Barracuda

Barracuda Solutions on Microsoft Azure Enables GL Education to Mitigate Security Concerns and Empowers International Expansion

GL Education

Profile
- Over 30 years of rigorous, high quality scholastic assessments delivered in over 100 countries
- Six million online tests delivered annually worldwide
- 2015 winner of the Education Investor Award in the Use of Technology category

Challenges
- Unreliability of colocation environment
- Uneven levels of demand throughout the year
- Highly sensitive data

Solution
Barracuda CloudGen WAF deployed on Microsoft Azure cloud platform

Results
- Estimated 10% potential reduction in operating costs
- Increased uptime
- Better security and more comprehensive compliance

About GL Education
GL Education is the leading provider of benchmarking formative and diagnostic assessments to UK schools and has a growing presence in British, bilingual, and international schools in over 100 countries worldwide. The company also provides assessment services to ministries of education and their agencies.

After acquiring The Test Factory, a UK-based developer of bespoke digital assessment delivery solutions, GL Education deploys their solutions via the web to an expanding local and worldwide customer base.

Challenges
Originally hosted in a colocation environment, GL Education faced the risk of cyber threats and downtime—both detrimental to its customers. They also faced challenges with uneven traffic patterns throughout the year, coupled with rapid international expansion.

Considering the seasonal nature of a typical school academic calendar, GL Education experienced fluctuating demands that traditional bandwidth licensing could not accommodate. Also, due to international expansion, the uneven and unpredictable patterns of usage had become amplified, with peaks in traffic greatly increasing the demand on its infrastructure. Solving this challenge in colocation environments would require license and equipment commissioning, which would be at risk of underutilization in other periods.

Colocation environments also proved problematic in the face of cyberattacks against other organizations using the same data center. Even a temporary outage directly impacted GL Education's customers, leaving them unable to administer online tests during the outage. This resulted in difficult to accommodate, last minute changes to their testing schedules.

Finally, GL Education faced the challenge of managing highly sensitive user data. Their web deployment needed strong protection against attacks and compromise, and they needed to ensure that they remained compliant with strict data security standards both in the UK and their growing international clientele.

Synergetic Solutions
Azure looked to be an ideal platform for GL Education as it offered scalability, flexibility, and could easily accommodate their ever-fluctuating platform usage requirements.

About Barracuda Security Solutions in Microsoft Azure Marketplace
Barracuda security solutions are engineered for Azure, and allow you to fully leverage the power of the cloud. Barracuda is a Gold Application Development Partner and is Microsoft Azure certified, which means solutions are well designed and pre-qualified by Microsoft. As part of the shared security responsibility model, Barracuda products complement existing Azure services by providing a comprehensive security architecture, as well as a more seamless experience across your cloud and on-premises environments—all while providing enhanced security against cyberattacks and advanced threats.

It would have an immediate impact on their bandwidth over-purchases, and would provide the international scalability they needed for global expansion. The Test Factory's Azure-focused platform would be ideal for scale on-demand, maximizing uptime while globalizing the business. Azure's geo-availability would also enable GL Education to deploy its testing and assessment platform in multiple locations in the future, improving user experience, lowering latency, and adhering to strict compliance policies. This includes policies that prohibit the transfer of data relating to individual students offshore, which is required by some of the international markets that GL Education is planning to enter in the near future.

To ensure optimal security and adhere to strict compliance policies, GL Education searched for a firewall solution in Azure Marketplace and decided on the Barracuda CloudGen WAF . Since GL Education's customers' biggest concern is security of their digital data, compliance with ISO27001 certification requirements is very important. The Barracuda CloudGen WAF would simplify and automate many elements of GL Education's strict compliance policies.

David Glover, Digital Director at GL Education, takes security just as seriously as his customers do.

> " *We experienced superior communication from Barracuda over the other options in Azure Marketplace. Barracuda covered all of the bases and was quite easy to set up. You get flexibility, which is key.* "
>
> *David Glover*
> *Digital Director*
> *Multi-state retailer*

Benefits

Scalability

GL Education's platform uses Azure to provide an elastically scalable and highly available system at all times. Additionally, the use of some functionality within Barracuda's CloudGen WAF automatically synchronizes between the clusters, providing instant recovery from outages. Combined, these solutions allow GL Education to easily scale without the risk of overspending or bursting fees.

Maximized Uptime

The Barracuda CloudGen WAF 's deployment within Azure provides GL Education with redundancy and seamless failover capabilities in response to outages, ensuring maximum uptime and higher customer satisfaction.

Security and Compliance

The Barracuda CloudGen WAF is compliant with major application-specific requirements including PCI-DSS, HIPAA, FISMA, and SOX. It also provides robust identity and access management, and data loss prevention capabilities to ensure privacy of sensitive data. In addition, Microsoft offers the most comprehensive set of certifications and attestations of any cloud services provider. With these features, GL Education's customers can be confident that the security of their data will not be compromised.

Planning for the Future

In January 2016, GL Education released the alpha version of their new delivery platform, and has since moved into a larger scale customer beta program. GL Education is confident that they are ready to roll out the offering to a larger customer base after a successful round of penetration testing that resulted in zero security concerns. They plan to have their first live, multi-country deployment up and running by September, which will include a collaborative initiative with the National Institute of Education Sciences (NIES) in China to administer its Cognitive Abilities Test in Putonghua to 25,000 students.

To further their international expansion, GL Education is also working on localizing their platform for deployment into more non-English speaking regions. The flexibility and security of the Barracuda CloudGen WAF running on Azure is key to unlocking this additional global growth vector.

Results and Impact

GL Education has experienced impressive results from its Azure and Barracuda CloudGen WAF deployments. When GL Education moves more customers to the new platform later in 2016, Glover believes that it will substantially reduce the operational cost of provisioning its digital assessments.

Without Azure, GL Education would have potentially had to commission a collocated data center

> *With Barracuda, we are able to extend our business on a global scale without employing a team of thousands of IT employees. Barracuda allows us to manage our infrastructure much more easily and enables us to punch above our weight.*
>
> **David Glover**
> *Digital Director*
> *GL Education*

in each region their solution is deployed in, which would be a costly and difficult task for them to plan and deliver.

Together, the Barracuda CloudGen WAF and Microsoft Azure cloud platform transformed GL Education's security and efficiency, and is empowering their international expansion.

For more information about other Barracuda customer successes, please visit: www.blog.barracuda.com

About Barracuda Networks, Inc.

Barracuda simplifies IT with cloud-enabled solutions that empower customers to protect their networks, applications, and data, regardless of where they reside. These powerful, easy-to-use, and affordable solutions are trusted by more than 150,000 organizations worldwide and are delivered in appliance, virtual appliance, cloud, and hybrid deployments. Barracuda's customer-centric business model focuses on delivering high-value, subscription-based IT solutions that provide end-to-end network and data security. For additional information, please visit barracuda.com.

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