VERITAS^{*} The truth in information.

Nokia Shanghai Bell reduces TCO by US\$2.5M with Veritas Enterprise Vault.

OVERVIEW

Nokia Shanghai Bell Saves 17 Million Yuan in 5 Years with Integrated Mail System

Nokia Shanghai Bell Co., Ltd. (hereinafter referred to as "Nokia Shanghai Bell") had set its sights on numerous innovations in communications technologies and services. To realize those ambitions, the company first needed to integrate the IT systems of its legacy companies. One of the key challenges was how to bring the cloud-based email accounts from nearly 14,000 Nokia users to a local data center. In Veritas Enterprise Vault[™], Nokia Shanghai Bell found an economical and efficient way to provide the previous cloud users with the mailbox space they were accustomed to while meeting China's compliance auditing requirements.

ACHIEVE 5G INNOVATION, REALIZE 5G DREAM

Nokia Shanghai Bell is the only joint venture company under the direct supervision of the State-owned Assets Supervision and Administration Commission of the State Council, and is also the exclusive operating platform of Nokia in China. At present, it has about 15,000 employees, and the domestic sales and service network covering 31 provinces and cities. Its international business covers more than 50 countries and regions.

The company has strong R&D capabilities and profound professional accumulation, providing end-to-end information communication solutions and high-quality services for operators and non-operator customers, and leads development in many fields, including IP networks, optical networks, fixed networks and next-generation 5G networks.

The legacy Nokia Shanghai Bell is Shanghai Bell, which has grown up along with the development of China's communications industry. Shanghai Bell is also the leading large-scale telecom equipment supplier in China and one of the pillar enterprises of China's modern communication industry. After the conversion to shares and restructuring of the original Shanghai Bell, it merged with the major operations of Alcatel in China and formed Shanghai Bell Alcatel Co., Ltd. – the first foreign-invested joint-stock enterprise in China's telecommunications industry.

NOKIALA

ORGANIZATION PROFILE

Website: www.nokia-sbell.com Industry: Telecommunications Headquarters: Shanghai, China Employees: 15,000

KEY CHALLENGES

After the merger of the worlds' 3rd and 4th largest telecommunication equipment companies Shanghai Bell (formerly Shanghai Bell Alcatel) and Nokia in 2015, the new company needed to migrate Nokia's Office 365 email from Azure Cloud to a local hosted data center. The volume of the Office 365 email data was too enormous for the local data center, but to meet the local governance requirements, the new company sought an agile solution that was both compliant and supported fast business expansion and improved user experience.

SOLUTION

Nokia Shanghai Bell turned to Veritas for a solution that would allow it to store more than 100 TB of user email data in its local data center, while providing ready access to archived emails.

Veritas Enterprise Vault™

BENEFITS

- Savings of 17 million yuan (approximately US\$2.5M) in maintenance costs over 5 years
- Ability to satisfy both user experience and compliance requirements, including email auditing
- Easy access to, and management of, archived emails
- Flexible path to manage cold data
- Scalability to accommodate future business development

On December 1, 2006, Alcatel and Lucent Technologies officially merged, and Alcatel-Lucent integrated its business in China into Shanghai Bell Alcatel Co., Ltd. On April 15, 2015, Nokia announced the acquisition of Alcatel-Lucent, the third and fourth largest global communications companies in the world. On May 18, 2017, Nokia Shanghai Bell was established to make full use of the advantages of Chinese and foreign shareholders in terms of innovation, global scale and efficiency, as well as a deep understanding of the local market, to further enhance Nokia's performance in the Chinese market. The new company's R&D team will also become an important part of Nokia's global R&D layout, focusing on 5G, Internet of Things, cloud, and other directions, leading the way in high-performance network innovation as well as expanding its goals in new areas such as non-telecommunication service operating markets.

"We have to find a balance between cost and overall user satisfaction. On the one hand, we try to optimize local data storage and archiving as much as possible; on the other hand, we try to drive the consistency of user experience to the greatest extent by providing sufficient capacity. The deployment of Enterprise Vault has delivered significant advantages in strategic implementation, cost reduction, compliance, and flexibility.

> — Zhenhuan Li, IT Environment Manager, Nokia Shanghai Bell



As a new company in a new climate, Nokia Shanghai Bell's IT team was faced with the challenge of deciding where to locate the email system used by about 14,000 users every day. Zhenhuan Li, IT environment manager of Nokia Shanghai Bell says that original Nokia users had been using Office 365, and their e-mail data was stored on an Azure public cloud. Shanghai Bell's user email data was stored in the company's local data center. After the merger of the both businesses, the original cloud data needed to be integrated and migrated to the local data center for compliance requirements.

