

# GAIN Capital Deploys A10 ADC to Scale FOREX.com Performance

## Company:

- Gain Capital

## Industry:

- Finance

## Critical Issues:

- SSL performance issues coupled with fast local and intra-data center application resiliency

## Selection Criteria:

- Full ADC feature set, SSL performance, advanced HA, IPv6 migration

## Benefits:

- Increased performance, improved resiliency, larger ADC feature set and increased data center efficiency

## Results:

- Predictable operation, downtime elimination, greater ADC flexibility with future investment protection due to all-inclusive no licensing model and reduced data center OPEX costs (e.g. space and power)

*“The A10 ADC helps GAIN Capital increase our SSL performance and overall capacity for our business critical applications, while its compact size and lower power requirements help us meet green data center goals within our current ecosystem.”*

**Todd Wojcik**  
Director of Network Engineering  
GAIN Capital

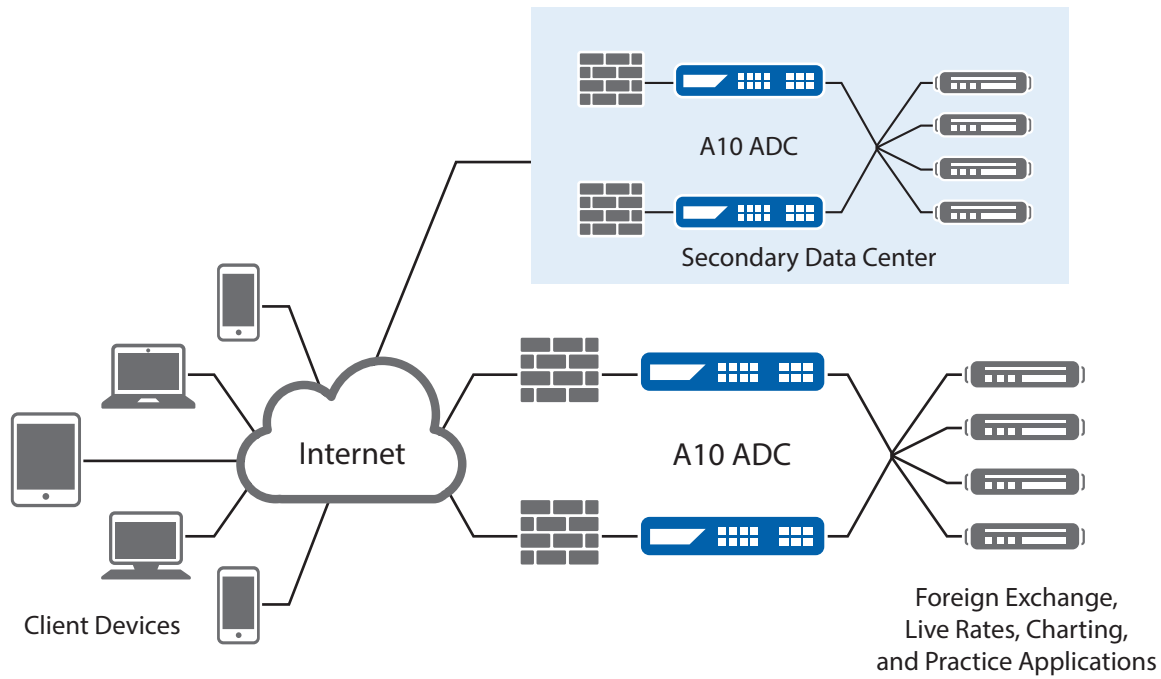
GAIN Capital Holdings, Inc. (NYSE:GCAP), a global provider of online trading services specializing in foreign exchange (forex) and contracts for difference (CFDs), offers award-winning trading solutions for customers and partners in more than 140 countries. GAIN Capital operates FOREX.com, one of the best-known brands in the global retail forex industry.

In response to increasing customer demand, GAIN Capital sought to optimize the applications that support its popular trading platforms 24/7. GAIN uses Application Delivery Controllers (ADCs) to provide server load balancing for its trading applications, which supply live market rates, streaming news and real-time account information.

