CSC LED Gains Reliable Backup and Security for AWS Environment

Executive Summary

CSC LED is a Canada-based company that provides industrial and commercial LED lighting for electrical wholesalers. Founded in 2006, CSC LED continues to deliver high-quality LED products with the latest chips, thermal management solutions, and drivers available. Today, CSC LED's selection includes everything from area and canopy lights to photocells and reflectors.

CSC LED approached ClearScale about concerns related to the security and redundancy of its existing AWS environment. ClearScale helped CSC LED establish a robust backup plan and implement key IT security measures. The client's IT assets are now much safer overall, and the in-house engineering team can easily restore its cloud infrastructure, should something happen.

"We were already on the cloud, but we knew we had opportunity to fix a few issues, namely on the backup and security side. ClearScale came in, proposed a thorough solution, and got the job done with little handholding. That's exactly what we were looking for to take our AWS environment to the next level."

Robert Smith, Information Technology Manager, CSC LED

The Challenge

CSC LED wanted to address a few issues with its AWS environment. First, the client needed assurance that it could restore its cloud infrastructure in case of accidental deletion or corruption. Not much had changed since CSC LED first adopted its AWS cloud, so it was time for an update, especially in relation to backup processes. In bringing on ClearScale, an expert AWS cloud consultancy, CSC LED hoped to implement best practices and address any shortcomings that had persisted over time.

CSC LED was also worried about the fact that all internal staff members had the same full access rights. The better approach would be to incorporate role-based access permissions into the company's IT strategy, thereby reducing the risk of someone compromising the cloud environment.

With these goals in mind, CSC LED asked ClearScale to:

- Propose a new backup solution
- Confirm that the new solution would work for the company's server data, database, and S3 bucket saved files
- Write clear documentation that the client could refer to in the future should it need to go through the backup restoration process

As an AWS Premier Tier Services Partner with 11 AWS competencies, including the DevOps competency, ClearScale was well-suited for the job.

The ClearScale Solution

ClearScale implemented attribute-based access controls to make sure that only users with specific permissions could access certain resources. ClearScale's engineers did this using AWS Identity and Access Management (IAM). The client's team members were organized into IAM user groups and then assigned appropriate roles and policies. By narrowing the scope of what internal staff could control, CSC LED reduced its risk of accidental changes.

ClearScale also used AWS Backup, a solution for centrally managing backups across various AWS services, to schedule backup copy creations and implement a reliable restore process. ClearScale applied AWS Backup capabilities to the client's EC2 compute tier, RDS database, and S3 object storage. For the EC2 and RDS tiers, ClearScale scheduled regular snapshots and used vSphere LifeCycle Manager and Amazon RDS Backup to coordinate retention management.

On the S3 front, ClearScale enabled object versioning and lifecycle policies. The objects were eventually moved to Amazon S3 Glacier Instant Retrieval, which is ideal for archiving data that is rarely used.

The Benefits

Thanks to ClearScale's support, CSC LED is now confident that all its data is redundant and safely stored in its cloud environment. This information can easily be restored and replicated.

Furthermore, CSC LED staff members now only have access to what they need, minimizing the chances of somebody deleting or corrupting crucial IT assets. Plus, the client has thorough documentation provided by ClearScale that explains how to follow through with a large-scale restoration, should the occasion arise.