

Cashless payment specialist, USA Technologies, delivers reliable, secure mission-critical service performance with Loadbalancer.org solution

Having to process over 2 million vending machine payment transactions per working day across North America, USA Technologies - a cashless payment solution provider - needed a highly robust and reliable way to manage its high volume of web traffic. The company turned to Loadbalancer.org for the answer.



It's important that the products we use to support our high transaction count are reliable and cost effective so that we can ensure a first class service to our customers. Along with some other key parts of our data infrastructure, the Loadbalancer.org devices are essential to delivering reliability."

Joe Lucchesi
Senior Network Engineer, USA Technologies

Challenges

- Support and manage a high-volume of financial transactions
- Distribute customer reporting requests for cashless and cash transactions
- Significant increase in customer demand with a 3 to 4 year target of over 5 million daily payment transactions
- High cost and inflexibility of many load balancing products

Solution

- Enterprise 10G High Availability Clustered Pair

Benefits

- Ensures customers get a secure and reliable service for well over 500,000 cashless, mission-critical payment transactions per working day
- Offers a highly flexible, customizable and scalable load balancing facility
- Provides a 50-percent saving compared to other similar load balancing solutions
- Virtually fault-free products operating in full production for over six years

Challenges

USA Technologies, founded in 1992, is headquartered in Malvern, near Philadelphia, Pennsylvania. It employs 50 staff. The company's core business is cashless payment solutions for remote, standalone vending and similar machines. USA Technologies provides a range of electronic payment devices, incorporated into vending machines, laundromat washing and drying machines and other units, such as touch-screen gaming machines and kiosks. USA Technologies has around over 200,000 devices across the US and Canada, most of which are wireless.

The key part of the USA Technologies solution is the management and communication of credit and debit card transactions between devices and payment partners, such as VISA. With thousands of devices around North America operating 24/7, 365 days a year, USA Technologies handles around 2 million transactions every working day.

Increasing demand from customers and an increasing volume of transactions led to USA Technologies upgrading and renewing its data center facilities. The company has its main data center in the Philadelphia area and another data and IT facility nearby. It had upgraded servers and other networking devices and needed to find a suitable load balancing solution which was essential for the volume of transaction traffic the company needed to manage.

Solution

USA Technologies considered a number of different load balancing solutions from the brand leaders, but decided instead to use a solution from Loadbalancer.org.

Joe Lucchesi, Senior Network Engineer at USA Technologies says, "One of the stand-out features of Loadbalancer.org is the open source software embedded into its load balancing devices. This meant that we could customize scripts to create health checks specifically designed for our environment. The Loadbalancer.org devices were really the only products that enabled us to do this. When you've got the kind of heavy web traffic which we have, you need to have a very flexible and customizable load balancing solution. The other products that we looked at simply did not have the same capability."

USA Technologies is using the Enterprise 10G High Availability Clustered Pair load balancing solution from Loadbalancer.org. Two appliances are located in USA Technologies' main production data center. Another two appliances are installed in test environments. USA Technologies also plans on deploying two more Loadbalancer.org appliances in its production environment to handle more general web traffic.

As well as handling transaction traffic and general web traffic, the load balancers also manage traffic in and out of an online portal USA Technologies customers use to generate device and transaction reports. The portal has around 1,000 live connections at any one time.

Results

USA Technologies prepares for growth as the market continues to transition to cashless payment. The Loadbalancer.org solution will be critical in supporting this business expansion because it provides a reliable, cost effective and flexible way of managing high volumes of transaction data.

USA Technologies believes that the Loadbalancer.org products saved the company as much as 50 percent compared to other branded load balancer products. They are also very reliable and stable.

Lucchesi says, "The margins in our business are not very high so whatever we do, in terms of infrastructure investment, we have to find the best value. Compared to some of the other load balancing products in the market, the price point of the Loadbalancer.org products is excellent."

From a usability and performance perspective, the Loadbalancer.org devices have also been very good. Some equipment has even been used at USA Technologies since 2006, it has required little maintenance and in that time has suffered virtually no problems at all. Also, an easy-to-use web interface on the load balancer appliances makes every day management simple.

About Loadbalancer.org

Loadbalancer.org's mission is to ensure that its clients' businesses are never interrupted. The load balancer experts ask the right questions to get to the heart of what matters, bringing a depth of understanding to each deployment. Experience enables Loadbalancer.org engineers to design less complex, unbreakable solutions - and to provide exceptional personalized support.

