



#SANLess Clusters for Cloud SQL Server in the Amazon Cloud

Key Benefits

Enables Clustering in the Cloud

- Makes cluster failover protection in cloud environments possible by eliminating the need for shared storage.
- Fully integrated with Windows Server Failover Clustering (WSFC)

Protection for Applications and Data

- High availability and disaster protection in a cloud environment.

Ease of Use

- Intuitive console for easy ongoing monitoring and management.

Through a joint effort with Amazon, SIOS provides a proven, highly efficient data replication solution that protects your data and applications in a cloud while simplifying your environment and lowering your total cost of ownership. SIOS #SANLess software enables you to create a cluster without the need for shared storage. It keeps real-time copies of data synchronized across multiple nodes and enables failover across EC2 Availability Zones (AZs) for availability and disaster protection in an Amazon cloud.

Microsoft SQL Server Failover Protection

Microsoft SQL Server Failover clusters provide failover protection for business critical databases. However, unlike other applications, SQL Server is typically deployed in a single Amazon Availability Zone, making it susceptible to outages within the Availability Zone. While SQL Server AlwaysOn Failover Cluster Instances and AlwaysOn Availability Groups provide some failover protection, they do not provide the benefits of a complete cluster solution. For example, AlwaysOn Failover Cluster Instances (FCI) require the use of a shared storage, excluding their use in a cloud environment.

Amazon's relational database (RDS) product for deploying SQL Server does not support multiple availability zones, has a limit of 30 database per SQL Server instance, and does not support Microsoft Distributed Transaction Coordinator (MS DTC). SIOS #SANLess cluster software works with AlwaysOn Failover Cluster Instances to provide the best of both worlds with an optimized and cost effective high availability solution in an Amazon Cloud. It integrates easily with AlwaysOn Failover Cluster Instances and enables deployment into environments with no shared storage, eliminating the single point of failure risk posed by shared storage.

SIOS software makes it simple to deploy a high availability solution in an EC2 environment that delivers reliable and efficient failover for SQL instances within and across Availability Zones. It also works with SQL Server Standard Edition and provides replication for data other than SQL.

Optimal Performance and Cost Savings

SIOS software replicates data volumes at the block level to use significantly fewer system resources, make more efficient use of the available bandwidth and to transfer more data faster across both WANs and LANs than file-based replication alternatives. SIOS software delivers incredibly fast replication speeds—without hardware accelerators or compression devices.



SIOS software replicates both data files and critical storage metadata information such as data access permissions. Block level replication easily transmits encrypted files, open files and other formats that challenge file-level replication solutions while controlling access to the backup environment, preventing unauthorized or inadvertent update access, protecting against data corruption.

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 provides unique #SANLess clustering software that eliminates both the cost and the single-point-of-failure risk of traditional SAN-based cluster solutions.

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

	SIOS DataKeeper Powered Failover Cluster	AlwaysOn Failover Cluster Instance	AlwaysOn Availability Groups
Protection Level	Instance	Instance	Database
Storage Type	Non-shared	Shared (Single Point of Failure)	Non-Shared
Protection Resources	Server, Instance and Database Server	Instance and Database	Database Only
Supported Versions of SQL	2005, 2008, 2012	2005, 2008, 2012	2012 Only
Supports Distributed Transactions	●	●	○
Protects System Databases	●	●	○
Protects Unlimited Databases	●	●	○
Protects Data Outside Databases	●	○	○
Protects SQL Server Agent Jobs	●	●	○
Protects SQL Logins	●	●	○

