancing services, which are defined as distributing web and Intranet traffic across two or more servers through a series of traffic rules, in order to place traffic on the best performing servers. In most of these situations, the feature requirements were relatively minimal: balance TCP (layer 4 in the OSI model) traffic between multiple servers, keep sessions persistent to a particular server, and remove a server from the service pool if it fails health checks or is overburdened.

Peak 10 has worked with a number of entry-level appliances to meet this need over the course of its ten year history as a data center services provider. Experience has shown that while devices meeting the functional requirements were cost-effective, they also suffered a rate of mechanical failure unacceptable to the solution. This has historically increased management complexities in a space where appliances typically did not come with a manufacturer hardware replacement SLA and high availability configurations were cumbersome at best.

The sum of the situation left Peak 10 looking for a load balancer manufacturer to partner with which could provide a good set of functionality for a reasonable cost, a platform that could scale from the SMB's basic requirements to an enterprise's high bandwidth needs, an intuitive interface that would allow Peak 10's technical staff to provide support, and robust monitoring hooks.

As Peak 10 polled its solution engineers for the list of providers which should be considered, one name came back consistently without stories of multiple failures or being too costly for the average customer: KEMP Technologies. Several of Peak 10's markets were managing the devices with confidence, and they were viewed as reliable, scalable, feature-rich, and fairly priced.

The KEMP Technologies LoadMaster platform is available as a physical appliance in four different sizes. The smallest of the models provides up to 200 SSL transactions per second which was Peak 10's key metric for performance, as most of its load balancing needs surround secure Web applications. The Web interface was intuitive enough that a systems engineer, who was involved with application server and OS aspects of a related environment could provision and support the devices without assistance from network engineering. KEMP also showed strong ties to Microsoft technologies, congruent to Peak 10, through its Exchange and Remote Desktop Services (aka Windows Terminal Services) functionality.

All of these features aside, there was one reason that really stood out to Peak 10 as to why KEMP Technologies could be a desirable partner in the load balancing space: the platform was available as a software subscription and could be deployed as a virtualized appliance. This model allows Peak 10 to deliver the KEMP solution from its CloudPlus environment, whereby Peak 10 provides a holistic solution to clients including the computing resources, the KEMP Technologies' software, and the management for a single monthly charge. Back-end resources can be scaled as needed to give the virtual load balancer more horsepower. This delivery model aligns with Peak 10's focus on recurring revenue and avoids the need to regularly resell or rent dedicated equipment.

By utilizing a KEMP-based load balancing solution, Peak 10's clients are able to take better advantage of cloud computing's promise of rapid elasticity. The ability to quickly scale out, by adding additional servers to accommodate increased workload, isn't a full solution without being able to spread traffic between the instances. As such, Peak 10 views a reliable load balancing platform as a critical component to its overall cloud strategy.

Peak 10 has successfully deployed a KEMP-based solution to solve a multitude of needs. As a typical example, a Peak 10 client utilizes the Virtual LoadMaster and the Virtual DR LoadMaster products to facilitate an active-active web application environment. Traffic is distributed between two sites using the DNS-based features of the Virtual DR LoadMaster, which selects the closest target environment based on the visitor's longitude and latitude. Within each geographically diverse infrastructure, traffic is then distributed between multiple front-end Web servers based on health and load. As an atypical example, a client utilizing infrastructure housed at their premise front-ends all traffic through Peak 10. By using KEMP's remote server load balancing capabilities, the client facilitates a very easy, yet desirably manual redirection to DR infrastructure at Peak 10 if required. The LoadMaster's flexibility enables out-of-the-box solutions when required.

In sum, Peak 10 has found KEMP easy to work with day in and day out, open to feature enhancement suggestions, and available both pre- and post-sales with product expertise as needed.