

# New Zealand Council Future Proofs Network with A10 ADC Appliances

## Company

- Thames-Coromandel District Council (TCDC)

## Industry

- Government

## Critical Issues

- A district council in New Zealand in need of upgrading an old load balancing solution, which was unable to meet increasing demands and support new services, causing worries about performance, security, and overall manageability.

## Selection Criteria

- High performance that can manage growing traffic volumes to ensure availability and performance of mission-critical online services
- Success of the proof of concept (POC) proving the A10 ADCs' ability to quickly integrate into the existing network environment

## Results

- Quick and efficient deployment due to the intuitive user interface
- Significant performance improvement; made load time of web pages 5 times faster
- Separation and partitioning of multiple ADCs on a single platform where rule changes do not affect each other



*“A10's unique Application Delivery Partition (ADP) feature has been highly beneficial, allowing us to utilise their device as load-balancer on our LAN, as well as being a perimeter device.”*

**Shiv Singh**  
Thames-Council District Council  
Networking Engineer

The Thames-Coromandel District Council (TCDC) in the North Island of New Zealand is seated in the town of Thames. It is located in the region around the Firth of Thames and Coromandel Peninsula, to the southeast of Auckland. It is the first District council to be formed in New Zealand, being constituted in 1975. As of June 2012 the population of the TCDC district is estimated at 27,000.

Thames-Coromandel District Council (TCDC) in New Zealand has created a fast, reliable future-proofed network for interacting with and servicing its various communities. The main drivers of this efficient technology are two application delivery controllers from A10 Networks, whose benefits include enabling Council's web pages to load five times faster than before.

## Situation

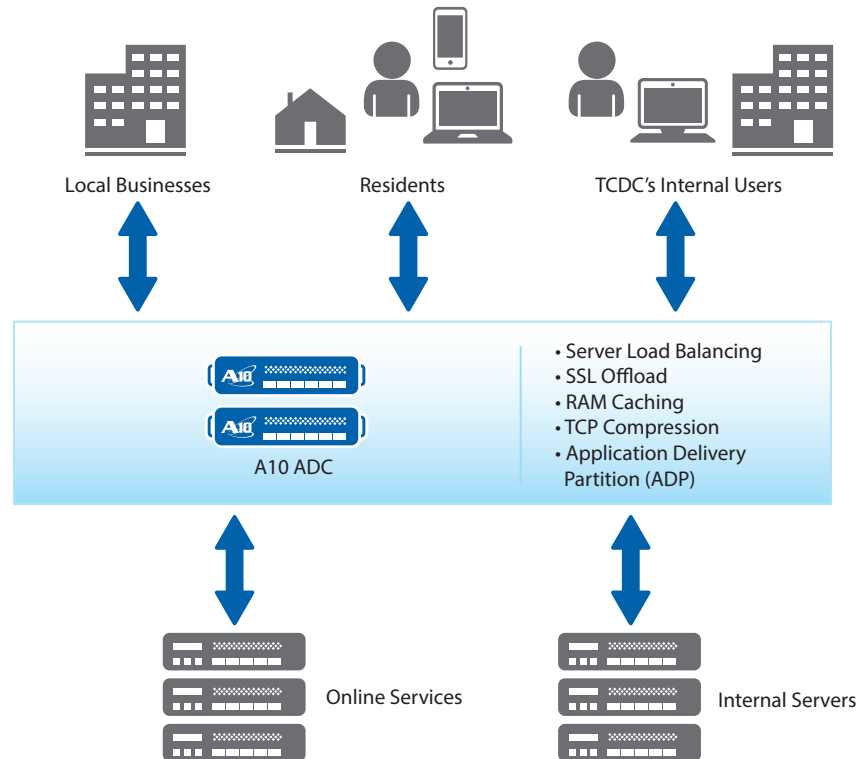
TCDC manages social, economic, cultural and environmental matters for a diverse community on the East Coast of New Zealand's North Island. A wide array of online services comprise a key element of TCDC's commitment to local businesses, residents and internal users. These services include everything from waste collection to town planning, and span the gamut from libraries to environmental issues and local cemeteries.

