



Shintao Natural Gas Implements VMware Cloud Foundation to Streamline Workflows and Improve Service Efficiency

Established in 1972, Shintao Natural Gas is the primary natural gas provider for the city of Taoyuan in Taiwan, serving as many as 430,000 households. To meet rising demand for gas and improve user experience, Shintao recognized the need for enhanced IT services for both internal and external users, which motivated the organization to begin planning and deployment of a private cloud.

Industry

Energy-Utilities

VMware footprint

- VMware Cloud Foundation®

After Taoyuan, Taiwan was upgraded as a special municipality, the city has invested heavily in digital transformation initiatives. Shintao chose VMware, recently acquired by Broadcom, to help make this transformation successful. Utilizing policy incentives and supporting resources, the city was able to facilitate an industrial digital transformation. As a key player in Taoyuan's development as a smart city, Shintao Natural Gas prioritized the implementation of VMware Cloud Foundation (VCF) in its digital transformation roadmap. This initiative aims to enhance service efficiency in the traditional natural gas industry through digital operations.

Providing opportunities to overhaul traditional operating model

In the past, Shintao operational processes were segregated between external and internal networks due to security concerns, requiring two separate workstations for each employee. This setup was an inefficient use of electricity, limited workspaces, and complicated data exchange and software updates. Other challenges included preventing internal data leaks via removable storage devices, lacking secure segregation within the same network segment, and not dedicating a secure and independent work area for vendors. The need for greater convenience and streamlined IT operations prompted Shintao to take the first step on its digital transformation journey.

“Natural gas is a conservative but essential industry. As the country's largest natural gas provider, Shintao needs to complete our digital transformation infrastructure quickly.”

Chien Shih-Shan, general manager & managing director, Shintao Natural Gas

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Building a private cloud to simplify processes

Chien Shih-Shan, general manager & managing director, Shintao Natural Gas, noted that natural gas is still a very traditional industry. To support the company's diversified operations, its infrastructure must be completed to lay the groundwork for sustainable operations.

Shintao selected VCF not only for its integrated compute, storage, network and management solution, which simplifies the system's control center architecture, but also for its ability to optimize workflows. It provides a ubiquitous private cloud platform for both traditional enterprise applications and modern applications. Already a solution favored by many enterprises across various industries worldwide, VCF also provides the option for hybrid cloud adoption according to business expansion requirements.

In July 2023, Shintao began by implementing a virtual desktop solution to manage user endpoint devices, simplify terminal work environments, and strengthen controls for sensitive internal data. VCF was then adopted to create the Shintao private cloud environment—this was the catalyst for the organization's internal IT digital transformation. VCF software-defined data center architecture drastically reduced investment in hardware and achieved 99.99% availability for key IT applications.

This provides Shintao an integrated private cloud platform for an efficient, resilient and secure environment, simplifying operations and consumption. Shintao users and business services now experience higher performance, reliability, and flexibility, and have reduced unscheduled downtime for core systems. Control center architectures are simplified, and time spent on maintenance is greatly reduced. Overall system monitoring and resource allocation

is easier and security measures can be enhanced without changing network architecture. Shintao also met ISO requirements for internal audit and control, significantly enhancing the network resilience and security of its private cloud.

Supporting sustainable development

When warranties expired on physical servers and storage devices, Shintao implemented VCF to achieve a private cloud architecture. IT monitoring was streamlined, and it created a war room dashboard for the Shintao IT center, providing comprehensive visual monitoring from physical IT equipment to virtual environments and system services. This significantly reduced IT personnel maintenance hours by over 2.5 times. It also enabled comprehensive IT resource monitoring, allowing for the adjustment of more than 70% of system CPU resource allocation, increasing resource availability by 65%. Most importantly, VCF significantly simplified Shintao internal IT management and operational processes—making data exchange easier and greatly enhancing overall work efficiency.

Shintao also leveraged its new and improved infrastructure to drive environmental, social, and governance (ESG) initiatives. Energy consumption was reduced by cutting electricity usage and the number of IT devices deployed. Shintao anticipates that streamlined and optimized workflows will allow for more data to be digitized, enabling improvement such as more accurate records of user natural gas consumption which will facilitate better carbon neutrality practices. These improvements will ultimately drive Shintao closer towards achieving its sustainability goals.

“Increased operational efficiency and service quality from cloud adoption and digital transformation will expand Shintao's future operational scope and prepare us for the modernization to come for the next fifty years.”

Chien Shih-Shan, general manager & managing director, Shintao Natural Gas
