

Hitachi Storage Solutions at Work

Advanced Info Service Public Company Limited (AIS)

INDUSTRY Telecommunications

SOLUTIONS Business Continuity/Consolidation

Hardware—Hitachi Thunder 9585V™ modular storage system and Hitachi TagmaStore® Network Storage Controller model NSC55

Software—Hitachi TrueCopy™ Remote Replication and Hitachi ShadowImage™ In-System Replication software bundles, Hitachi Resource Manager™ utility package's Performance Monitor feature, and Hitachi HiCommand® Protection Manager software

Services—24/7 professional services provided by DataOne Asia, a Hitachi TrueNorth™ Channel Partner

“Our continued success in a very competitive industry relies on the technology and services that support our business. The products, price, and performance provided by Hitachi Data Systems and DataOne Asia are remarkable.”

*Suphot Punnachaiya
Assistant Vice President of Technical Operations
Advanced Info Service*



Thailand's Leading Wireless Provider Looks to Hitachi Data Systems for Performance, Reliability, and Scalability

Thailand telecommunications service provider Advanced Info Service rings in more than half the nation's wireless business and shows no signs of losing market share. With its continual expansion of services and customers, Advanced Info Service needed to amplify its data storage performance, capacity, and stability. The company called Hitachi Data Systems and DataOne Asia, a Hitachi TrueNorth™ Channel Partner, for an Application Optimized Storage™ solution.

Thailand has “gone cellular.” Advanced Info Service (AIS) holds the largest share of the fast-growing, fiercely competitive Thai mobile telecommunications market, with 17 million subscribers who represent more than 55 percent of the nation's wireless users. The rapid growth of the company's services and customer base happened as fast as text messaging exchanges between young professionals or teenagers.

Understanding the Demand for Data

Unrelenting growth is nothing new for AIS. Founded in 1990, the Bangkok-based wireless service provider began with just a few

thousand subscribers and basic mobile-to-mobile services. Today, AIS keeps 10,000 employees very busy running continuous promotions, managing customer accounts, expanding diverse services, and harnessing data storage—all in an effort to keep a successful lead in this “ring-tone era.”

“Data storage plays a vital role in mobile phone services, as AIS must hold substantial amounts of data for a long time for market requirements analysis and the subsequent creation of customer services to meet those requirements,” says Suphot Punnachaiya, assistant vice president of technical operations for AIS. “Moreover, customers are demanding the usage of more data via mobile phones with greater speed.”

Supporting the company's “anytime, anywhere, everyone” tagline means ensuring that data storage can perform in a highly available, stable environment, despite the continually expanding customer demands and internal usage. In an effort to keep pace with growth, management at AIS realized that the company needed to upgrade its data storage systems.

The Challenges: Aggressive Growth, Performance Speed, Stability

To make the business operate efficiently in an aggressive growth environment, AIS has relied on Hitachi Data Systems for 80 percent of its data center storage. The IT environment includes three data centers. Data is replicated to one backup center and then to another backup center. Across the three centers, AIS runs customer billing, corporate e-mail, customer relationship management (CRM), and data warehouse applications, mostly on Sun Enterprise servers with the Sun Solaris UNIX, HP-UX UNIX, and Microsoft Windows operating systems. This configuration is backed by three Hitachi Lightning 9900™ V Series storage systems and two Hitachi Freedom Storage™ 7700E systems, for a total of 120TB of storage capacity.

Punnachaiya determined that any data storage upgrade effort would need to include the corporate e-mail system, which had grown to 2TB and was hindering performance speed and stability. Additionally, replacement technology for the pair of Freedom Storage 7700Es had reached capacity. The acquisition of a new data warehousing application gave AIS an immediate need for at least 10TB of additional storage space to handle anticipated data volumes.

Although several storage vendors approached AIS to provide storage solutions, Punnachaiya chose to work with DataOne Asia, a Hitachi TrueNorth™ Channel partner, and with the Hitachi Data Systems Thailand office to architect an Application Optimized Storage™ solution that could meet the wireless carrier's urgent growth needs.

