

Streamlined network management delivers operational efficiency

Cisco and BT collaborate to host multiple private cloud solutions, supporting critical voice applications for consumer, enterprise, government, and blue light services. Consolidated infrastructure platform enables BT to strengthen security and find new efficiencies for critical voice applications

**Industry:**

Telecommunications

Location:

London, United Kingdom

Organization:

91,500 employees

Solution:Cisco ACI
Cisco DUO
Cisco ISECisco CSPC
Cisco FMC
Cisco FTD

Underpinning the UK's critical communications infrastructure

BT is a provider of critical communications infrastructure to the UK. It provides voice application services for enterprise, government, and the UK's emergency services. If you're calling to check a tax rebate or making a 999 call, you're using a service underpinned by BT.

While the BT brand is a national institution, many of the group's business units have been brought together via more recent mergers and acquisitions. BT wants the different business units to have autonomy over their go-to-market strategies but recognizes that back-office standardization can cut the duplication of effort and create efficiencies.

"Different businesses within the group have retained their own infrastructure stacks," says Ryan Emberson, senior manager, Converged Technology, BT. "They have their own teams to manage compute, firewalls, and network. The reality is that many of these teams need the same thing."

BT aimed to consolidate multiple voice application services on one central platform.

1. Streamline network deployments and management
2. Provide clarity around security
3. Ensure segmentation between workloads and users

This presented an opportunity. If BT could create a single platform capable of hosting a diverse range of voice application services, with all the necessary infrastructure components and clear demarcation between users, it could create a transformation leap in terms of speed and efficiency.

"By sharing the development burden across multiple business units, we could create a next-generation infrastructure," says Emberson. "We'd struggle to justify this investment individually, but shared across six of BT's biggest voice applications, it could be possible."

Simplifying network deployments and management

The result is the BT SVA Cloud platform. Built using a host of Cisco technologies and designed by BT working alongside Cisco experts, the platform enables BT, for the first time, to consolidate numerous voice application platforms on the latest hardware.



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— Ryan Emberson, Senior Manager

At the heart of SVA Cloud is Cisco Application Centric Infrastructure (ACI). This allows Emberson's team to simplify network deployments and management, with automated operations across multi-site networks. Cisco Intersight then allows BT to unlock the full potential of its hyperconverged infrastructure across four UK data centers, managing 10 clusters with same ease as managing four.

"We basically then went and 'sold' the platform to the business units responsible for some of BT's biggest voice applications. We could offer them a much lower cost of entry to the most advanced, bleeding edge technology," Emberson explains. As providers of critical communications infrastructure, security is paramount. SVA Cloud integrates Cisco Duo and Cisco Identity Services Engine (ISE) with BT's internal access management systems, ensuring robust protection while allowing seamless connectivity. BT then utilizes Cisco Adaptive Security Appliance (ASA), Cisco Firewall Management Center, and Cisco Secure Firewall Threat Defense to deliver comprehensive firewall and security management.

"Again, rather than different units with different approaches, our security story is now a lot clearer," he adds.

Establishing central visibility and control

Today, SVA Cloud hosts multiple private cloud solutions, supporting critical voice services for consumer, enterprise, government, and blue light services. It transforms the efficiency of the underlying infrastructure and resiliency of BT's service delivery.

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While it is difficult to state a definitive figure in terms of total cost savings, Emberson says the return on investment has been clear to all. There is now one team managing infrastructure for six business units; resources that were previously spent managing infrastructure are now dedicated to refining new applications.

"One unit had been quoted GBP £5 million to upgrade their infrastructure, we came in under GBP £1 million," he says. "It's not just the cost efficiency of splitting this investment across six entities, it's the saving in time and effort."

From a security perspective, BT is now more certain in asset and vulnerability management. The Cisco engagement means BT is getting far more value from its firewalls; Cisco Common Services Platform Collector (CSPC) automatically pulls live data on which software is running on each asset.

"We have central visibility for the first time and a clear status on possible vulnerabilities," Emberson says. "It's all Cisco, which makes life easier."

The advantage of SVA Cloud, he explains, is that it can be all things to all parties. The 999-emergency application needed to overhaul its hardware; the prisons service wanted to migrate from an on-premises solution to the cloud. SVA Cloud can accommodate both, while ensuring specific security and scalability.

"Essentially, we have templates and automated workflows. We can bring any user online quickly," Emberson says. "We're managing far more workloads, from one central platform, with no increase in headcount."