Etere Supports Microsoft High Availability

Etere supports Microsoft SQL high availability solutions, including load balancing and failover, ensuring availability, reliability and responsiveness at all times.

Etere logo

Microsoft

Microsoft SQL Server

Etere supports Microsoft high availability solutions that helps it to maintain a high level of availability and uptime at all times. It supports failover cluster and features a high level of fault tolerance.

About Microsoft SQL High Availability
- Improves the availability of servers and databases
- Masks the effects of hardware or software failure
- Reduces the downtime of applications
- Maintains the availability of applications

Always On Availability Group (AG)
- One or more user databases that fail over together
- An availability group consists of a primary availability replica and one to four secondary replicas that are maintained through SQL Server log-based data movement for data protection without the need for shared storage
- Each replica is hosted by an instance of SQL Server on a different node of the WSFC
- In the event of a failover, WSFC is leveraged to reconfigure a secondary replica on another SQL Server instance to become the availability group's primary replica
- The availability group's virtual network name resource is then transferred to that instance

Always on Failover Cluster
- Leverages Windows Server Failover Clustering (WSFC)
- Provides local high availability through redundancy at the server-instance of SQL Server that is installed across WSFC nodes and across multiple subnets
- The FCI provides failover from one WSFC node to another if the current node becomes unavailable

Always On Availability Groups
- An enterprise-level high availability and disaster recovery solution in SQL Server 2012
- Enables maximized availability for one or more user databases
- Requires that the SQL Server instances reside on Windows Server Failover Clustering (WSFC) nodes

About Database Mirroring
- Increases database availability
- Supports almost instantaneous failover
- Maintains a single standby database or mirror database for a corresponding production database that is referred to as the principal database

Log Shipping
- Log shipping operates at the database level
- Maintains one or more secondary databases for a single production database (also known as primary database)

Windows Server Failover Clustering (WSFC)
- A group of independent servers that work together to increase the availability of applications and services
- Provides the infrastructure features that support the high-availability and disaster recovery scenarios
- Provides distributed metadata and notifications

■ Provides resource management
■ Provides health monitoring
■ Provides failover coordination

Failover Cluster Instance (FCI)
■ May be used together with an availability group to enhance the availability of an availability replica
■ To prevent potential race conditions in the WSFC cluster, automatic failover of the availability group is not supported to or from an availability replica that is hosted on a FCI

Recommended Solutions
■ In an instance of data protection through a third-party disk solution, the always On Failover Cluster Instance solution is recommended
■ In an instance of data protection through SQL Server, always On availability groups solution is recommended
■ In an instance of SQL server that does not support Always On availability groups, log shipping is recommended

About Failover Policy
■ Configured at the WSFC node, the SQL Server Failover Cluster Instance (FCI), the availability group levels
■ Based on the severity, duration and frequency of unhealthy cluster resource status and node responsiveness
■ Can trigger a service restart or an automatic failover of cluster resources from one node to another
■ Configured at the WSFC node, SQL Server Failover Cluster Instance (FCI) or the Availability group levels

About Storage Spaces Direct
■ Caching
■ Storage tiers
■ Erasure coding
■ RDMA networking and NVMe drives
■ Delivers unrivalled efficiency and performance

About Etere

Etere was established in 1987 in Italy and it is amongst the worldwide leaders in Media Asset Management (MAM) and channel-in-a-box software solutions. Etere Media Enterprise Resource Planning (MERP) framework of scalable solutions are used by media enterprises across the end-to-end workflow. Etere MERP modular software including Media Asset Management (MAM), Airsales, Ad Insertion, Playout Automation, Broadcast Management System, HSM Archive, Newsroom Computer System (NRCS), Broadcast Management System, Broadcast video over IP, Censorship, Closed Captioning and Subtitle Management are built with an innovative architecture, offering the best flexibility and reliability in the market. Etere headquarters is in Singapore and it has a worldwide 24/7 support.