These applications are business critical so instant failover in the event of an outage is necessary. GAIN's existing ADCs were struggling to keep up with the increased demand. GAIN also discovered that one of the factors contributing to its SSL performance restrictions was due to the need to switch to larger more secure 2048-bit security certificates. A 2048-bit certificate size can account for an additional 3 to 7 times impact in performance over a 1024-bit certificate. GAIN Capital needed to refresh its existing ADCs to increase performance while maintaining a consistent user experience to its clients.

## Planning for Future Application Delivery Needs

GAIN Capital initiated an evaluation of three leading ADC vendors. Each vendor's ADC was evaluated in several areas: SSL performance, price/performance, High Availability (HA), 10 Gbps scalability and the quality and responsiveness of their customer support services. After extensive testing in its evaluation cycle, GAIN decided that A10 met all the required goals and provided additional performance and functionality along with a reduced capital and operational cost. An attractive element for GAIN was that features such as SSL Offload, IPv6 and dynamic routing were included for operational simplicity and did not require an additional cost as with the competitors' solutions. A10's increased SSL performance, and extra capacity for growth, along with the advanced HA options led GAIN to select A10 ADC as the clear choice to replace the incumbent units.



*Gain Capital's Data Center Deployment*

GAIN Capital chose to deploy multiple pairs of A10 ADCs in HA mode at its two data centers in New Jersey to provide advanced server load balancing to its critical trading applications. SSL Offload and optimization features have allowed GAIN Capital to improve performance for customers by reducing response times while greatly increasing reliability within and between data centers.

### Critical A10 ADC Features

GAIN Capital selected A10 ADC over the incumbent appliances and other competing solutions for the following compelling reasons:

- **High Availability (HA):** With GAIN Capital's configuration, no down-time is tolerable, so added health checks to verify firewall connectivity are used to provide stateful sub-second failover. This ensures traffic is re-routed instantly in the event of a network failure.
- **SSL Offload:** With A10 ADC, SSL Offload decrypts HTTPS to allow subsequent HTTP forwarding to the backend web servers, benefitting GAIN Capital in the following ways:
  - Increased SSL transaction capacity of 3X over previous vendor
  - Centralized certificate management on the A10 ADC
  - Increased server transaction capacity due to servers being freed from SSL processing
  - Extra capacity ensuring no negative impact from the migration to compute intensive 2048-bit keys

- **IPv6 Ready:** The A10 ADC migration capabilities such as SLB-PT (Protocol Translation) will allow GAIN to seamlessly offer IPv6 access to its clients without the need to change their existing IPv4 infrastructure despite the protocols not being compatible.

With all features included and an easy to use GUI, GAIN Capital ensures they can deploy any feature anytime.

### Success

Financial organizations such as GAIN Capital need to provide their customers with the highest degree of performance and uptime. Any downtime or loss of connections results in significant cost to the institution as well as potential loss of customers and customer confidence. The introduction of the A10 ADC application acceleration features has allowed GAIN Capital to increase and optimize capacity for future growth.

With A10 ADC, GAIN Capital has improved its customer user experience while promoting the use of GAIN services on many of the most popular smart phones and tablets. The A10 ADC provides GAIN Capital access to all advanced ADC features on-demand, ensuring operational simplicity, predictability and a powerful array of features that can be used to accommodate any of GAIN Capital's ADC business requirements, planned or unplanned.

## 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](http://www.a10networks.com/products/application_delivery_controllers.php)

## About GAIN Capital

GAIN Capital specializes in trading services such as:

### FOREX.com

For retail traders of all experience levels who want to trade currencies, commodities and CFDs in major global markets

### GAIN Securities

For individual investors who want to trade stock, options, ETFs (Exchange Traded Funds), mutual funds and other exchange traded products

### GAIN GTX

For financial institutions' hedge funds, and HFTs looking for access to a fully anonymous trading environment via an independent FX ECN (Electronic Communication Network)

## 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.

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