DP201 - Designing an Azure Data Platform Solution

Lab 5 – Designing for Scale and Resiliency

Exercise 4

Task 1: Incorporate Disaster Recovery into Architectures

Use the table below to document the service feature that can support the disaster recovery for AdventureWorks. The choice should be justified.

Below are examples of the requirements that could be identified.

Service	Disaster Recovery Approach	Justification
Data Lake Store Gen II	1. Read-access geo-redundant storage (RA-GRS)	In a DR strategy, it is also important to have data replicated to a different region using GRS or RA-GRS replication.
Cosmos DB	1. Automatic online backups	Azure Cosmos DB automatically takes a backup of your database every 4 hours and at any point of time, only the latest 2 backups are stored. However, if the container or database is deleted, Azure Cosmos DB retains the existing snapshots of a given container or database for 30 days.
SQL Database	1. Active geo-replication 2. Auto-failover groups 3. Geo-restore 4. Zone-redundant databases	There are a wide range of options available for disaster recovery. Full details for at https://docs.microsoft.com/en-us/azure/sql-database/sql-database-disaster-recovery
SQL Data Warehouse	1. Data warehouse snapshot 2. Geo-backups	A *data warehouse snapshot* creates a restore point you can leverage to recover or copy your data warehouse to a previous state. SQL Data Warehouse takes snapshots of your data warehouse throughout the day creating restore points that are available for seven days. SQL Data Warehouse supports an eight-hour recovery point objective (RPO). You can restore your data

| | | warehouse in the primary region from any one of the snapshots taken in the past seven days.

Geo-backup are performed once per day to a paired data center. The RPO for a geo-restore is 24 hours. You can restore the geo-backup to a server in any other region where SQL Data Warehouse is supported. A geo-backup ensures you can restore data warehouse in case you cannot access the restore points in your primary region. |
|---|---|---|