Fluid Networks creates a stable and scalable cloud-based platform for hosted medical application

When Fluid Networks was appointed to host a cloud-based medical application, it knew just how critical it would be to deliver reliable application performance for thousands of doctors. The company selected solutions from Loadbalancer.org and effortlessly supported a five-fold increase in user numbers over three years.

"The cloud only does one thing: gets bigger. Loadbalancer.org has enabled us to increase the number of end users in our hosted, cloud-based environment from a few hundred to several thousand while continuing to provide a stable application experience."

Damian Stalls,
Network Engineer,
Fluid Networks

Challenges

- Build a cloud-based platform to host a medical application

Solution

- Loadbalancer.org Enterprise AWS Cloud Solution

Benefits

- Delivers stable application performance for doctors and clinicians

- Allows end user numbers to increase five-fold over three years

- Simplifies the management of the hosted IT environment

- Improves the reliability of load balancing in the Microsoft Terminal Server farm

- Includes expert support

Challenges

Based in California, Fluid Networks is a successful provider of managed IT services with customers throughout the USA. It was appointed by a large IT vendor to build a software-as- a-service platform and host a cloud-based medical application initially for a few hundred doctors and clinicians.

To meet the requirements of this prestigious new client, Fluid Networks began to create a Windows Terminal Server environment in the Amazon Cloud. However, it quickly discovered that Amazon's integral load balancer function would not meet the requirements of end users, as it had a connection limit of just 23 minutes. Fluid Networks had to be able to provide stable end user connections for 12 hours or more, as well as ensure that its platform could support an increase in end user numbers.

Solution

Fluid Networks evaluated a number of possible solutions, of which most were either unnecessarily complicated or overly expensive. "When we discovered Loadbalancer.org's cloud-based load balancing solution, we found that we could start setting it up in minutes," recalls Damian Stalls, Network Engineer at Fluid Networks. "Other products had inferior configuration options and lacked key features."

The organization selected Loadbalancer.org's Enterprise AWS cloud-based load balancing solution to interact directly with its Amazon console and implemented two separate instances of the solution in its Microsoft Terminal Server farm, in an active/passive configuration. Initially, Fluid Networks only used the Enterprise AWS to balance its four gateways, but the installed Microsoft load balancers were struggling to allocate traffic appropriately at the broker and session host levels. The solution, as Stalls explains, "was to take all load balancing away from Microsoft and use the Enterprise AWS at all three levels."

Results

Over a period of more than three years, the Enterprise AWS has helped Fluid Networks to provide a stable application environment for its client – and its client's customers. Doctors and clinicians at hospitals and medical centers across the USA use the cloud-based patient management system every day to help them deliver the best possible levels of healthcare.

The cloud-based solution from Loadbalancer. org has proven to be highly scalable and capable of supporting the unexpectedly fast growth of the hosted medical application. Initially, the LoadBalalncer.org's Enterprise AWS balanced traffic for a few hundred end users; now it supports several thousand active users daily.

Most importantly for Fluid Networks, the Enterprise AWS is very easy to maintain, which helps it to manage the application environment for its client. "Every new release of the Enterprise AWS has had significant improvements, so it has got easier and easier to use over time," comments Stalls. "Loadbalancer.org is dedicated to enhancing its products and ensuring they work well in environments like the Amazon cloud."

Reliability has never been a concern. "We have been using the Enterprise AWS for over three years and have never had a problem with it," Stalls says. "Loadbalancer.org is an invaluable third party in our network."

Over the years, Fluid Networks has occasionally interacted with Loadbalancer.org's support team for help in diagnosing problems in its environment. Recently the company experienced a serious issue with Amazon, which Stalls describes as "mission critical." He says, "Loadbalancer.org got straight into the detail and identified the problem within about 15 minutes. By the next day, the company had a patch ready that enabled the Enterprise AWS to resolve the Amazon-derived issue."