New England Utility Company Case Study





Profile

A public power utility company, owned by the people of a large city in New England, provides reliable services at economical rates through teamwork, technology, and innovation. The organization and its employees are committed to safe operations, to excellent customer service and to the community they serve. Like most power companies, this New England based company uses a geographic information software (GIS) application for planning, building, monitoring, and managing their transmission networks.

Problem

The team at this growing power utility company sought to upgrade their GIS application database back-end in AWS to incorporate an additional region as part of their resiliency strategy. Because the current application was using critical SQL data, this required additional considerations to ensure replication of their production data was seamless.

Solution

As part of the ongoing Managed Services effort, DLT supported the power company's team in creating a new SQL witness server configuration across three AWS regions to ensure seamless availability in a disaster scenario. By using VPC peering across the production, disaster recovery, and witness environments the new architecture is able to take advantage of the powerful and secure AWS backend network. DLT was responsible for configuring the multiple VPCs and peering connections, while managing the EC2 components of during and after the updated deployment.

How AWS Services Were Used as Part of the Solution

DLT worked with the company's team to come up with the listener solution and planned for the multi-region deploy-

ment. The new architecture included AWS networking in multiple Virtual Private Clouds (VPCs) across three US-based regions with a VPC connection across each. Once the VPCs and ports were configured, additional Elastic Compute Cloud database servers were set up with failover and monitoring in mind, using CloudWatch, CloudTrail, and AppDynamics for optimum performance monitoring.

Third Party Tools

CloudCheckr, Zendesk Support Ticketing, AppDynamics

Outcome(s)/Results

Following the successful deployment of the SQL listener solution, the team at the utility company have seamless replication with high-safety, automatic failover available in the case of an emergency, preventing potential outages for stakeholders. Monitoring services through DLT Managed Service practice continues to provide platform monitoring for the new deployment in addition to failover testing for additional peace of mind.

Lessons Learned

With the successful SQL failover upgrade, the power company now has a template for multiple critical applications as they become targeted for migration into the cloud. The team is able to leverage multiple AWS regions for more services and have experience with using VPC peering connections for all of their workloads. This knowledge in addition to future planned workloads and continual DLT Managed Service monitoring allows for continuous transition of projects into the cloud with confidence.



DLT