Scomis improves the scalability and performance of its Hosted Application Service

A specialist IT services provider in the education market, Scomis provides hosted application services for over 600 primary and secondary schools across 19 local authority areas. It relies on virtualised load balancing solutions from Loadbalancer.org to help it deliver consistent application performance for over 4,500 concurrent.

Challenges
- Deliver consistent application performance and support business growth

Solution
- 3 x Loadbalancer.org Enterprise VA MAX software licences

Benefits
- Improves the application experience for users
- Provides a scalable foundation to support increasing user numbers
- Simplifies IT management in a large server farm
- Boosts the resilience and reliability of the server environment
- Includes responsive technical support

Our remote desktop users are based at more than 600 sites across the South and South West of England. Loadbalancer.org helps us to ensure that the educational applications they need are fast and consistently available.”

Zac Newton
Technical Manager, Scomis
Challenges

Scomis is part of Devon County Council but operates as an entirely separate, traded service and not-for-profit business. It offers a Hosted Application Service specifically for members of staff at schools, giving them easy access to administration and management information systems. Over a period of eight years, Scomis had enjoyed strong demand for its service and had built up a customer base of around 400 schools. It was keen to expand and offer its service to more schools outside Devon and Cornwall, but its plans were being hampered by failings in its installed load balancers.

“We found that our load balancers were not spreading traffic evenly across all available servers, so often there would be twenty users on one server and twice that on another,” explains Zac Newton, Technical Manager at Scomis. “As a result, we weren’t necessarily providing the same level of application performance for all our users. We needed to find new load balancing solutions that could deliver a consistently good user experience, while also enabling us to expand our services to even more schools across the country.”

Solution

Scomis did soft market testing of a range of load balancing products including market leaders and dismissed a large number of these potential solutions, as they couldn’t support the predicted future size of the organisation’s server farm.

In contrast, Loadbalancer.org provided the required scalability, along with good support and an established virtualised load balancing solution. “We were moving into a virtualised world and Loadbalancer.org offered virtualised appliances at a time when not many of the other vendors did,” Newton explains.

Today, Scomis uses two Enterprise VA MAX virtualised solutions to balance traffic in its primary hosted application environment. It also has a third Enterprise VA MAX licence, which it uses to support its carrier-neutral telecommunications strategy. This solution manages connections to two separate ISPs, so in the event of an outage or problem on one of these Internet networks, Scomis can easily redirect all its traffic to the alternate service.

Results

The virtualised load balancing solutions from Loadbalancer.org have given Scomis the scalability to achieve its expansion goals. Indeed, in the four years since the Loadblancer.org solutions went live, Scomis’ customer base has grown from around 400 to over 600 schools, spread across the country from Cornwall to Oxfordshire and Kent. In the same period, concurrent user numbers have more than doubled, increasing from 2,100 to over 4,500.

Throughout this business growth, users at schools have consistently experienced high quality application performance. This is because the Enterprise VA MAX works very effectively in distributing user traffic evenly across all available servers. Newton observes that, “The load balancers rarely go over 20% CPU, so there is plenty of capacity and performance to deliver a first-class hosted service for our current and future users.”

Significantly, the Enterprise VA MAX makes it easier for the IT team to manage the whole remote desktop environment. For example, Scomis can take servers in and out of production during the day and immediately ensure that users are directed to an alternative server to get uninterrupted service. In the past, there was always a two or three hour delay when users might still be directed to a faulty or disconnected server.

Loadbalancer.org also helps to improve the resilience and availability of the Scomis hosted application service. The first two virtualised solutions are configured in a clustered pair to eliminate a single point of potential failure, while the third virtual appliance makes Scomis less dependent on a single ISP. “I can’t recall any outages that have been the fault of our Loadbalancer.org solutions,” Newton says. “The uptime is in excess of 99.999% in the four years that we have had them.”

Above all, the IT team at Scomis is full of praise for the support it receives. Newton speaks for his colleagues when he says, “Whether we have a problem in the remote desktop environment that we need to resolve or just an idea to float, we always get a really fast reply and good advice from Loadbalancer.org.”