CASE STUDY

Accelerating Business Outcomes for a Power & Utilities Company

Through data freedom, flexibility, and instant access

About the Customer

One of the largest, vertically-integrated energy producers in North America, based on electricity produced and market value.

Benefits

Increased productivity
Move data 400% faster and access it at near-instant speeds so the organization can focus on what to do with the data, not how to get it

Compliant, controlled data
Operate seamlessly within a hybrid cloud environment while maintaining control of where data sits

Reduced costs
Access data in a single location, reducing redundant storage, data transfer, and migration costs as well as need for version control

Executive Summary

Many forward-thinking organizations within legacy industries, like power & utilities, are looking to digital transformation to revolutionize their operations: increasing service reliability, improving customer satisfaction, and optimizing operational costs. For a large power & utility company, this meant bringing a geographically diverse network of power generation sites and data centers online to create transparency and consistency across data that could then be analyzed and used across a variety of initiatives. Using Vcinity increased the agility and velocity of the company's digital transformation by enabling expedited data movement and the ability for applications to instantly operate on data, regardless of where it exists—allowing the organization to significantly reduce migration time.

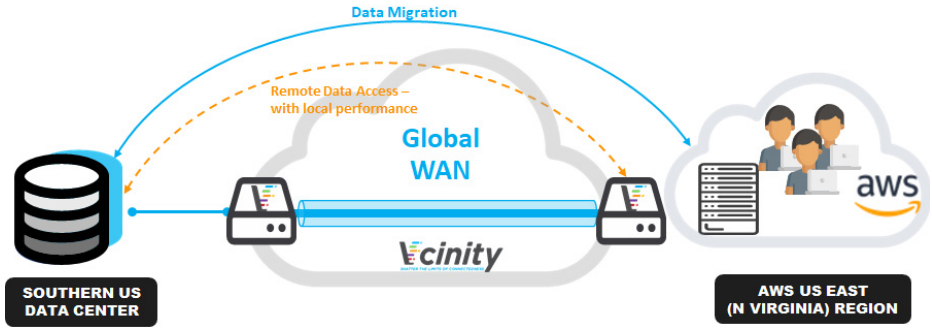

Figure 1. Vcinity allows for rapid movement of and access to data across data centers, cloud, and edge locations

Challenges

To improve technical performance, maximize operational efficiency, and meet customer expectations, this large utility embarked on a "cloud first" journey—which meant cloud migration and data center consolidation across its complex IT infrastructure. Moving these large amounts of data to new data centers or the cloud was time consuming and costly. The organization also knew they needed to prepare for the future challenge that, once data was in the cloud, they would still need copies of data for local applications to run at expected performance levels. This meant the amount of data they would be managing wouldn't be optimized—just moved. Additionally, due to both industry regulations and/or difficulty transmitting large volumes of data from edge locations, such as power generation sites, not all their data could be moved to the cloud.

Vcinity Solution

This large power & utility company turned to Vcinity's hybrid cloud software to support both their data center consolidation and cloud migration as well as to support their post-migration operations in a flexible, scalable way.

Vcinity's technology was placed between the utility provider's datacenter in Miami (on-prem location) and AWS cloud (US East (N. Virginia) Region) to quickly move file data into Amazon S3 storage. The standard workflow, which will also be used for a variety of the utility's business units, begins with identifying which application data must be moved from on-premises to the appropriate AWS region Amazon S3 bucket(s) and placing that data in a centralized local on-prem file share. From there, the utility can either use native file copy tools or Vcinity technology to schedule automated jobs to move data from the on-prem file share(s) to Amazon S3 bucket(s) via an AWS Direct Connect Gateway. The utility then monitors and verifies successful data movement natively via the Amazon S3 bucket(s) user interface. With their data now stored in Amazon S3 and/or Amazon Elastic Block Storage, the data can then be leveraged by Amazon EC2 application queries, analysis jobs, and more.

Once the deployed, Vcinity evaluated the following criteria (between the on-prem location and in AWS cloud):

- Data transfer speeds that could be used during migration and
- Post migration, if cloud applications can access remote on-prem data as if it were local.

Evaluation found data transfer rates using Vcinity averaged 400 percent faster than traditional methods—speeds that could shave months off the overall migration process moving petabytes of data. It also provided LAN-like performance across the WAN so that cloud applications access on-prem data as if it were local to the application.

Impact

Vcinity provides power & utility organizations the freedom to implement a data and cloud strategy that best suits the vision and requirements of their enterprises. They can hasten their AWS cloud migration and choose the best place (whether in the cloud, a datacenter, or edge location) to house their data based on cost and performance—which provides additional capacity and resources to focus on business and customer innovations.

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