“The storage solution from Hitachi Data Systems helped us build a unified cloud storage platform for both structured and unstructured data. It ensured the database system would be continuously running, enabled the content cloud data storage and the shared access of images, videos and documents. It also provided remote disaster recovery based on the cloud storage. In this way, our production and disaster recovery requirements were satisfactorily met.”

Beijing Municipal Bureau of Finance
Beijing Municipal Bureau of Finance Supports Varied Data Stores with Hitachi Unified Cloud Storage Solution

Beijing Municipal Bureau of Finance is a functional department of Beijing Municipal Government that manages financial revenue and expenditure, implements financial supervision and participates in regulating the national economy in Beijing. As the information systems development of Beijing Municipal Bureau of Finance became increasingly important, it opted to reconstruct its data center. The bureau required a highly scalable and sustainable unified cloud storage platform to store both structured and unstructured data. Hitachi Data Systems offered a unified cloud storage solution that fit the bureau’s needs.

As an important government department, Beijing Municipal Bureau of Finance (www.bjcz.gov.cn) is responsible for medium- and long-term financial analysis and planning as well as financial revenue and expenditure management for specific areas. It also prepares the financial revenue allocation plan, managing non-tax government revenue, and supervises and inspects the execution of financial and tax regulations and policies.

Project Background

The major business system in the original production center of Beijing Municipal Bureau of Finance included several IBM® pSeries® servers and IBM DS8100 storage. The unstructured data, such as the office, training and video data, was stored in NetApp storage. No remote backup was implemented for this core data. Beijing Municipal Bureau of Finance required a unified cloud storage platform for both structured and unstructured data, as well as a unified disaster recovery platform for backup. The new storage platform needed to be built into a high-performance, highly scalable and advanced architecture, which could be managed in a unified way to adapt to structured and unstructured data storage and business growth.

Why Choose HDS?

Through communication with Hitachi Data Systems (HDS), the bureau learned of a world-leading storage solution offered by HDS. Therefore, in the data center storage and disaster recovery reconstruction project in 2011, Beijing Municipal Bureau of Finance selected the unified solution from HDS. By combining Hitachi storage virtualization with its content management platform, the solution was able to meet all requirements of the users, and provided a sustainable storage and disaster recovery platform.

Easy-to-manage, Easy-to-upgrade Solution

To meet the bureau’s business and unified management requirements, Hitachi Data Systems proposed a centralized, easy-to-manage and easy-to-upgrade cloud storage system. The HDS solution utilized 1 Hitachi Universal Storage Platform® (USP) V. USP V would provide high-performance storage to build the virtualized storage pool. Hitachi NAS Platform (HNAS) 3080, powered by BlueArc®, was implemented as unstructured content cloud data gateway, thus creating a unified storage platform. Critical data, such as office documents, images and email attachments of Beijing Municipal Bureau of Finance needed large-capacity high-speed storage. This solution employed the high-performance, highly scalable HNAS 3080 to process this data and deployed unstructured data to the underlying USP V system.

Beijing Municipal Bureau of Finance undertakes very important tasks, so business continuity must be guaranteed. The solution built a unified disaster recovery platform and system for Beijing Municipal Bureau of Finance based on USP V for the production storage and USP VM for the disaster recovery storage, ensuring long-term business continuity.

"Employing Hitachi Universal Storage Platform V and the virtualized storage pool created on it provided for future capacity expansion and smoothly implemented upgrades at Beijing Municipal Bureau of Finance."
Hitachi Delivers on Project Objectives

Beijing Municipal Bureau of Finance planned to build a unified storage platform for all business. The HDS solution answered specific Beijing Municipal Bureau of Finance objectives for:

- **Virtualization.** HDS helped the bureau build a unified storage platform for the many existing business systems in Beijing Municipal Bureau of Finance. The HDS solution utilized HNAS 3080 and a high-performance USP V to build a virtualized storage pool to meet the business and unified management requirements. As a result, a unified storage platform was created.

- **Scalability.** Employing USP V and the virtualized storage pool created on it, provides for future capacity expansion and smoothly implemented upgrades.

- **Unstructured data storage.** HNAS 3080 and USP V support storage of unstructured data, such as office documents, images and videos, and provide unified management on the unified content cloud storage platform.

- **Disaster recovery.** For the virtualized storage pools in remote production center and disaster recovery center in different locations of Beijing, the HDS solution provides disaster recovery replication. The replication is implemented smoothly from USP V production storage platform to USP VM disaster recovery storage platform, and maintains long-term business continuity. The solution also provides unified disaster recovery protection for unstructured and other structured data deployed by HNAS.

Bureau Tallies Benefits, Plans Future HDS Solution Expansion

The virtualized storage pool, which combined HNAS with USP V, met the requirements of storing about 40TB data of the unified platform system and future petabyte-level expansion. The solution enabled unified storage of structured and unstructured data, while guaranteeing the deployment of a large volume of data such as office documents, images, videos, etc.

The unified disaster recovery system from the production center to the disaster recovery center was implemented smoothly. This higher level of data protection guaranteed business continuity, with a recovery time objective of less than 5 minutes.

In the future, Beijing Municipal Bureau of Finance will consider a large-scale Hitachi remote data protection solution, extended to 3 centers.