

CASE STUDY | UTILITIES

Enabling greater agility, flexibility and ambitious growth for **Engie**.

What was the challenge?

- Engie UK needed to consolidate eight data centres to two, while gaining complete flexibility in application deployment, full automation capabilities and no restrictions on physical location.
- Engie also wanted Cyber Essentials Plus security certification for its data centres, so it could bid for new contracts that require CE+.
- Engie needed to aggregate multiple WANs as its UK business was developing fast.

'It's universally agreed that this was one of our most successful projects of the year. Downtime was minimal and not a single WAN change was reversed —CAE got it right first time.'

Chris Tyler, Network Manager, Engie UK

THE OUTCOMES

- Dual Active-Active data centres with ACI delivers massive flexibility and performance headroom
- Cyber Essentials Plus certification achieved for data centres — so Engie can bid for new contracts
- Total freedom over where to locate future data centres
- Aggregated WAN layer unifies business divisions and has boosted network performance
- Newly-acquired companies can be added easily, supporting Engie's ambitious plans for growth

THE POINT

As a leading energy and services enterprise, Engie was restructuring its UK operation — bringing three business divisions together with a newly-acquired company. But this presented complex IT challenges over how to: Consolidate legacy data centres into a secure, highly available and automated new environment; aggregate disparate wide area networks (WANs); and deploy data centre interconnects.

The network team faced tight deadlines and couldn't risk any major downtime.

Engie turned to trusted IT partner CAE and found a way to achieve its goals — and go even further.

SOLUTIONS

- Cisco Application Centric Infrastructure (ACI) for dual Active-Active data centres
- Aggregated WAN layer for Engie UK

SERVICES

- ACI data centre modelling
- ACI deployment
- Cisco ACI support through CAE
- WAN layer design and deployment
- Co-managed WAN support

The CAE approach

NETWORK COMPLEXITY SWEEP ASIDE

- Engie was restructuring, changing from vertical business units to geographical lines. The UK team needed to bring three different network entities into one, as well as adding the WAN of a newly-acquired company.
- For the Engie network team, this presented major complexity. Deadlines were looming and downtime was hard to schedule at the best of occasions.
- But with help from CAE, Engie was able to interconnect networks and data centres through a WAN aggregation layer. In effect, this created a small service provider MPLS (Multiprotocol Label Switching) network for internal use.
- Each WAN was connected successfully with minimal downtime. The project achieved its objectives — and not a single change was reversed.

SCALABILITY AND EASE OF USE

- Engie benefits from WAN connectivity and a data centre infrastructure to support its growth. Any new businesses it now acquires can be integrated easily.
- Network bottlenecks apparent to server teams have been removed — and performance gains have been felt across the company. There's no single point of failure either.
- Meanwhile, the Active-Active data centres provide extra flexibility for whenever Engie wishes to step up performance dramatically.
- Significantly, the independence of the WAN aggregation layer from the data centre infrastructure means Engie has total flexibility over where data centres are located.

WHY CAE?

Our agility allows us to take a strategic approach to understanding, recommending and implementing our clients' needs, delivering a truly customised approach and empowering our customers.

We work to deliver an outcome that exceeds our customers' expectations. We drive cost efficiency down, ensuring we benchmark costs to ensure predictability, transparency, consistency and inclusivity. Our agility is demonstrated through time gains and strategic efficiency, which we measure so we can refine and improve.

DATACENTRES WITH GREATER AGILITY

- Engie was uniting business divisions with vastly different data centre strategies — from cloud-only to everything in-house.
- Ultimately, eight data centres needed consolidating to two in-house locations that would allow for expansion as well as the increasing use of the cloud alongside.
- After extensive modelling, CAE and Engie realised that Cisco's Application Centric Infrastructure (ACI) provided more advantages than a classical-based approach. ACI offers greater business agility through network optimisation, security and cloud enablement.
- Ultimately, CAE delivered the highly-flexible solution that Engie needed going forward. In effect, the two teams created an ACI 'greenfield' build and then began migration of the data centres successfully.
- Today, the company has dual Active-Active data centres with a stretched ACI fabric across them and both capable of 'live' services.

ABILITY TO WIN KEY CONTRACTS

- With its new data centre infrastructure in place, Engie has achieved Cyber Essentials Plus security certification. This means the company can now bid for new projects and seek repeat business when existing contracts come up for renewal.

"With CAE, we never felt on our own. Their personnel was consistent throughout. The decision to go for ACI with our data centres was a bold move. But CAE put in all the effort required and got the most from Cisco on our behalf, making the project a success. On the WAN side, the smoothness of the transition was amazing, thanks to the technical expertise and planning."

Chris Tyler, Network Manager, Engie UK

