Media Conglomerate Dainik Bhaskar Accelerates Website Performance with A10 ADC

Company
Dainik Bhaskar Group

Industry
Media

Network Solution
A10 ADC

Critical Issues
- Slow application performance during traffic spikes
- Network congestion and lag caused by multiple users accessing the website at the same time
- Need to scale website performance when traffic peaked
- Existing integrated firewall and load balancer had limited features and scalability

Results
- Faster web acceleration and better scalability and management of traffic spikes; application and network response increased by 50-60%
- The same physical server can now be used across different applications and environments
- Network bottlenecks have been ameliorated and all websites maintain optimal performance during traffic spikes
- The A10 ADC performs periodic health checks and alerts the network administrator whenever a server goes down

> **"**_The world's number one Hindi portal, Dainik Bhaskar, hosts around 15 domains and several sub-domains for its daily readers," added Mr. Nathan. "We also receive around 24 million unique visitors on our websites and A10 Networks has provided us a timely solution for the problem we were facing on slow application performance. It has not only saved us a lot of time, but also helped us in uninterrupted service along with improved performance._**"**
>
> **Mr. Arokia Nathan**
> Head of Technology,
> Dainik Bhaskar

India's largest media conglomerate, Dainik Bhaskar, first began publishing in the year 1956 in Bhopal and the central province of Gwaliorto, to fulfill the need for a Hindi language daily newspaper. The newspaper went by the name Subah Savere in Bhopal and Good Morning India in Gwalior. It was renamed twice, in 1957 as Bhaskar Samachar and in 1958 as Dainik Bhaskar. In 2010, Dainik Bhaskar became the number one circulated daily newspaper in India – and number 11 worldwide.

Challenge

Dainik Bhaskar Group required a solution that could manage its network traffic during spikes. The newspaper organization was previously using a Fortinet firewall with a basic load balancer that provided limited features and scalability. Dainik Bhaskar maintained several news delivery network platforms, and these platforms faced frequent traffic spikes. Application usage surged whenever any major events occurred.

Whenever significant news announcements were made, network traffic would typically spike between 30% to 70%. With 15 websites across the region and nationwide, the critical challenge was to improve Dainik Bhaskar's website performance during peak traffic when many users were trying to access a single website at the same time.

Selection Criteria

Following the proof of concept (POC), Dainik Bhaskar Group selected A10 Networks® ADC to optimize its website performance. After installation, website performance improved appreciably, and the A10 ADC solution ensured low website latency even when application traffic spiked.

"We chose A10 Networks for their features and their price-performance advantage. We were able to control costs with no added licensing fees. A10 worked closely with us to deploy the solution from start to end," said Mr. Arokia Nathan, Head of Technology at Dainik Bhaskar.

dainikbhaskar.com

More than 20 server farms were deployed, allowing the same physical server to be used across different applications and environments. The A10 ADC solution enabled better scalability and management of traffic spikes by accelerating web traffic through RAM caching and compression. A10's Transmission Control Protocol (TCP) multiplexing feature ensured that few connections were opened on the web server, enabling requests to be processed more quickly. Its built-in intelligence meant that the A10 ADC was able to perform periodic health checks and to alert the network administrator whenever a server went down. Another important benefit was that the same physical server could be deployed when other farms were not available.
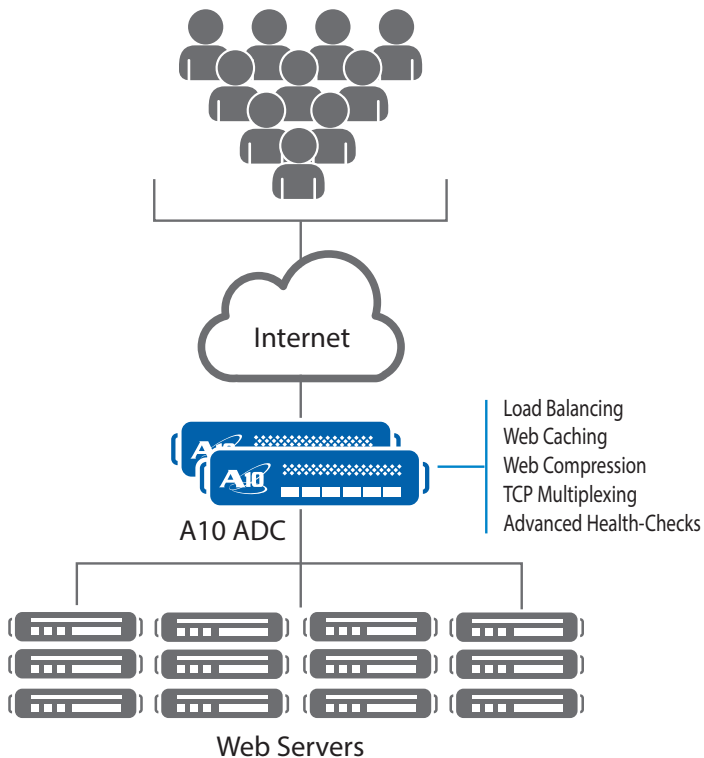

Load Balancing
Web Caching
Web Compression
TCP Multiplexing
Advanced Health-Checks

A10 ADC

Web Servers

Figure 1. A10 ADC architecture

Solution

A10 Networks ADC product line of high-performance Application Delivery Controllers has helped Dainik Bhaskar's network to be highly available, accelerated and secure. A10 ADC is built upon A10's Advanced Core Operating System (ACOS®) platform, with Symmetric Scalable Multi-Core Processing (SSMP) software architecture, and delivers high-performance options for dedicated, hosted or cloud data centers.

