

Azure and SQL Database, Backup and Disaster Recovery Assessment, Implementation and Testing.

Are you ready to navigate all of the new database Backup and DR technologies available to you in Azure and SQL 2017? We are experts in the Microsoft data and BI stack and we can help ensure your data is secure and available.

We will review your current SQL server, Azure Database and/or Analysis Services solution and provide a complete end-to-end backup and disaster recovery plan, including timelines and Azure cost projections.

A successful database backup and disaster recovery plan includes a clear, data-driven understanding of your current infrastructure and your committed Service Level agreement (SLA). This assessment will deliver a roadmap for your entire SQL Server and Azure DB environment. We start with a review of your current database solution, which includes dev, test and production. From there, we work with you to translate that information into an action plan that will deliver a solution to secure your data and meet the highest SLA's available.

Our review includes the following Azure and SQL technologies available which enables us to design a solution that meets your SLA and budget requirements.

- Always On Availability Groups
- Active geo-replication and auto-failover groups
- Read Scale-Out
- Zone Redundant Configuration
- Azure Availability Zones
- Azure Traffic Manager (ATM)
- Basic, Standard, and General Purpose service tiers availability in your area
- Accelerated Database Recovery (ADR)
- Stretch Databases, Partitioning Data
- Long term Retention (LTR) and Blob Storage Solutions
- Temporal Tables and Point in Time Restore Issues
- Standard SQL Backup and Restore Solutions and technologies
- Support for Contained Users, Active Directory and Azure AD Users in DR Solutions



Our assessment will answer architectural questions related to the four major potential disruption scenarios:

- **Local hardware or software failures** affecting the database node such as a disk-drive failure.
- **Data corruption or deletion** - typically caused by an application bug or human error. Such failures are intrinsically application-specific and cannot be detected or mitigated automatically by the infrastructure.
- **Datacenter outage**, possibly caused by a natural disaster. This scenario requires some level of geo-redundancy with application failover to an alternate datacenter.
- **Upgrade or maintenance errors** – unanticipated issues that occur during planned upgrades or maintenance to an application or database may require rapid rollback to a prior database state.

Deliverables

We will provide you with detailed backup and disaster recovery architecture along with platform recommendations for each process and service currently used in your data pipeline. This project step is a prerequisite for the next follow-on tasks, which is implementing, testing and training support staff on each technology used.

Agenda

Weeks 1-2 – Data Collection

- Define the SQL and/or Azure Backup and Disaster recovery environment
- Inventory of server infrastructure, (Dev, Test and Production)
- Inventory of services that will need to meet the Service Level Agreement (SLA)
- Collection of basic workload utilization metrics

Weeks 3-4 – Infrastructure Analysis

- Categorize each data service and data pipeline and match it to the SLA
- Review database sizes, hot and cold storage along with ETL storage and determine what solutions will meet the SLA and budget requirements
- Estimate modernization level of effort
- Estimate costs related to meeting the solution SLA

Note: We can easily customize our solution to include or exclude any technologies and processes that you may need.