Nokia employees had been using Office 365 for more than two years, and the average user mailbox space was nearly 100GB. "In theory, storage and archive space on the public cloud is unlimited, but basically that is mission impossible in the local environment," Zhenhuan Li says. "So, we have to find a balance of cost and user satisfaction. On the one hand, we try to optimize local data storage and archiving as much as possible; on the other hand, we try to guarantee the consistency of user experience to the greatest extent and provide sufficient capacity. At the same time, considering the storage of granular historical data over the years, this solution must have the ability to cope with future business development with scalability and flexibility."

During the selection process, Nokia Shanghai Bell's IT team researched quite a number of mainstream solutions in the market. After a comprehensive evaluation of the deployment cases and product features of various vendors, Veritas Enterprise Vault was finally selected. Enterprise Vault is both an economical and an efficient solution for expansion of local mail systems that also meets compliance auditing requirements.

TCO REDUCED BY 17 MILLION YUAN IN 5 YEARS

At present, the deployment of the first phase of the Nokia Shanghai Bell's file system has been completed, and the service is stable. The project successfully realized the local migration of data from the original Office 365 cloud, integrating data of about 70-80 TB, plus the original local data of 10+ TB, for an overall volume of nearly 100 TB. According to Zhenhuan Li, the current archived data is in the original accumulation stage. In the future, the team will archive more cold data generated by 14,000 users in the past. "In our research, we found that a large number of users have the habit of using large-capacity mailboxes, and an average of 20-30 GB of data was generated in June," Zhenhuan Li says. "Enterprise Vault enables



strategic planning and optimization in every dimension, with excellent flexibility, and the ability to archive data as much as possible. Going forward, with the Enterprise Vault solution, it will be very easy to deploy compliance policies for email auditing. That would be our focus in the next phase."

Due to the new global business landscape and the planning of shared R&D resources, there are personnel changes (such as reassignments) within the group. With archiving in place, local historical data resources can also be leveraged in the updated user environment. In other words, business characteristics define the specification of solution requirements in personalization. In Nokia, the flow of people is very common. Zhenhuan Li believes that, "Whether users are working with data in the cloud or on premises, the comprehensive features of Veritas products enable us to fully meet their business needs."

Zhenhuan Li has calculated the benefits of the Enterprise Vault solution: Compared to the local deployment of Exchange, without even introducing archiving, maintenance services of a full stacked storage alone would have cost an additional 17 million yuan (US\$2.5M) over five years.

The platform also provides up to 50GB of mailbox space for a single user, fully meeting typical usage needs. "In the nearly half-year program deployment, implementation and verification process, Enterprise Vault has delivered significant advantages in strategic implementation, cost reduction, compliance, and flexibility," Zhenhuan Li says. "In the second phase, we plan to establish cloud-based access and are currently preparing for the relevant testing environment. The potential for subsequent extended applications on the Enterprise Vault platform is huge."

It is often said, "Internal stability sustains any development." Thus, the rapid business development of an enterprise needs robust internal IT architecture, and building an architecture that impacts the lines of business requires a trusted enterprise data management partner. With Veritas, Nokia Shanghai Bell's IT team is riding the tide of the new era and supporting the innovative development of Nokia Shanghai Bell in everchanging business landscape.

FOR MORE INFORMATION

Please contact your local Veritas Sales Representative or Business Partner, or visit Veritas Enterprise Vault

ABOUT VERITAS TECHNOLOGIES LLC

Veritas Technologies is a global leader in enterprise data management – our software and solutions help organizations protect their mission-critical data. Tens of thousands of businesses, including 97% of Fortune 100 companies, rely on us every day to back up and recover their data, keep it secure and available, to guard against failure and achieve regulatory compliance. In today's digital economy, Veritas delivers technology that helps organizations reduce risks and capitalize on their most important digital asset – their data. Learn more at www.veritas.com or follow us on Twitter at @veritastechllc

Veritas Technologies LLC 2625 Augustine Drive Santa Clara, CA 95054 USA +1 (866) 837 4827 veritas.com For specific country offices and contact numbers, please visit our website. veritas.com/company/contact



V0930 08/19

Copyright © 2019 Veritas Technologies LLC. All rights reserved. Veritas, the Veritas logo, and Enterprise Vault are trademarks or registered trademarks of Veritas Technologies LLC or its affiliates in the United States and other countries. Other names may be trademarks of their respective owners.