"We preferred Hitachi Data Systems for its product performance and price competitiveness and were pleased to know that our urgent requirements and tight implementation needs could be met," says Punnachaiya.

Planning Ahead for Resilient Growth

Punnachaiya worked with the technical consultants from DataOne Asia and Hitachi Data Systems on the AIS data storage upgrade. The team decided to migrate all the corporate mailboxes to a Hitachi Thunder 9585V™ modular storage system. They also agreed to purchase a Hitachi TagmaStore® Network Storage Controller model NSC55 to replace the pair of 7700Es; this would allow AIS to gain greater storage performance and would serve as a stepping stone to virtualization and system management technologies to support



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future needs. Punnachaiya also selected Hitachi TrueCopy™ Remote Replication and Hitachi ShadowImage™ In-System Replication software bundles to improve replication capabilities across the three data centers, as well as Hitachi Resource Manager™ utility package's Performance Monitor feature and Hitachi HiCommand® Protection Manager software, which are in the planning stages for deployment.

The Thunder 9585V system is designed for agile, quick-response operations, such as AIS's internal e-mail management, administrative and regulatory processes, and backup functions. No longer limited to the sluggish 2TB of storage capacity for its 10,000 users, AIS can now tap into the Thunder 9585V system's power and performance.

The wireless carrier has been able to more than double users' individual electronic mailbox storage capacity and has significantly improved productivity by gaining more responsive file access and faster data transfers. AIS systems administrators have also realized internal efficiencies, thanks to the Thunder 9585V system's easier storage backup and management capabilities, which reduce the IT resources needed.

The NSC55, powered by the Hitachi Universal Star Network™ crossbar switch architecture, delivers innovative controller-based virtualization, logical partitioning, and universal replication—and gives AIS five times the performance of the two 7700Es it replaced. Designed to serve in distributed environments for aggregating as much as 16PB of internal and externally attached storage, the model NSC55 will serve AIS's fast-growing, high-

performance needs for many years to come. Even better, Punnachaiya and his team appreciate the NSC55's advanced storage functionality, such as visualization of hosts and ports, performance bottleneck detection, storage capacity monitoring, client/server communication security, and easier installation features.

Dialing into All-the-time Efficiency

Thanks to its deployment of the Application Optimized Storage solution, AIS can continue to meet its "anytime, anywhere, everyone" commitment with higher performance, scalability, cost-effectiveness, and efficiency.

That efficiency has helped the bottom line. In fact, AIS was able to purchase the

NSC55 using the money saved on recurring maintenance and service costs for the legacy 7700E systems. And for future competitiveness and efficiency, the NSC55 brings to AIS the ability to apply storage virtualization across its IT environment for even more savings of both time and money.

"Our continued success in a very competitive industry relies on the technology and services that support our business. The products, price, and performance provided by Hitachi Data Systems and DataOne Asia are remarkable," says Punnachaiya.

About DataOne Asia

As a Hitachi TrueNorth Channel Partner, DataOne Asia helps its customers to simplify, secure, and optimize technology infrastructures, reduce total costs of ownership, and improve investment returns.

DataOne Asia is a leading outsource provider of products and services designed to support stringent and ever-changing e-business requirements. As a premier e-business exchange, DataOne Asia helps to build a community of businesses on the Internet and provides hardware and network management services, e-business application infrastructure, seamless communications, and state-of-the-art Internet data centers—the only pan-Asian provider equipped to offer leading-edge software and hardware solutions that enable customers to build an online presence and fully capitalize on new business opportunities in the global e-marketplace.

Headquartered in Singapore, DataOne Asia has regional offices in Malaysia, Thailand, and the Philippines, and direction operations in Hong Kong, China, Taiwan, Korea, Japan, and Indonesia. For more information on DataOne Asia, please visit www.data1asia.com.

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