

SIOS DataKeeper™ Cluster Edition Protects Van de Lande Data Systems



"We have tested our file server with both DFS replication and AlwaysOn technology. Neither delivered an automated disaster recovery solution to match SIOS DataKeeper, which fully addresses our DR requirements."

- Maurits van de Lande, VDL

SIOS #SANLess Cluster Delivers Continuous Availability and Disaster Protection for Business Critical Applications and Data.



Van de Lande BV (VDL) specialises in the manufacture of PVC-U and PE pressure fittings and valves for plastic piping systems, both made from tube and injection moulded. Their products are used all over the world in industrial and technical installations. What sets VDL apart is its impressive range of product types and sizes, and its continuous commitment to product improvement and enhancement. As a result, VDL has been the brand of choice for builders of systems and installations for more than 50 years.

The Challenge

VDL started with a virtualized server environment, based on Xen and CentOS. Later, they implemented KVM and Hyper-V. This heterogeneous environment proved difficult to maintain so they gradually switched to the Windows Hyper -V environment.

Before implementing the SIOS DataKeeper solution, VDL relied on shared storage (SAN) for their main storage. To improve performance, they decided to move to local storage based on solid state disk (SSD) instead of traditional spinning disks.

However, VDL relies heavily on the availability of its ERP database. With only one primary data processing system, VDL needed a reliable, comprehensive disaster recovery solution to ensure the availability of its systems in the event of a site wide disaster.

To prevent downtime, the company needed its servers to replicate data to a backup server for disaster protection. If one server fails, the other server takes over operation. This failover process sustains operations, maximises uptime and enables user productivity.

The joint solution of Microsoft Hyper-V with SIOS DataKeeper Cluster Edition software provided the availability and disaster protection that was essential to VDL.

The Solution

To deliver full failover and disaster recovery protection, VDL built a Windows Server Failover Cluster (WSFC) system, with each node replicating data to the other. If one node fails, operation continues on the other server and no data is lost.

VDL use SIOS DataKeeper Cluster Edition software to ensure continuous availability of applications, databases and web services. SIOS DataKeeper software integrates with WSFC to create a 'mirrored' server system between two Windows cluster nodes. If the primary node fails, WSFC transfers all operations to the other node while enabling continuous access to applications and data (which is protected at the volume level). SIOS DataKeeper software enables disaster recovery without the long down time and recovery time associated with traditional backup and restore technology. SIOS DataKeeper works with MS WSFC to monitor system and application health, maintain client connectivity and provide uninterrupted data access, giving VDL the reliable, fault-resilient system they needed.

SIOS DataKeeper software provides an extension to Windows Server 2008 R2 and 2012. SIOS DataKeeper Cluster Edition further extends the capabilities of Microsoft Cluster Services and Windows Server Failover Clustering. SIOS DataKeeper Cluster Edition also supports real-time replication of Hyper-V virtual machines between physical servers across either LAN or WAN connections.

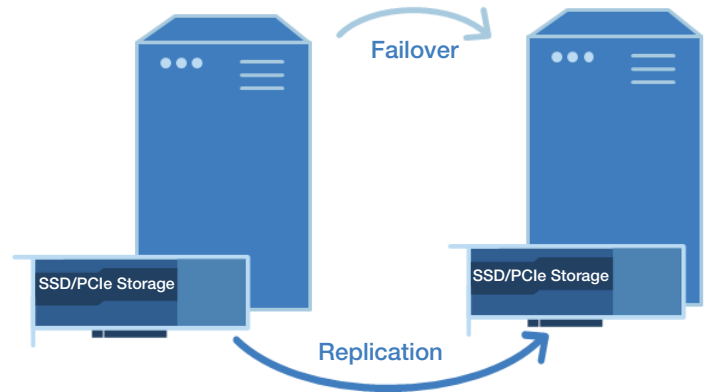
For companies like VDL, SIOS DataKeeper Cluster Edition software reduces the cost of deploying clusters by enabling them to create a #SANLess cluster that eliminating the cost, complexity, and single point of failure risk of a SAN in a traditional shared storage cluster.

The cluster implementation ran smoothly and took less than a day. Following a thorough evaluation of the VDL server configuration and testing, the installation team found that the #SANLess cluster with SIOS DataKeeper Cluster Edition software met all of their criteria for DR, performance, and high availability. During the system failover test, the network services team easily failed over and failed back the system quickly and easily.

Benefits

VDL now has a comprehensive HA/DR solution that keeps their mission-critical applications such as its web services and ERP database always available. SIOS DataKeeper software provides continuous real-time, host-based, block level replication delivering continuous access to customer and inventory records. VDL deployed two SIOS DataKeeper clusters that protect a file server, print server, SQL server (ERP), Microsoft Dynamics NAV web services, NiceLabel NiceWatch label service and iSCSI server.

One two-node cluster works as a file server and iSCSI server, while the other supports a SQL Server cluster and Dynamics NAV web services. The IT infrastructure consists of three Hyper-V hosts with 60 VMs installed on it, one BackupExec server, 50 desktop users and 25 mobile barcode scanners, which are connected via web services to the ERP system. Every host contains 240GB SSDs in a RAID 60 configuration with a total of 3TB local storage. The systems are connected through 10 Gigabit interfaces.



SIOS #SANLess cluster synchronizes high performance local storage for high availability without the cost, complexity or single point of failure risk of shared storage.

About SIOS

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

Clusters Your Way.™

An essential ingredient in any cluster solution, SIOS SAN and #SANLess clustering software provides the flexibility to build clusters your way 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. SIOS' unique #SANLess clustering solution eliminates both the cost and the single-point-of-failure risk of traditional shared-SAN storage.

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

About FT Systems

FT Systems specializes in creating high availability and fault-tolerant solutions. Together with partners FT systems create solutions and give advice on the availability of mission-critical applications.