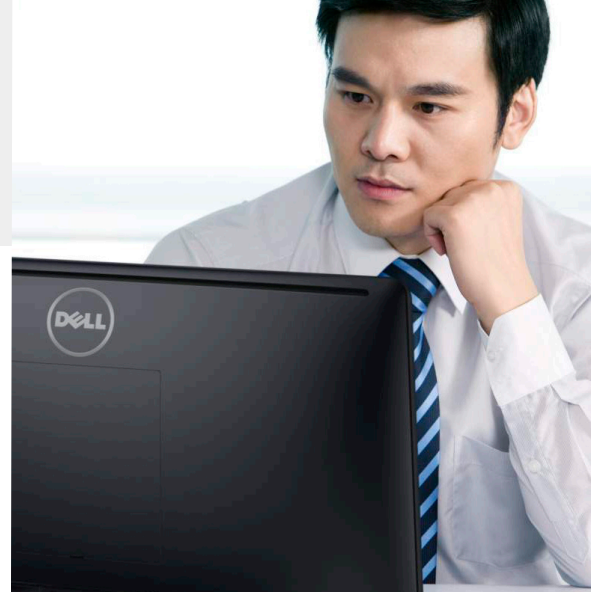# The wisdom of virtual desktop infrastructure

An IT services provider in China achieves 31 percent business growth in one month with cloud-based desktops running on a converged architecture

中国通信服务 中通信息服务有限公司
CHINA COMSERVICE ZHONGTONG INFORMATION SERVICE CO.,LTD

Technology | China

Business needs

To help drive expansion and increase efficiencies, Zhongtong Information Service looked to replace its traditional PC infrastructure with a cloud-based desktop.

Solutions at a glance

- Cloud Client-Computing
- Modular Infrastructure
- Software-Defined Storage
- Endpoint Management
- Enterprise Support

Business results

- Realizes business growth of 31 percent in one month
- Cuts the costs for managing desktops by 80 percent
- Increases the efficiency of managing its desktop environment nine-fold
- Maximizes data protection through secure operating system
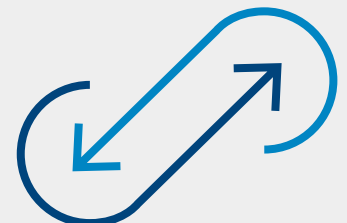- Optimizes investment long-term through detailed insight into performance

31%
growth in
1 month

80%
reduction in
managing desktop
costs

Companies want to take the uncertainty out of scaling and managing virtual desktop infrastructure (VDI) solutions. They are looking for technologies that streamline costs as well as maximize the performance of their investment. Zhongtong Information Service in China sought this kind of solution when it proposed moving to a cloud-based desktop.

In search of cost-efficient desktop computing

The company, formerly known as the Shenzhen City Telecom Industry, has delivered IT services to more than 20,000 businesses over its 20-year history. As part of a policy to drive efficiencies, the company wanted to replace its PC infrastructure with a cloud-based solution that included thin clients. The existing environment proved expensive to resource and time-consuming to manage. The replacement cycle for its PCs was three to five years, when thin clients had much longer life spans. There was also concern about security. It was hard to deliver a consistent, high level of security across such a distributed PC environment where data was often stored locally.

Ensures predictable cost and increases desktop performance 50 percent

Zhongtong Information Service engaged with Dell, which proposed an end-to-end solution to overcome the existing PC challenges by delivering a cloud-based desktop environment on which to drive long-term efficiencies. At the heart of the solution, Zhongtong Information Service chose six Dell XC630-10 web-scale hyper-converged appliances with Intel® Xeon® E5-2620 v3 processors and powered by Nutanix software. Each XC630-10 node included dual SD modules, two 200GB SSDs and four 1TB serial-attached SCSI drives that provide efficient computing and automated tiering capabilities. As a result, the performance of the VDI was at least a 50 percent improvement from its previous PC environment.

Lowers total cost of ownership (TCO) of virtual desktops by 80 percent

Zhongtong Information Service maximized the cost-effectiveness of its cloud desktop by choosing a Dell solution powered by Nutanix software. Deploying a software-defined storage solution for the VDI, the Nutanix software enabled Zhongtong Information Service to aggregate storage across all the nodes, ensuring simplified scaling. In addition, it provides data tiering, thin provisioning and cloning, continuous snapshots, remote replication, deduplication, data compression, load balancing, and multi-channel support. This not only ensured high performance, but also reduced its TCO by 80 percent.

> "*In one month, our business has improved 31 percent. We have nearly 100 cloud desktop terminals serving online, and employees from across multiple departments are responding well. We've started to promote the Dell VDI solution in the market, hoping to create value for customers through cloud desktop services since we've seen how good the results are.*"
>
> Huang Zhiqing, Project Manager, Zhongtong Information Service

Enhances end user experience of cloud-based computing

For endpoints, Zhongtong Information Service chose Dell Wyse 3020 thin clients with Dell Wyse vWorkspace as the broker software and VMware ESX® as the virtualization hypervisor. Through vWorkspace, IT administrators shortened the delivery time for endpoint devices. With HyperDeploy, administrators cloned existing virtual desktops, and with HyperCache they optimized performance through selective caching so frequently read data was stored in memory to improve their access speed.

Increases management effectiveness nine-fold and keeps endpoints always protected

The organization drastically improved management effectiveness through the cloud-based desktop. Using Dell Wyse vWorkspace WSM, Zhongtong Information Service gained enhanced VDI management capabilities by efficiently supporting 64 desktop and server operating systems. As a result, it has improved desktop management efficiency by nine times.
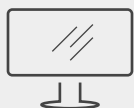
The cloud-based desktop is secure at all times as a result of the Dell Wyse Thin OS, which protects the infrastructure from attack. Even while automatically completing firmware updates, going from power-on to fully operational within eight seconds, the operating system remains virus and malware resistant.

Simplifies management and support functions

To boost performance long-term, Zhongtong Information Service invested in Dell Foglight for Virtualization to provide deep-level insight into the health and efficiency of the Dell infrastructure. It also has Dell ProSupport with mission-critical four-hour onsite service to helps resolve any issues. Huang Zhiqing, project manager of Zhongtong Information Service, comments, "Our IT managers use Foglight for Virtualization to gain a content-rich dashboard which monitors start efficiency, performance speed, application delay and network transmission rate for VDI users. They can also analyze this information using simple graph models to determine the underlying factors that influence the user experiences, transforming terminal management from passive to active."

Achieves 31 percent business growth in just one month

Zhongtong Information Service is driving business expansion as a result of its Dell-based cloud desktops. Huang says, "In one month, our business has improved 31 percent. We have nearly 100 cloud desktop terminals serving online, and employees from across multiple departments are responding well. We've started to promote the Dell VDI solution in the market, hoping to create value for customers through cloud desktop services since we've seen how good the results are. "

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Cloud Client-Computing

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