

Design, Implement & Migrate to a resilient and scalable data centre architecture, with zero-downtime

Size: 3000 employees | Industry: Media | Location: London

Requirements

- Design, implement and deliver new data centre co-location
- Ensure high speed switching to support 10G virtual environment
- Speed of application deployment to the market needs

Challenges

- Operational impact within the data centre to be minimised
- Aggressive delivery schedule - six-week timeline
- Legacy applications and customer timescales

Solution

- High-performance, high-density network switches with high-availability (HA) features
- System-level HA via In-Service Software Upgrade (ISSU) service
- Network-level HA with redundancy and multi-pathing with virtual port channels (vPCs)

Benefits

- Elimination of network downtime for the new data centre
- Increased throughput for north-south as well as east-west network bandwidth
- Future-proofed environment with software-defined options

The requirements

The customer, a big player in the media industry were looking to re-locate to a new data centre co-location space. The decision to move posed many challenges, the biggest was with the existing infrastructure and its capabilities to meet the business demands which had organically grown over time.

The existing data centre was dated and did not support any host connectivity over a 1Gbps connection – this was another key driver to ensuring that any new design and deployment would ensure that 10Gbps connectivity to end hosts was available as a minimum.

Additionally, the customer wanted to ensure that their data centre had the capabilities to support a software-defined approach in the future, through centralised management, automation and API's.

The approach

DEFINING SUCCESS

We worked with the customer to build a solid foundation based on a trusted relationship through technical workshops and assessment of the current environment, from this we were able to commit to a robust plan with a tangible criterion ensuring a successful outcome.

IMPLEMENTATION

Following a design phase along with a detailed implementation plan, physical work began within the data centre. The customer worked hand in hand with the re-solution technical engineering team throughout – further enhancing the relationship.

OUTCOME DELIVERED

As a trusted partner, our job was not only delivering an outcome, but to ensure that the solution was fit for purpose and did the job it was designed to do. We continue our work with the customer to ensure that they're still getting a return on their investment.

Increased Bandwidth

The customer's legacy switches, were geared toward north-south, client server traffic and only offered 1 Gb connections, the Nexus 9000 switches comes with 10 Gb interfaces along with flexible options to increase to 40 and 100Gb connectivity.

They also deftly support east west traffic, which was the biggest limitation of the former solution.

Simpler upgrades and management

With ISSU functionality now built-in, the customer adopted the Nexus 9000 as its standard for data centre switching. No downtime is required with the Nexus 9000. The switches can continue to receive and forward traffic even as their software is being updated.

The solution also ensured consistency and a single point of control to manage all the network devices through Cisco Data Centre Network Manager (DCNM), with the customer now having the stability, reliability, and performance they need to support their mission critical applications as well as their customers.

The technology

- Cisco Nexus 9000 Series



Model: Nexus 93108TC-EX