Abans PLC

Industry:
Retail and Consumer Services

Network Solution:
A10 ADC

Critical Issues:
• Existing system structure was creating a major support burden
• Line-of-business (LOB) applications, currently based upon a distributed database approach, were difficult to manage and scale
• With more than 2,000 users of the Remote Desktop Services (RDS) systems connecting from multiple locations across the country to the head office, there was a need to evenly distribute the network traffic across the servers to ensure high network performance
• A responsive IT infrastructure was required to support agile operations across the whole island of Sri Lanka

Results:
• High-performance network, ready for future expansion
• Excellent features for RDS and Virtual Desktop Infrastructure (VDI) load balancing
• All-in licensing model
• Exceptional service and support during rapid deployment

"A10 Networks provided a deployment guide for setting up the ADCs to work with Terminal Services and Remote Desktop Services, easing the burden for the local implementation partner and the customer, Abans. The local systems integrator and implementation partner, EGUARDIAN, took care of the setup and configuration of the A10 ADC, which has performed faultlessly from day one. In the few times we encountered a configuration issue, A10 immediately helped us resolve the problem."

Pubudu De Silva
Senior Manager of IT, Abans PLC

Incorporated in 1981, Abans PLC is the vital trading arm of the Abans Group, representing world famous brands of electric and electronic home appliances, crockery and cookware, sanitary and light fittings, and a host of other household items that make Sri Lankan people’s lives easier and better. Over the last few decades, Abans has grown to become one of the biggest retailers in Sri Lanka, with over 750 showroom outlets around the country, supplying appliances from leading brands together with trusted warranties, as well as equipment and services for businesses.

Abans’ main showrooms are located across three floors of its group head office on the main thoroughfare in the heart of Colombo City, with 25 more elite showrooms located throughout Sri Lanka. Abans also has more than 400 authorized dealers in remote, rural areas, bringing its products within reach of each family and every household in the country.

Continuously seeking to expand and improve upon its product and service offering, Abans required a responsive IT infrastructure to support agile operations across the whole island of Sri Lanka, and to provide the company’s local staff with a high-performance and reliable network to offer the best possible customer experience.

Challenges

With the continuous growth and expansion of Abans’ network of stores, the existing system for providing line-of-business (LOB) applications based on a distributed database architecture was turning into an administrative burden, and Abans realized that the company needed to shift to a more manageable and scalable approach. To provide the front-end applications of the showroom, Abans has at least one PC in each showroom, with some locations having more than one PC, where each PC is connected to the head office servers over the WAN using Remote Desktop Services (RDS) technology. In total, more than 2,000 users of the RDS systems connect from multiple locations across the country to the head office, creating an urgent need to evenly distribute network traffic across the servers to ensure high network performance.
Selection Criteria

Pubudu De Silva, Senior Manager of IT at Abans PLC, considered all of the options for restructuring the existing systems to provision LOB applications countrywide and decided that a centralized database model with applications provided via RDS would offer the optimal combination of real-time data and central management. This would require a central server system capable of supporting simultaneous RDS connections from the nationwide network of stores, of scaling to accommodate future growth, and of supporting the installation of new client systems in outlets across the country. Once De Silva had structured the best model for Abans, he acted decisively. He knew that this project needed to happen, and it needed to happen quickly to cope with the rising support burden on the existing infrastructure.

Once the system model was structured, De Silva immediately set about evaluating solutions proposed by various local systems integrators. In order to complete the complex implementation within the required tight timeframe, De Silva needed a solution and a partner he could count on. Abans evaluated an entry model of the A10 Networks® ADC against competing products from Juniper, Cisco, Extreme and Fortinet, but it was A10 that came out as the clear leader in terms of performance, scalability and cost effectiveness, especially with respect to the key load-balancing feature of the new system.

Solution

The A10 ADC with its Advanced Core Operating System (ACOS®) has been designed specifically for applications such as Terminal Services (TS) and RDS, providing more robust response in failover situations, offloading security processing, and performing intelligent load sharing for all three access modes. Features such as token redirection allow for routing and reconnection of existing sessions, providing a more resilient implementation. Additionally, the Abans team was attracted to the A10 ADC's capability to support large RDS farms, as it will be able to support future expansion, no matter how large the company grows, with granular RDS load balancing and availability options.

At the same time, De Silva had great faith in the chosen implementation partner in Sri Lanka, EGUARDIAN, to be able to handle the complex implementation in a very tight timeframe.

Results

The A10 ADC load balances remote users, distributing traffic across four Windows servers that handle the RDS sessions. In addition, the A10 ADC load balances connections from a second office in Colombo, where VDI provides 150 users with access to the full range of head office application systems. Besides virtual desktop and application access, the A10 ADC load balances Exchange Server connections as well.

