St Pancras International Railway Station's Scalable On-Demand Cloud Hosting
Supporting a High-Volume Web Site Platform

"Netcetera’s an established cloud hosting company that could deliver the internet infrastructure we were looking for and had the features and automation we needed to meet our business timeline."

Robin Nicholl, Digital Director, Brandnew Corporation

Profile

St Pancras International is a central London railway terminus celebrated for its Victorian architecture. The Grade I listed building stands on Euston Road in St Pancras, London, between the British Library, King's Cross station and the Regent's Canal. It was opened in 1868 by the Midland Railway as the southern terminus of that company's Midland Main Line, which connected London with the East Midlands and Yorkshire. When it opened, the arched Barlow train shed was the largest single-span roof in the world.

After escaping planned demolition in the 1960s, the complex was renovated and expanded during the 2000s at a cost of £800 million with a ceremony attended by the Queen and extensive publicity introducing it as a public space. A security-sealed terminal area was constructed for Eurostar services to Continental Europe—via High Speed 1 and the Channel Tunnel—along with platforms for domestic connections to the north and south-east of England.

The restored station houses fifteen platforms, a shopping centre and a bus station in addition to London Underground services from King's Cross St Pancras tube station. St Pancras is owned by London and Continental Railways along with the adjacent urban regeneration area known as King's Cross Central. The redeveloped terminus has been described by the travel writer Simon Calder as "the world's most wonderful railway station"
Challenge

Brandnew, having won the contract to develop and host the new website for St. Pancras, needed a skilled and experienced Hosting partner with a proven track record to provide a flexible Web Hosting solution that would be reliable and affordable, yet scale easily to satisfy the growth demands and deliver the flexibility to accommodate traffic spikes.

There were a number of key requirements considered priority for the hosting platform for such a high profile, public facing Website including High Availability; Data Integrity; Security and these were to be achieved in a cost effective way without sacrificing Scalability, Manageability.

Solution

System Design
It was clear from the outset that these challenges would be best met with a Cloud Hosting solution and Netcetera designed the infrastructure to take full advantage of the benefits that virtualisation brings.

High Availability
Hosting the solution on the Netcetera Cloud Platform, and therefore abstracting from any underlying physical hardware, immediately delivered a level of High Availability that would have otherwise required significant cost to achieve.

The remaining challenge was to ensure that system updates, maintenance or even individual appliance failure would not impact system availability and this was achieved by duplicating all key components such as servers, firewalls and load balancers in either active/active or active passive configuration thus removing all single points of failure with the system itself.
Security
An Astaro virtual firewall Cluster with two appliances setup in Active/Active mode was selected to provide both perimeter security and also a remote VPN solution.

Scalability
The complete solution is contained within the Netcetera enterprise flexible Cloud Hosting Platform and therefore any component can be upgraded or new components deployed in a matter of minutes. This ensures that growth can be met easily by scaling up or out as necessary and it also ensures that peak demand can always be met.

System Management
The remote access VPN solution ensures that all administrative functions can be carried out remotely without exposing the administrative applications beyond the firewall perimeter. This keeps the attack footprint to a minimum whilst ensuring maximum manageability even from remote locations.

Backups/Disaster
Netcetera included a Continuous Data Protection backup service for additional data security. This solution provides full system, bare-metal, recovery options for each server as well as granular file level recovery. Many recovery points are stored allowing and a managed hardware firewall for secure connections between the virtual servers and physical servers.

Managed Services
Netcetera include a centrally managed Windows Update service for the Windows servers, Update service for all Virtual appliances and an managed Antivirus Solution as part of the hosting package.
Results

- The above solution met all of the initial demands and challenges;
- Reliable, Highly Available Website
- Flexible Scalable Infrastructure
- Secure yet Manageable Systems
- Backup Protection
- Cost effective

and the 100% uptime continues to validate the design and demonstrate the benefits of a Netcetera Cloud Hosting solution.

Questions? Let us help!

To speak to one of our Sales Consultants about what our services can do for you, or for any other queries, please fill out our Enquiry Form or call 0800 061 2801 or click our Live Chat.