- Highly available applications and data centers, advanced server load balancing and Global Server Load Balancing (GSLB) help maximize uptime by detecting local and remote outages.

- Users benefit from the integration of Software Defined Networks (SDNs) with overlay networking (VXLAN and NVGRE), cloud orchestration systems (OpenStack, Microsoft SCVMM and more) and A10 ADC allows service chaining and traffic insertion.

- Fast deployment, proven application configuration and provisioning rapidly enable business-critical applications with predefined smart templates for popular applications from Microsoft (Exchange, Lync, SharePoint), Oracle and many more, result in full deployment in hours, not days or weeks.

- A10 ADC provides complete management control with custom scripting for compatibility with home-grown management operations or integration into third-party management systems.

- The Web Application Firewall (WAF) guards web servers against the critical Open Web Application Security Project (OWASP).

Protecting against the latest emerging threats, A10 ADC allows the network to always be ready with effective countermeasures. Distributed Denial of Service (DDoS) protection features are standard in all appliances, and with Field Programmable Gate Array (FPGA) Flexible Traffic Accelerator (FTA)-based models, protection is available against high volume attacks on application servers.

Results

Using A10 Networks Application Delivery Controller solution, Dainik Bhaskar was able to save on CAPEX costs from lower power consumption. The solution was hosted in the data center within a 1U size rack, a feature that made it easy to manage. As there were no added licensing fees, the newspaper organization had greater peace of mind, knowing that its investment was both scalable and future proof.

"Dainik Bhaskar's biggest concern was to improve application performance," said A10 Networks Country Sales Manager, Mr. Shalendra Singh. "We would like to thank Dainik Bhaskar Group for the confidence that they have shown in us. The A10 ADC solution has helped them to address their problems. We are confident that our solution can help Dainik Bhaskar to render better services to its website visitors."

Success and Next Steps

During deployment, Mr. Nathan said the A10 Networks team helped Dainik Bhaskar solve application bottlenecks and, at the same time, made sure that application performance was fast and responsive so that pages did not take long to load during peak times.

"The world's number one Hindi portal, Dainik Bhaskar, hosts around 15 domains and several sub-domains for its daily readers," added Mr. Nathan. "We also receive around 24 million unique visitors on our websites and A10 Networks has provided us a timely solution for the problem we were facing on slow application performance. It has not only saved us a lot of time, but also helped us in uninterrupted service along with improved performance."

In the future, Dainik Bhaskar expects to take advantage of enhancements such as MySQL caching and other advanced features already available in its A10 ADC.

About Dainik Bhaskar

DB Corp Ltd. is India's largest print media company. It publishes 8 newspapers with 66 editions and 199 sub editions in 4 languages (Hindi, Gujarati, English and Marathi) across 13 states in India. DBCL's flagship newspapers Dainik Bhaskar (in Hindi) established in 1958, Divya Bhaskar and Saurashtra Samachar (in Gujarati) have a combined average daily readership of 19.8 million, making them one of the most widely read newspaper groups in India with presence in Madhya Pradesh, Chhattisgarh, Rajasthan, Haryana, Punjab, Chandigarh, Himachal Pradesh, Uttrakhand, Delhi, Gujarat, Maharashtra, Jharkhand and Jammu. DBCL is the only media conglomerate that enjoys a leadership position in multiple states, in multiple languages and is a dominant player in all of its major markets.

The company's other business interests also span the radio segment through the brand "My FM" Radio station with presence in 7 states and 17 cities, and a strong online presence in Internet portals.

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 ADC 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.

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**.

Corporate Headquarters

A10 Networks, Inc
3 West Plumeria Ave.
San Jose, CA 95134 USA
Tel: +1 408 325-8668
Fax: +1 408 325-8666
www.a10networks.com

Part Number: A10-CS-80130-EN-01
Apr 2015

Worldwide Offices

North America
sales@a10networks.com
Europe
emea_sales@a10networks.com
South America
latam_sales@a10networks.com
Japan
jinfo@a10networks.com
China
china_sales@a10networks.com

Taiwan
taiwan@a10networks.com
Korea
korea@a10networks.com
Hong Kong
HongKong@a10networks.com
South Asia
SouthAsia@a10networks.com
Australia/New Zealand
anz_sales@a10networks.com

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** or call to talk to an A10 sales representative.