Lightning Fast Deployment

At Abans, the timeline for new product implementation depends largely upon the proof of concept (POC) and verification of reliability. Once the suitability to needs is proven, the procurement process moves very quickly, and implementation can occur without long delays. The performance and scalability of the A10 ADC in testing was very impressive, with all functionality included, and no hidden, additional license fees.

Upon receiving the green light for implementation to proceed, incredibly in the space of just six weeks, the Abans IT team set up and configured the Windows servers, the RDS cluster, the firewall, the A10 ADC, and the client RDS endpoints at 750 locations around the country, completing everything in parallel and succeeding in going live without a hitch. That equates to completion of setup and configuration in over 20 locations per day, working six days per week, in addition to the central server cluster configuration.

Figure 1: A pair of A10 ADC appliances load balance RDS infrastructure as well as web, email, ERP, and other application servers
Phenomenal Sales and Implementation Support
Support for the implementation was received from A10 engineers in Singapore and the local partner EGUARDIAN in Sri Lanka. Understanding the urgency of the project, with a very short timeframe in which to go live, they really came through to make the project possible.

“A10 Networks provided a deployment guide for setting up the ADCs to work with Terminal Services and Remote Desktop Services, easing the burden for the local implementation partner and the customer. The local systems integrator and implementation partner, EGUARDIAN, took care of the setup and configuration of the A10 ADC, which has performed faultlessly from day one. A second unit of the A10 ADC was added to create a high availability (HA) setup, as well as for future capacity expansion, for which some additional configuration was required. When an issue was encountered during this configuration, the response from A10 was excellent, and A10 quickly resolved the problem,” said De Silva.

With this kind of ability to achieve such a remarkable transformation in so little time, it is clear to see why De Silva was recognized in the Great CISO Awards Sri Lanka in 2013 for his contribution in using information security technology to deliver business value. Looking back at the project, De Silva commented, “We always like to discover a brilliant product. We are very happy indeed with the A10 ADC model selected for this project, and we really appreciate how it fits into the overall solution. Customers all around the world would love to have products like this, which are robust to use with vital LOB applications and complex networks. I have to express my gratitude to A10 Networks for making such fantastic equipment available to the industry.”

Success and Next Steps
Abans expects to continue to expand its showroom channels at a rate of at least 20 showrooms per channel per year. With four major channels, that equates to over 80 additional showrooms per year covering the whole country. There is also the possibility of unplanned expansions. For example, in the past year, Abans acquired a business in the same sector which had 100 showrooms. On top of that, there is a plan to expand the motorbike showroom channel, from 100 showrooms up to 200 showrooms.

With many other projects in the pipeline, Abans is looking forward to working with A10 Networks again in the future. De Silva mentioned “Abans makes a promise to its customers of a trusted guarantee of quality and reliable after-sales service.’ In this project, A10 Networks and EGUARDIAN absolutely lived up to the standard that we set for ourselves, and so it was great working with them. We have monitoring services in place, both at the network level and right down to the hard disk level, and everything is running perfectly. The transformation brought about by the project as a whole is like night and day. Before we had a system based on the distributed database concept, but now we have shifted to a central database, and through this we are able to provide management with more timely information, and at the same time benefit from greatly simplified IT management, freeing us to think more strategically about our IT infrastructure rather than spending time troubleshooting individual issues in remote locations.”

About A10 Application Delivery Controllers
A10 ADC is a scalable, high-performance application networking platform that delivers enterprises, web properties and Internet Service Providers (ISPs) superior reliability and an energy efficient footprint for lower total cost of ownership (TCO). With A10 ADC, customers of all sizes benefit from application availability, scalability and performance as well as increased infrastructure efficiency and a faster end user experience. A10 ADCs have a comprehensive Layer 4-7 feature set and flexible virtualization technologies such as A10 Networks aVCS™ Virtual Chassis System multi-tenancy and more for public, private and hybrid cloud environments. In addition, A10 ADC leads in IPv6 migration technologies with many large-scale deployments worldwide.

A10 ADC delivers industry-leading return on investment (ROI) by leveraging A10’s 64-bit Advanced Core Operating System (ACOS), with a scalable shared-memory parallelism architecture that leaps the competition in scalability and flexibility.

For more information, visit: www.a10networks.com/products/application_delivery_controllers.php.

About A10 Networks
A10 Networks (NYSE: ATEN) is a leader in application networking, providing a range of high-performance application networking solutions that accelerate and secure data center applications and networks of thousands of the largest enterprise, service provider and hyperscale web providers around the world. Founded in 2004, A10 Networks is based in San Jose, Calif., and serves customers globally with offices worldwide. For more information, visit: www.a10networks.com.