



**Case Study: Financial Client** 

## **Financial Client**

BestPath were approached to help transform the datacentre infrastructure for a large financial client; an international business, employing over 4500 people, with annual revenue in excess of £2bn.

# **Objective**

Over time, the existing network estate of the client had grown both organically and through acquisitions which resulted in a mix of deployment standards and unnecessarily complex solutions.

The client identified a need to reduce their overall network costs, remove end-of-life (EoL) hardware, and both simplify and future-proof their network.

This was to be achieved by deploying new networking solutions into existing data centres and migrating existing services onto the new networks with minimal disruption. The refresh of the existing data centres needed to ensure that the infrastructure would meet all the demands of the business and also provide a platform ready for additional capabilities.

# **Engagement**

Through the client's trusted partner, BestPath were engaged to identify and design a global datacentre architecture. This design would then be used as a blueprint for any future datacentre deployments within the organisation.

For their existing datacentres the requirement was to ensure that the solution met the following key business objectives:

- Reduction of hardware costs through rationalisation/consolidation.
- Remove end-of-life hardware.
- Simplify the day-to-day operations of the network infrastructure.
- Provide configuration consistency across different datacentre locations.

In addition to the objectives for the existing datacentres, the solution also had to adhere to the organisations long-term IT infrastructure strategy:

- Maintain a cloud first strategy.
- Provide the ability for active/active datacentres in different availability zones.
- Separate Management and Fault Domains between datacentres.
- Software Defined solution that will provide APIs and automation capabilities.

During the initial project stages, BestPath worked with the client's network infrastructure teams to understand the existing network landscape in order to ensure the correct solution was chosen.

For this engagement, the industry-leading software-defined network solution, 'Cisco ACI Multi-Site' based on the Nexus 9000 Cloud Scale technology was selected.

Once the solution was identified and the reference architecture design had been created, BestPath were required to produce a Low-Level Design covering multiple existing datacentre locations. The low level design had to accommodate how the ACI fabrics could be provisioned in the existing datacentres and also how existing datacentre services could be migrated to the fabrics as seamlessly as possible.

# **ACI Multi-Site Deployment**

Project Lifecycle

#### **DESIGN**



### **DEPLOY**





### **MIGRATE**



After capturing and analyzing the customer requirements, a design was created to meet the criteria.

The design was discussed with the client and approved before the initial fabric build started.

Discussing the design with the client early ensured that all requirements were addressed and all expectations were met.

With the design approved, the initial fabric builds were completed. The ACI fabrics were built in conjunction with the client to give essential visibility of initial configuration steps to staff. Involving the client in each step aided the adoption of the new platforms.

BestPath completed the deployment of multiple ACI fabrics in parallel with the existing network infrastructure. Once built the fabrics were integrated with the existing network to facilitate migrations to the fabrics. The ACI Multi-Site Orchestrator was deployed so that common policy could be deployed with ease into each of the availability zones.

critical services blocks to the Cisco ACI Multi-Site fabrics using a Cisco ACI Network-Centric deployment. Migrations were performed outside of core business hours inline with the clients' existing change management processes and whilst ensuring service availability post migrations.

Migration of existing

## **Benefits**

The project helped the client achieve the following outcomes:

- Cost: Cost savings for the client were achieved through the consolidation of hardware. The consolidation of hardware was facilitated by the use of server virtualisation and a reduction in the overall number of unused network ports.
- Operational Efficiencies: Through the use of a centralised controller and hierarchical policy model, configurations are now consistent in their deployment allowing for operational standards to be applied once to many devices within the network.
- Delivery: Through our flexible engagement model, the reseller and client were able to continue leveraging existing relationships with their proven datacenter vendor.
- Risk mitigation: As part of the migration of services onto the Cisco ACI fabrics, BestPath helped reduce exposure to the end-of-life network infrastructure and mitigate business risk, as well as reducing complexity by removing existing complex features and functionality.
- High Performance Network: The Cisco ACI Multi-Site solution allowed the client to increase the available bandwidth within their datacentres by around 1000%, whilst at the same time increasing their end-to-end payload (MTU), and multi-pathing capabilities; and reducing the number of transit switches.
- Software Defined Networking (SDN): The Cisco ACI Multi-Site solution has given the client the ability to perform configuration and monitoring of the datacenter through RestFUL API.

Since the initial project completed successfully, BestPath continue to be engaged through the trusted partner for the client, helping them achieve the next steps in their journey.

## **Added Value**

