SANGFOR

Customer Success Story

University Sultan Azlan Shah

Customer Background

Universiti Sultan Azlan Shah (USAS) is an institute of higher learning registered under the Private Higher Educational Institution Act 1996 (Act 555). USAS offers a variety of courses from foundation studies level to PhD. The campus is located at Bukit Chandan, Kuala Kangsar the Royal Town of Perak.

USAS strives to produce excellent graduates through a quality education programmes based on the integration of Islamic values and professional knowledge. To prepare a conducive environment for scholars to explore, strengthen and renew the authorisation of knowledge through research.
To champion humanitarian and social issues based on universal values and to internationalise all activities of the university.

The decision to establish USAS in the historical royal town of Kuala Kangsar with its clean and beautiful surroundings that attracts local and foreign tourists a like, making the university's position extremely strategic.

Executive Summary

- Private Local University
- Industry: University, Education
- Location: Malaysia

Challenges

- Complex to Manage
- Difficult to Expand
- Low Utilization
- No Disaster Recovery Plan

Sangfor Solution

- Sangfor aCloud

Challenges

Complex Management

- USAS had a conventional IT infrastructure (5 tiers) supplied by different vendors, making it tedious to maintain and O&M difficult. IT administrators were forced to check each appliance individually to ensure maintenance operations were kept up-to-date.
- The physical appliances were legacy and spare parts difficult to find in an emergency. Vendors did not often have the appropriate spare parts on hand and were forced to order any hardware required.
- There were only 2 IT personnel running the entire IT department, requiring them to work weekends and holidays and long hours, resulting in exhaustion and low productivity.

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Challenges

Difficult to Expand

- Physical appliances disallowed expansion or addition of resources. Because USAS hosted in-house applications, IT personnel were required to add additional physical servers whenever new applications were installed. The lengthy procurement process and lack of manpower meant that this task often took days or weeks to complete. Moreover, additional physical servers required additional software licenses and network ports, forcing IT personnel to both procure a server and also to closely watch all switches simultaneously.

Low Utilization

- Unlike in a virtual environment, the utilization of servers was relatively low (30% or below). Their system was not cost effective and their return-on-investment was comparable to a virtual environment. USAS management pressured the IT department to develop an alternative plan to resolve the issues of high cost of ownership & low ROI.

No Disaster Recovery Plan

- Floods, electric disruption or any kind of disaster caused significant service downtime, leaving IT administrators no alternative ways to restore systems. Because all data was stored in a single location, all core applications and systems were running 24/7. ISO auditors were putting pressure to USAS to focus on data security while USAS executives insisted on a DR plan to ensure there was no business impact to their offsite offices.

Customer Success Story

Sangfor Solution

Sangfor consolidated all physical appliances (servers and storage) to 2 nodes of hyper-converged infrastructure (HCI) appliances to replace the existing legacy systems.

Solution Values

Replaced with Hyper-Converged Infrastructure (HCI)

- After a few discussions and POC, Sangfor proposed their HCI solution and managed to substitute 4 physical appliance units with only 2 physical servers units, configured with the Sangfor Hyper-Converged solution. With a single brand and single vendor, IT and Operation departments experienced a lessening in the complexity of administrative tasks. The IT department was now able to spend more time focusing on necessities instead of constant hardware or appliance maintenance.

Highly Efficiency and Expandable

- IT personnel easily create virtual machines to host the in-house applications whenever necessary (Sangfor re-designed the infrastructure system with additional resources within the given budget). Sangfor's Hyper-converged infrastructure leveraged their virtual environment to simplify administrative tasks, reduce the purchase of new hardware and simplify the complexity of physical resources. Furthermore, Sangfor HCI consolidated the network, allowing IT personnel to easily map newly provisioned virtual machine(s) into any VLAN with the 'drag-and-drop' feature, simplifying the procurement process to a 'Software Defined Data Centre' concept.

Setting up a Disaster Recovery Centre

- Sangfor helped to setup Disaster Recovery (DR) functions for USAS (specially requested by a USAS IT manager after visiting a Sangfor event), configure the backup from production and transfer copies to DR. Thus, IT administrators can now power up DR whenever necessary with 'one-click," with convenient mobile access available to provide full flexibility and full security.

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Solution Values

Balance the Server Utilization

- Working in a virtual environment means resources are equally divided into 2 nodes of physical servers to load balance the resource weight. Sangfor configured the server specification based on the importance of individual applications in order to achieve the best utilization and to maximize the ROI. Sangfor has enabled USAS to fully recover from any downtime without loss of significant data near-immediate recovery.