

Scaling Web Application Delivery for Education

“Our existing server load balancer platform was incapable to meet the needs for our new Web service project. We chose A10 ADCs as they met and exceeded the project’s functional requirements, including scalable performance for growth.”

Andrew McClements
Network Services Manager
University of the Arts London

Founded iUniversity of the Arts London is a vibrant world center for innovation, comprising six internationally renowned colleges. It is Europe’s largest university for art, design, fashion, communication and the performing arts.

University of the Arts London leverages Web technologies to provide a multitude of applications and services to its students and faculty. It has over 25 websites with interactive content, including bandwidth-intensive graphic applications. Its infrastructure spans two data centers and consists of Apache servers running on VMware that communicate with and retrieve information from the MySQL and Oracle databases on the backend.

In 2009, University of the Arts London began a new Web service project to create a new architecture capable of providing optimized content delivery to site visitors. The project consisted of an initial phase: Redesign and build a new hardware/software platform, which included replacing the existing Radware server load balancers whose capacity was maxed out.

During the server load balancer evaluation process, the following capabilities were deemed requirements:

- Direct user requests to the best fulfillment server across both data centers, based on host/URI and server availability/performance
- Terminate SSL for HTTPS traffic once within the data center
- Load balance any TCP/UDP traffic
- Provide persistence when required by the application
- Perform detailed health checks on fulfillment servers across both data centers
- Provide graceful shutdown of virtual servers for maintenance
- Perform slow start of virtual servers after maintenance

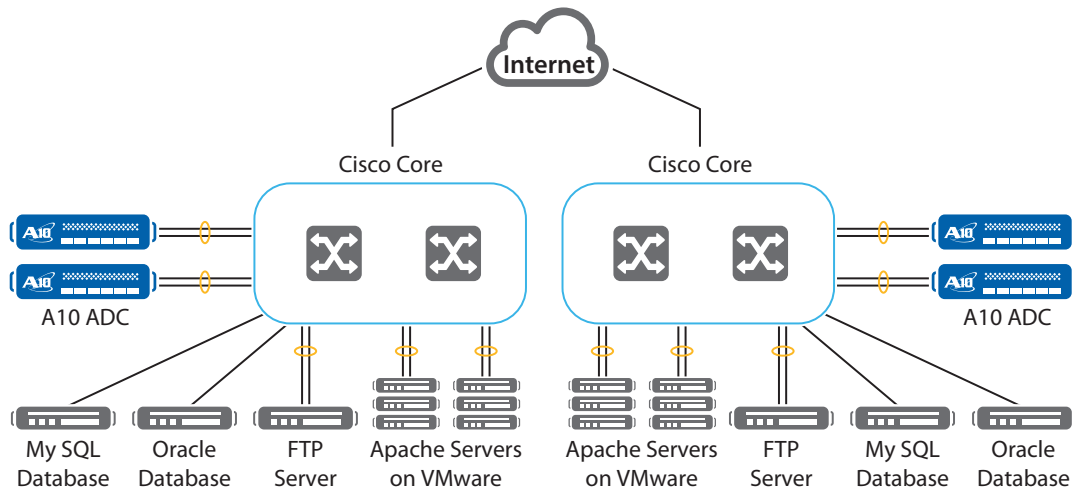


Figure 1: University of the Arts London's Network

A10 ADC: The New Generation Platform

University of the Arts London selected four A10 Networks Application Delivery Controllers' (ADC) new generation server load balancers to replace the aging Radware devices with a higher-performance and scalable solution. The A10 ADCs met and exceeded the project's functional requirements with additional features, including:

- **Global Server Load Balancing (GSLB):** Load balances Web servers across University of the Arts London's two data centers to ensure high availability. Unlike competing solutions, GSLB is included in all A10 ADC models, without additional licensing fees.
- **URL Switching:** Delivers services hosted on the University of the Arts London domain based upon the contents of the URL. Requests are then directed to the relevant servers located in the private address space.
- **Custom Health Checks:** Ensures that servers are available and able to communicate with and retrieve data from the backend MySQL and Oracle databases.

Success

The load balancer replacement to a full-featured ADC enables a suite of new features previously unavailable, ensuring increased functionality, a lower initial procurement cost, and importantly the

all-inclusive licensing model removes the need to request additional funds for license upgrades (performance or feature related).

Since deploying the A10 ADCs, University of the Arts London has the scalable platform required to develop and deliver a range of visual content services to its entire network, quickly and efficiently. In addition, the customizable A10 ADC platform allows University of the Arts London to tailor content for a diverse range of student nationalities and visitor profiles.

University of the Arts London

University of the Arts London is Europe's largest university for art, design, fashion, communication and the performing arts. For more information, visit <http://www.arts.ac.uk/>

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

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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 or call to talk to an A10 sales representative.

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