Leading Beverage Manufacture Protects Critical SAP ERP in AWS EC2 Cloud

SIOS Chosen Based on Certifications and Validations for SAP, Amazon Web Services and Red Hat Linux



A leading Hong Kong-based beverage manufacturer produces 61 beverage brands including the number one software drink brand in the world and distributes them to more than 728 million customers throughout Hong Kong, mainland China, Taiwan and western USA.

The Environment

The company relies on an SAP ERP (enterprise resource planning) system running in a Red Hat Linux environment to manage a variety of critical business operations. The SAP environment comprises a variety of services including the ABAP (Advanced Business Application Programming), SAP Central Services (ASCS), Evaluated Receipt Settlement, Web Dispatcher and the DB2 database.

They used a large Storage Area Network (SAN) for data storage. The core SAP applications handle all business operations across the company's beverage division. In their on-premises data center, the company provided uptime protection for this system using data replication and backups of the SAN.

The Challenge

The company's IT department determined that they could achieve true high availability (99.99% uptime), disaster recovery, scalability and cost savings by migrating to the cloud and using failover clustering to protect their critical SAP system. However, they realized that SAN and other shared storage required for traditional failover clustering is not practical in some clouds and is not available in others.

The Evaluation

After extensive evaluation, the company chose to move their SAP environment to Amazon EC2. They established four key criteria for evaluating their choices for an HA/DR solution.

Their solution needed to:

- Be certified and validated for use with SAP, AWS and Red Hat
- Provide both high availability and enable high performance
- Protect against all likely failure scenarios
- Enable easy ongoing operation and maintenance



The company's cloud account manager recommended that they consider the SIOS LifeKeeper, offered through AWS China. The SIOS software is certified by SAP for both NetWeaver and DB2, and that SIOS is fully tested and supported on Red Hat Enterprise and other distributions of Linux.

The company tested the SIOS clustering software extensively under a variety of challenging failure scenarios, and also evaluated the throughput performance during periods of peak demand. The IT team's confidence in SIOS LifeKeeper increased as it passed each of their rigorous tests and proved to be remarkably easy to use.

The Solution

SIOS LifeKeeper for Linux enables SANIess failover clustering to provide full HA and DR for SAP and its critical services. The SIOS software uniquely includes modules called Application Recovery Kits (ARKs) that provide application-specific functionality that simplifies configuration and ensures failover orchestration maintains application best practices.

The SAP and HANA ARKs automate configuration steps and validate configuration inputs and manage IP failover, and boot order to minimize human error.

Unlike other clustering software that only validates server operability, the SIOS clustering software verifying that SAP and critical services are running, that databases are mounted and available, that any file shares or exports are available, and that clients are able to connect. To ensure these services are all functioning properly, SIOS software continuously monitors the servers, virtual machines, operating system and all major components of the SAP software.

For DR protection, the company located the active and standby cluster nodes in different AWS Availability Zones for geographical separation.

The Results

SIOS LifeKeeper has made it possible for this leading beverage manufacturer to meet the stringent recovery time and recovery point objectives established for its SAP/DB2 environment. To date, the configuration has experienced no perceptible downtime, including during planned maintenance. And these results have been realized with minimal effort, making it possible for the IT staff to focus more on projects that enhance employee productivity or otherwise improve business operations.

About SIOS

SIOS delivers innovative software solutions that provide application high availability and disaster protection for Windows and Linux environments.

SIOS clustering software provides the flexibility to build clusters to protect your choice of Windows or Linux environment – and any configuration (or combination) of physical, virtual and cloud (public, private, and hybrid) storage – without sacrificing performance or availability.

Founded in 1999, SIOS Technology Corp., is headquartered in San Mateo, California, and has offices throughout the United States, and in the United Kingdom, Germany, and Japan.

