CDW Helps Suffolk County Community College Save on Storage While Improving Reporting

Customer Overview

SCCC is an academic institution of 27,000+ students across three campuses and two downtown centers. It is the largest Community College in New York.

The Challenge

SCCC wanted to get a reporting of WorkSpace utilization for each student enrolled in the CDW provided Classroom-in-the-Cloud solution in order to monitor usage and costs as well as auditing student activity.

The Solution

Using Amazon Simple Storage Service (S3) and Amazon S3 Standard-Infrequent Access (S3 Standard-IA), Lambda and CloudWatch, CDW architected a solution for generating WorkSpace utilization reports. Appropriate S3 lifecycle policies were used for controlling the state of the intermediate raw files as well as the final WorkSpace utilization report.

The Benefits

The CDW Classroom-in-the-Cloud solution allows SCCC to significantly lower their onpremise infrastructure cost while simultaneously reduce operational complexity. Additionally, the AWS and CDW solution provides lower development costs and ongoing support and maintenance due to inherent automation.

The Challenge

Suffolk County Community College (SCCC) was experiencing growing pains as the success of the CDW Classroom-in-the-Cloud began to really explode. As each student logs into their Cyber Security class on AWS WorkSpaces, the record of their attendance and all their activity is stored for record-keeping and regulation purposes. As the quantity of classes started to skyrocket, so did the utilization of their WorkSpaces and it became difficult for SCCC to obtain the reporting they needed in order to properly analyze classroom costs by factors such as students, classrooms, activity, etc. Additionally, SCCC realized that these data could also be used to audit student activity and ensure the students were completing the assignments.

The Solution

CDW, working closely with SCCC, developed an elegant solution utilizing Amazon Simple Storage Service, Glacier, Lambda and CloudWatch and which supports 150 WorkSpaces and 600+ backend servers. As a single student can be enrolled in multiple classes simultaneously, additional backend servers are required. The solution uses three separate Amazon Lambda functions for gathering data about WorkSpaces utilization and summarizing the data.

- The first Lambda function invokes DescribeWorkspaces API. This API gathers the utilization of the WorkSpaces running in the SCCC environment every 15 minutes and stores the output in an S3 Bucket.
- The next Lambda function processes the daily activity into a summary report, tags it and saves that file in a separate location.
- The final Lambda function runs a monthly report, again, tagging it and storing it.

Finally, CDW developed and implemented life-cycle policies by utilizing tags or suitable prefixes for additional action: e.g. delete raw files after seven days, move weekly files to infrequent access after 30 days.



The Benefits

With this new paradigm of storage and archiving for their successful Classroom-in-the-Cloud solution, SCCC can now accurately track student usage, provide timely reporting, look at trends to insure scalability, meet strict compliance requirements and save a significant amount of money on storage costs considering the overall Classroom-in-the-Cloud solution, which contributes to the 75% overall reduction in spend for their popular Cyber Security curriculum. This solution added the capability of getting reports on WorkSpace utilization while minimizing development and operational costs.

