



SMARTESTENERGY ACHIEVED A HIGH-AVAILABILITY HYBRID CLOUD ARCHITECTURE WHILE REDUCING LICENSING COSTS

Industry
Energy

About the Customer

SmartestEnergy is a leading purchaser and supplier of energy generated by the independent sector. They combine customer knowledge built up over 13 years with a uniquely flexible approach to service delivery. It's their mission to help customers find the right energy solution for their business.

They offer bespoke service with a range of fixed and flexible products to meet the specific needs of their customers, who range from large industrial users to high-street retailers.

Customer Challenges

SmartestEnergy was undertaking a data center migration to a single co-location data center and needed to redesign their production SQL Server architecture to incorporate on-premise resilience and provide disaster recovery (DR) capability to the cloud.

SmartestEnergy engaged Data Intensity to design and build out a hybrid SQL Server topology using SQL Server Standard Edition and Microsoft Azure. The challenge was to deliver the on-premise resilience requirement of a two-node cluster while leveraging Azure for DR with a third node. SQL Server 2017 Standard Edition provides only basic availability groups that support a single replication.

Data Intensity Solution

Implementation of a Microsoft Azure Cloud for SQL Solution

Data Intensity designed and built out a stretched three-node Windows Server 2019 Failover cluster. The cluster comprised two on-premise nodes with shared storage and a third Azure VM node. An SQL 2017 Standard Edition Failover instance was configured for the two on-premise nodes, meeting the on-premise resilience requirement.

The SQL Server failover instance is recognized as a single SQL Server instance, allowing the database to be mirrored to the third Azure node using basic availability groups. The application connectivity was accomplished using a single database listener associated with one of the many availability groups and stretched into Azure using Azure Load Balancer. The use of a single database listener meant that all databases had to reside on the same availability group replication and move as a collective. To achieve this, Data Intensity developed a script to check the database status and move databases by code as appropriate.



The Data Intensity Difference

Industry Validation

Third-party independence with high visibility and analysis

Comprehensive Approach

360-degree view of the technology configuration, performance, security, scalability

Real-World Experience

Deep and wide technology expertise – 2,800+ technical certifications across 10 primary technology domains over two decades of designing, implementing, and supporting full-stack enterprise application solutions

Benefits

By combining two native SQL Server HA technologies, Failover Cluster Instances, and Basic Always-On Availability Groups, SmartestEnergy was able to achieve a highly resilient architecture on-premise and incorporate a third warm disaster recovery instance without incurring the higher licensing costs of Enterprise Edition. Data Intensity provided support during the migration process, scripting, and rebuilding the transactional replication post-migration.

About Us

Data Intensity is a Global Oracle Platinum and Microsoft Gold Partner with more than 20 years of experience managing Oracle workloads both on-premise and in the cloud (public and private). Data Intensity delivers a follow-the-sun 24 x 7 reactive and proactive managed services support focused on providing business value. A progressive organization achieving results through advanced innovation, Data Intensity forges vendor partnerships that ensure we're at the forefront of cloud technology evolution, enabling your business to remain competitive through technological innovation.

Data Intensity is the largest independent multi-cloud services provider focused on managing mission-critical applications and services in a hybrid cloud world. Our purpose-built solutions and services focus on the life-cycle design, implementation, support, and operation of technologies and platforms that power our customers' business processes. Customers choose Data Intensity because we allow them to focus on their critical business needs while we focus on their applications and multi-cloud investments.



Gold Cloud Platform
Gold Application Development
Gold Data Analytics
Gold Data Platform
Gold Datacenter
Silver Security

- + Data Intensity is a Microsoft Certified Partner in Data Platforms and Data Center.
- + Data Intensity supports thousands of databases, including 5,000+ global SQL Server instances.

