Clark Realty Capital Cloud Storage

CHALLENGE

Clark Realty Capital (CRC) is a national real estate company focused on serving military housing partners and jointly owned real estate investments with the Clark organization.

CRC had a requirement for making its data available for access by multiple regional offices spread across the nation. Prior to this project, data storage in regional offices was addressed by physical servers at each location with backups consolidated to a centralized data center using third party backup software over DMVPN connectivity. Data backups were replicated to a secondary data center for redundancy and long-term retention. With data located in regional offices spread across the US, data protection became increasingly difficult as data sizes increased. Maintaining and protecting disperse file systems introduced latency and operational overhead. Hardware refresh cycles for the physical equipment at each regional office and both data center SANs provided CRC an opportunity to rethink the existing storage strategy to significantly reduce the capital expenditure of each office and lower the storage footprint in each data center. They were looking for a backup and recovery solution that would streamline backup and data protection for all CRC locations nationwide while reducing their reliance on aging hardware and reducing CapEx.

SOLUTION

The primary goal of this project was to have Red River perform assessments of CRC's server infrastructure, then consolidate and migrate the remaining servers to the AWS environment.

Red River implemented a backup solution using N2WS for servers in AWS. Additionally, to ease the site-to-site connections from all regional offices, an SD-WAN solution was implemented utilizing Meraki's vMX appliance in the AWS Cloud.

CRC's primary AWS storage solution consists of Elastic Block Storage (EBS) volumes that are attached to Elastic Cloud Compute (EC2) instances. The backup and recovery solution, aligned with the AWS Well Architected Framework (WAF), included the newest technologies from N2WS and AWS. Red River deployed the N2WS Cloud Protection Manager that provided a backup, recovery and disaster recovery solution which met the customer's immediate storage needs currently and allowed for optimized elastic growth. N2WS was setup to use EBS snapshots in accordance with Volume Shadow copy Service (VSS) to provide application-consistent backup and restore capabilities in AWS. The backup solution delivered in the AWS cloud far exceeded the customer's Service Level Agreements (SLAs) for data, as well as site restoration if needed.

The final solution offers protection for both Availability Zones (AZ) and Region outages, while still meeting Recovery Time Objectives (RTO).

RESULTS

Red River provided an N2WS protected storage solution that met CRC's immediate storage requirements and positioned CRC for future growth. CRC was able to decommission all regional office server hardware and eliminate capital expenditures for server hardware refresh cycles by roughly $10,000 per site. The primary data center SAN was downsized, and the secondary data center SAN decommissioned. In total, CRC saved almost $200,000 in annual IT costs and now has a storage solution that is durable, scalable and secure.

Red River Managed Services provides 24/7 ongoing support and maintenance of the environment. These services consist of optimization of the environment, applying patching, monitoring and alerts. When Red River Managed Services receives alerts the support team immediately responds to the issue to meet the SLAs required by CRC.