

AWS PARTNER Premier Tier Services

Public Sector
Immersion Day
Managed Service Provider
Govt. Services Competency
AWS GovCloud (US) Delivery

Education Services Competency Public Sector Solution Provider Well-Architected Partner Program
 Cloud Operations Software Competency

Case Study: North Attleboro Electric Department - GIS

Profile

NAED is a state and local public sector government agency that supports residents of North Attleborough Massachusetts. NAED specializes in using science and technology to research energy generation through wind, solar, nuclear, and hydro. Another core commitment is applying technology to advanced metering infrastructure and electrical vehicle charging stations. NAED's Geographic Information System has been used for many years to help this team uncover insights from location data, map layering, and 3D modeling to accomplish their ongoing efforts to provide services to the community and work toward their objectives.

Problem

One of the major concerns that the team was facing were problems with how authentication was configured with their on-premise Active Directory in conjunction with resources that were deployed within their VPC's. While reviewing the components of the authentication problem, it was determined that security could be further enhanced with traffic encryption. The customer was interested in remodeling their disaster recovery solution from an "always-on" configuration to a stand-by solution to reduce costs and increase security. Lastly, it was found that the operating system that this application was using is approaching end of life support.

Solution

To resolve the Active Directory issues, an AD connector inside the AWS account connected to the on-premise environment was designed to communicate properly with resources deployed within the VPC's. To further enhance compliance requirements, the AD connector was configured over a site-to-site VPN to allow secure communication of traffic. This was mandatory to adhere to the new infrastructure that was being put into place . For the re-platform of the disaster recovery solution, Amazon RDS was configured with a read replica in an alternate region to the production environment. In the event of a disaster, this would allow the replica to be promoted to the master and have the GIS applications running on ec2 automatically provisioned, without causing any loss of service. To resolve the end-of-life support on the current system's operating system, the Engineering team at TD SYNNEX Public Sector proposed an OS upgrade moving from an end of life Windows Server version to a LTS Windows Server version.

Outcome(s)/Results

With TD SYNNEX Public Sector's experienced team of AWS Certified professionals, state of the art managed services solutions are designed and delivered to meet the unique needs of public sector customers. By delivering an efficient and well architected solution, NAED will be able to continue to obtain operational support of their systems through a current operating system, a secure and properly configured authentication control, and a robust disaster recovery solution. This will allow NAED to continue to pursue important research around creating energy efficient solutions with their GIS applications without having to manage the underlying infrastructure.

For More Information



