

## Kabel Deutschland achieves security compliance through a virtual desktop infrastructure



### Challenge

- secure access to Kabel Deutschland's core network infrastructure
- drive efficiencies within the organisation to grow and remain competitive



### Solution

- Cisco's UCS platform integrated at two data centres in Berlin to reduce the total cost of ownership, improve scalability, and improve efficiency by integrating components that can be managed as a single platform
- VDI solution to improve security to the organisation's core network



### Result

- enhanced security provided by the centrally managed VDI desktops
- greater flexibility, and faster delivery and access for internal administrators and external consultants
- a more efficient, cost-effective, and simplified data centre platform
- a scalable solution that can be enhanced as required and used for other internal services

„Dimension Data's SMEs managed to gather the different demands of Kabel Deutschland's departments and matched them to a **tailored environment**, which **enhanced the security** of our core network as well as the **flexibility of the operational teams**“

Senior Security Manager  
Kabel Deutschland

### Challenge

#### Largest German cable operator

The Vodafone company Kabel Deutschland (KD) is Germany's largest cable operator. It offers its customers high definition (HD), digital (SD) and analogue TV, pay TV and digital video recorder (DVR) offerings, video on demand, broadband Internet (up to 200 Mb/s), WiFi services, and fixed-line phone services via cable. Kabel Deutschland also provides mobile services.

Situated in Unterfoehring near Munich, the MDAX-listed company operates cable networks in 13 German federal states and supplies its services to approximately 8.3 million connected households. As at 31 March 2014, Kabel Deutschland had approximately 3,700 employees. In the fiscal year 2013/14, the organisation reported revenues of EUR 1,900 million and an adjusted EBITDA (earnings before interest, taxes, depreciation, and amortisation) of EUR 910 million.

Currently, cable operators face a number of challenges that include: increased competition, security issues, the gradual move of television transmissions over the Internet, as well as the development of new technologies, devices, and digital-content-delivering platforms.

Security is a key challenge for cable operators with risks of hacking, content piracy, and unpermitted access to network infrastructures and data. The technical and regulatory requirements associated with cable operations also cause increases in complexity, time, expense, and risk.

The high bandwidth that cable operators provide for their customers can become a focus for cybercriminals. They want to use the bandwidth for illegal activities that can include file-sharing and botnets. Customers may also become targets for fraudulent activities.

All these factors apply financial and efficiency pressures to the daily operations of cable operators.

#### Security is the priority

Kabel Deutschland's goal is to have a secure, efficient network infrastructure. Its complex network already incorporates sophisticated security software, but senior management wanted this enhanced to minimise the risk of hacking, which can negatively impact business confidence and customer numbers. Kabel Deutschland wanted to achieve enhanced security and improved efficiency, but keep its costs down.

Due to the size and complexity of its network, Kabel Deutschland needed many employees to administer the infrastructure. To be more efficient, it was necessary for these employees to manage more network devices, and in a secure manner.

Prior to this project, administrators accessed the company's backbone infrastructure from a variety of mostly unmanaged client systems, and installed different tools and applications to customise their desktop environments. The variety of devices with access to the core network increased the

risk of compromised security. Additionally, an increased demand for mobility and remote access had developed, which was creatively solved with a number of individual, remote-access solutions.

Kabel Deutschland is an organisation experiencing rapid growth. Its infrastructure must be secure and efficient to maximise opportunities and address the challenges that face cable operators in the current, competitive environment.

### Solutions

#### A reliable partner with an expanded portfolio

Dimension Data has a long-standing relationship with Kabel Deutschland and is considered a reliable partner that's already significantly involved with the organisation's network.

Following discussions with Kabel Deutschland, the organisation realised that Dimension Data's expanded portfolio and expertise could bring value in areas other than networking, for example data centres and security.

Dimension Data provided consulting and assessment services to analyse the current infrastructure, define the project scope and methodology, and determine the roadmap. Dimension Data's professional services were engaged to implement the proposed solution.

Dimension Data's reliability as a partner, adaptability, as well as its expanded portfolio, excellent consulting services, and a financially attractive package were key differentiators for the project.

#### Integration at two Berlin data centres

Within its data centre infrastructure Kabel Deutschland has an entire client environment including applications, operating systems, and management functions. This added a degree of complexity to the solution, which had to incorporate a variety of different hardware, software, tools, and applications.

Dimension Data proposed the implementation of a virtual desktop infrastructure (VDI) solution and two Cisco Unified Computing Systems (UCS) data centre platforms at Kabel Deutschland's two data centres in Berlin. The combination of vendor products used in the solution resulted from specific requests from Kabel Deutschland, and Dimension Data's recommendations for compatibility and ease of incorporation.

A VDI is a desktop-oriented service that hosts user-desktop environments on remote servers/ blades, such as Cisco's UCS. This provides access to desktops from any location and without the need to use a particular client device. Resources, tools, data, and applications are centralised, which increases security and provides the flexibility for administrators to access the same desktop environment from different office locations, or even remotely. For Kabel Deutschland's

administrators, this means a more centralised, efficient client environment that is easier to maintain. It's also able to respond more quickly as business and user needs change.

The two Cisco UCS data centre platforms are composed of hardware, virtualisation support, switching fabric, and management software. They'll reduce the total cost of ownership and improve scalability by integrating the components into a cohesive platform that can be managed as a single unit. This reduces costs and complexity, simplifies the administration of devices, and is more efficient.

The overall solution will ensure secure, centrally managed access to the core network via centrally managed VDI desktops, whether in the office or accessing remotely via a virtual private network (VPN). For remote users, it eliminates the need for a broadband network connection and supports accessibility to the core network, even via a 3G cellular network.

Dimension Data provided the underlying server infrastructure and integrated the solution on-premise at Kabel Deutschland's two data centres in Berlin.

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### Result

## A secure, agile, efficient, and centrally managed desktop infrastructure

Dimension Data integrated a secure, standard VDI environment for administrators at Kabel Deutschland's two data centres in Berlin, which will enhance security via the centrally managed infrastructure. Dimension Data and Kabel Deutschland worked in partnership to establish a secure desktop environment for the administrators. It offers the level of performance preferred by the administrators, is accessible from the office or remotely via a VPN, and it provides a consistent and adequate selection of tools and applications that can't be extensively customised.

A simplified data centre infrastructure that incorporates Cisco's UCS platform will improve efficiency by allowing administrators to manage more devices. It will also reduce complexity and costs.

Kabel Deutschland is experiencing rapid growth, with many more employees accessing the environment than was originally planned. As a result, the organisation may need to extend the solution and develop additional data centres, which is no problem with the new infrastructure.

## Service Overview

Implementation and integration of:

- IBM V7000 unified storage
- two Cisco UCS systems
- nine UCS Blades hosting:
  - VMware vSphere 5
  - VMware Horizon View 5
  - Cisco Nexus 1000v
  - Windows 7 Desktop for approximately 180 administrators
- consulting services from project initiation to handover
- professional services to integrate the solution