

Cloud-Based Virtual Data Center Helps BT Improve Performance, Scalability, Efficiency, and Customer Satisfaction

Executive Summary

CUSTOMER
BT Group

INDUSTRY
Service Provider

CHALLENGES

- Current VDC solution lacked scalability and flexibility
- Needed new solution that accelerates provisioning of new users and components, improves user productivity, increases customer satisfaction, and reduces total cost of ownership

SOLUTIONS

- Create customer use cases and economic models; develop operational model and blueprint (Phase 1)
- Provide market-sizing data to help BT MFU understand VDC's potential for enterprise customers (Phase 2)
- Provide economic models for downscaled VDC suitable for U.K. SMBs; develop go-to-market plans with BT MFU (Phase 2)

RESULTS

- Improved scalability and flexibility by 10X; reduced provisioning time from 11 weeks to eight days; 80-90% error reduction (Phase 1)
- \$100M revenue estimate for BT through 2012 (Phase 2)

Background

BT operates in 170-plus countries and serves more than 18 million customers. The company is transforming itself from a traditional telecom firm to a leading provider of converged networked and IT services. Its aim is to help customers get the most from communications technology by providing tailored solutions that are easy to use. To start, the company is focusing on enhancing its current virtual data center (VDC) solution. It asked the Cisco® Internet Business Solutions Group (IBSG) to help accelerate the deployment of a cloud-based VDC that will quicken system performance and responsiveness, improve user productivity, increase customer satisfaction, and reduce total cost of ownership.

Challenges

BT has provided telecommunications services for more than 150 years—from telegraph and telephone to, most recently, converged network services. The company has 25 data centers around the world, and recently developed a VDC designed to provide greater flexibility and operational effectiveness for both internal and external users. The current offering, however, lacks the scalability and flexibility required to support the power of today's converged network services and to meet current and future needs of users. For example, it can take days to bring additional servers or storage online when customers may need such resources in a few hours. Also, existing operational tools are not effective for managing complex VDC components, leading to manual errors and delays. The challenge was to improve scalability and create a more versatile solution that meets the needs of internal users, enterprises, and small and medium-sized businesses (SMBs).

Solutions

Strategy

Cisco's account team reached out to Cisco IBSG for help as a trusted adviser, given IBSG's thought leadership experience in the areas of service provider (SP) data center virtualization and cloud computing. The IBSG team met with BT's CIO to discuss how IBSG could assist BT's



Cisco Internet Business Solutions Group (IBSG)

Innovation and Design team. Cisco IBSG proposed a consortium-led approach where IBSG would facilitate interactions among the company's key vendors—including Cisco, EMC, NetApp, and VMware—and develop economic models and use cases for VDC deployment, for BT's internal use, and for its enterprise customers.

Phase 1 – Proof of Concept (PoC)

A cross-functional team led by Cisco IBSG worked with the appropriate Cisco business units, key vendors and partners, and contacts within the customer's CIO office to develop a set of economic models and use cases for data-center virtualization in a cloud-based model.

Key activities involved:

- Assessing the economics of a BT VDC solution in various configurations of small-, medium-, and large-scale deployments for BT internal and external use
- Sharing best practices gained from IBSG's experience with other SPs
- Creating a number of use cases illustrating how the solution might be deployed in the customer's environment
- Developing an operational model and blueprint that show how to run the VDC, highlighting operational benefits the company would gain over its existing solution

Phase 2 – Identify Markets and Define VDC Solution

The PoC phase was completed to BT's satisfaction in early 2010. During the second half of that year, Cisco IBSG worked closely with the BT Market-Facing Unit (MFU), known as BT iNet, sharing the models and IBSG's operational analysis of BT's capabilities. In addition, Cisco IBSG provided iNet with a better understanding of the U.K. VDC market size and potential in the enterprise and SMB customer bases, providing input into the company's commercial modeling activities and sharing relevant VDC work IBSG had done with other SPs.

Results

Phase 1

The PoC phase achieved two key objectives: 1) demonstrated the scalability and flexibility of the proposed VDC architecture versus the existing setup; 2) demonstrated the economic and operational impact of reducing from weeks to days the time it takes to provision new users and components to the cloud-based VDC.

The time it takes to provision new users and components onto the system has fallen from 11 weeks to eight days, with potential to further decrease this time to a few hours. "Cisco provisioning and management tools are 12 to 18 months ahead of those of Cisco's competitors in their ability to clearly and seamlessly manage the complex components in a VDC environment and reduce staff errors by 80 percent to 90 percent when it comes to reconfiguring the data center

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Les Drumm
Chief Data Center
Architect
BT Group

components," said Less Drumm, BT chief data center architect.

Phase 2

Cisco IBSG's input enabled iNet to quickly bring the BT Virtual Data Centre Private (or VDC Private) service to market, which was launched and showcased at the Cisco Live event in February 2011. The service is targeted to BT's enterprise customers.

Since the launch, BT iNet has identified a number of customers for VDC Private. Cisco and BT estimate that the service will result in \$100 million in revenue for BT through 2012. "Cisco IBSG has been a strong partner and adviser to us in launching VDC Private. Their input to and validation of our actions has helped significantly in reducing the time and effort required by us to realize revenue from this new service," said BT iNet CEO Neil Pemberton.

Next Steps

The BT VDC Private service is being actively deployed among BT's enterprise customers as the first step on the path to fully outsourced VDC solutions from BT. A customer demo suite similar to the Cisco Executive Briefing Center was also completed at iNet's headquarters, and BT iNet has allocated 22 additional people to sell and support the service throughout 2011 and beyond.

Cisco IBSG will continue to work with BT, providing market-sensing input and best practices to help BT develop smaller, scalable versions of VDC Private for the U.K. SMB market.

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Neil Pemberton
CEO
BT iNet

More Information

Cisco Internet Business Solutions Group (IBSG), the company's global consultancy, helps CXOs from the world's largest public and private organizations solve critical business challenges. By connecting strategy, process, and technology, Cisco IBSG industry experts enable customers to turn visionary ideas into value.

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