

Delivering international efficiency through hybrid cloud

THE OVERVIEW

EBC Brakes is a world leader in the manufacture of brake components. Incorporated in 1983 and headquartered in Northampton, the firm also has a manufacturing base in Las Vegas, Nevada and employs 400 people worldwide. Rapid expansion has established EBC as a world leader in sport, high performance and race brake pads and disc/rotors with an extensive range of branded products.

The firm produces the vast majority of their own products from its UK and US facilities. A product range with over 33,000 variations makes timely dispatch and accurate recording and visibility of current stock, critical to its efficient operation.

THE CHALLENGE

James Hallett, Group CEO at EBC Brakes explained the challenge that they faced, "We were seeing growing problems for our US based colleagues in accessing data and applications hosted on our private cloud in the UK. This was creating a real operational challenge and a threat to maintaining the customer service excellence that we pride ourselves on. It could take up to 30 seconds for one of our hand held scanners used by the Vegas team to connect back to the database. This was slowing dispatch and increasing our costs as we sometimes had to incur overtime payments for the team, in our endeavour to often process 2000 parcels in an eight-hour shift. The performance issues were only affecting the US office users based in Las Vegas when connecting to our RDS and MS SQL Database servers back in the UK."

Bristol based Bimotech has established a strong reputation with over 20 years as a Managed Service Provider and has worked closely with EBC Brakes for more than four years. They were asked by their client to help resolve the business challenge and address the continued user performance and latency issues for US based users in accessing the existing UK hosted private cloud.

After analysing the challenge, Bimotech concluded that a hybrid solution combining both private and public cloud could help to optimise performance. They approached GCI, as one of only ten Microsoft accredited cloud service providers in the UK that can deliver Microsoft Azure for both direct and indirect channels.

John Higgins, Managing Director at Bimotech explained: "We were eager to access all the advantages of Microsoft Azure from a trusted partner but needed consolidated billing and a single support contact. We wanted to work with a trusted partner that would give us a choice of options and help to make the potentially complex, simple."



THE SOLUTION

A high level scope and design workshop, engaging a team drawn from EBC, Bimotech and GCI concluded that there were four main elements of successful implementation. The key factors were the selection of the most appropriate Azure solution, ensuring efficient connectivity, effectively managing migration and Virtual Machine setup and providing robust backup and testing.

Microsoft Azure's 'West US' Data Centre in California is only a few hundred miles from the client's site in Las Vegas and provided an ideal option to address the earlier latency challenge of accessing private cloud more than 8000 miles away in the UK. The GCI and Bimotech team set to and successfully provisioned and configured the Azure virtual network solution (VNET), subnets, virtual network gateway, storage account, recovery services vault and network security group components.

The implementation phase then required the design and configuration of the Azure networking and firewall components for internal and external connectivity. VPN connectivity needed to be configured between the private GCI Cloud, public Microsoft Azure cloud and the customer's sites in Las Vegas and Northampton.

Both staged and 'big-bang' approaches were considered for migrating the RDS (Relational Database Service) and MS SQL Database server's systems and data drives. It was concluded that the 'big-bang' migration was the best option to avoid any potential mismatch of data between the source and target virtual machines. Migration and rollback recovery plans covered resuming services back to GCI Private Cloud's source virtual servers.

The final phase of back up and testing covered the design, configuration and retention of daily/weekly/monthly/annual backups of the migrated Azure RDS and SQL virtual machines. The GCI team also tested the internal and external connectivity between the Private and Public Cloud and concluded with a successful handover to Bimotech and EBC Brakes for customer-side application layer testing.

The performance of the hosted services, connectivity concerns and the end user experience have all vastly improved. The previous latency problem between the US office and hosted services is no longer an issue.

"We have been able to ensure international connectivity, infrastructure resilience and instant scalability without building a data centre or the headache of managing physical IT equipment. The delay in dispatch scanning has gone away with a resultant improvement in our customer service and operational efficiency. The seamless partnership between Bimotech and GCI has been of great value to us. We were particularly grateful for the pre-sales support team that really did go out of their way to support us and regularly worked in the evenings to help overcome the challenge of an eight-hour time difference between the two sites."

James Hallett, Group CEO EBC Brakes

"The ability to work with GCI to deploy Microsoft Azure Virtual Machines is a real competitive advantage for us moving forward. We can now deliver flexible deployments and hybrid cloud hosting solutions that best meets our clients' operational needs."

John Higgins, Managing Director Bimotech

For more information regarding our services please contact us at:

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