The TCDC relies heavily on web-based services to provide an efficient delivery mechanism to all parties and to support the organisation's overall mission and goals.

According to TCDC, the local authority focuses on ensuring that its communities have a good quality of life, now and in the future. TCDC identifies what its communities require and pinpoints the most effective ways of fulfilling those needs. The commitment to mission-critical online services demands a fast, reliable network.

## Critical Issue

Based on its previous technology, TCDC's ability to support the future requirements of all stakeholders was very limited. Performance, security and overall manageability were being compromised and the situation was expected to deteriorate further as more applications were added to the network.



*Thames-Coromandel District Council's Solution for Application Delivery*

Auckland-based IT consultants Network Edge, who have worked closely with TCDC for some years, suggested that TCDC look at ways of speeding up their applications and preparing the network for greater capacity in the near future.

Paul Johnson from Network Edge said: "There were some performance issues with the network setup. Application delivery relied on an end-of-life (EOL) Microsoft ISA, which was fine initially, but the infrastructure could not meet increasing demands and support the new services TCDC were looking to introduce."

## Solution

Network Edge evaluated the existing solution and sought ways to remedy the situation. They considered products from several vendors to help with Server Load Balancing (SLB) and Application Networking, before recommending deployment of A10 ADCs.

A10's advanced Application Delivery Controllers help organisations such as TCDC to scale and maximise application availability and ensure their networks run at peak efficiency.

A10 worked with Network Edge to understand TCDC's key requirements and develop a proof of concept (POC). The A10 ADC was quickly integrated into the existing network environment.

A10's appliances improve web services availability through SLB, as well as performance optimisation through SSL Offload, HTTP caching and compression. The A10 ADC also optimises security services such as Distributed Denial of Service (DDoS protection), Web Application Firewall (WAF) and DNS Application Firewall (DAF), and future-proofs TCDC in areas such as multi-tenancy, IPv6 Migration and Virtualisation.

## Results

Paul Johnson said: "Implementation after a proof of concept (POC) and then transitioning into production using the A10 ADC was extremely easy. The A10 interface is highly intuitive and enabled our new infrastructure and services to be deployed quickly and efficiently."

Performance benefits were apparent immediately. The average load time of web pages is now five times faster—1.4 seconds per page compared to the previous 7 seconds. With cached web pages on the A10 ADC, the average load time is close to 0.6 seconds.

Certain critical features were needed immediately, and the expected benefits of deploying these features already are being fully realised by the TCDC. But investment in A10 ADCs also has improved performance in unexpected areas.

"A10's unique Application Delivery Partition (ADP) feature has been highly beneficial, allowing us to utilise their device as load-balancer on our LAN, as well as being a perimeter device," said Shiv Singh, TCDC's Networking Engineer.

"We can create logical Layer 3 separation on the appliance for services published in DMZ, WAN, LAN and to the Internet. Each partition has its own routing table, its own group of networks and associated VLANs. A rule change on one LAN partition will not affect the rule changes on other partitions. The A10 technology is a perfect fit."

## 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) with superior reliability and an energy-efficient footprint for low total cost of ownership (TCO). With A10 ADC, customers of all sizes benefit from application availability, scalability and performance, increased infrastructure efficiency and a faster end user experience. The A10 ADC has 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 leads in IPv6 migration technologies with many large-scale deployments worldwide.

A10 ADC delivers an 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 surpasses the competition in scalability and flexibility.

For more information, visit: [www.a10networks.com/products/application\\_delivery\\_controllers.php](http://www.a10networks.com/products/application_delivery_controllers.php)

## About A10 Networks

A10 Networks is a leader in application networking, providing a range of high-performance application networking solutions that help organizations ensure that their data center applications and networks remain highly available, accelerated and secure. Founded in 2004, A10 Networks is based in San Jose, California, and serves customers globally with offices worldwide. For more information, visit: [www.a10networks.com](http://www.a10networks.com)

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To learn more about the A10 Thunder Application Service Gateways and how it can enhance your business, contact A10 Networks at: [www.a10networks.com/contact](http://www.a10networks.com/contact) or call to talk to an A10 sales representative.