Baltimore County Schools Survive Cyberattack Through Partnerships with Focus School Software and AWS Cloud Based Data

Executive Summary

Baltimore County Public Schools (BCPS) was in need of a secure software system that provided solutions for Scheduling, Data Reporting, Student Data Storage, and other functions surrounding student data management. Prior to the cyberattack, BCPS supported an in-house solution for these functions. This solution had been in place for over a decade and had started to lag behind the industry. The decision was made to pursue a different solution. The core needs BCPS identified for this solution were could hosting, robust feature set, and industry leading architecture.

Baltimore County Public Schools Challenge

The 2020-21 school year began in a most unique way for BCPS, as it did for most schools in the country as a result of the Covid 19 pandemic. The district began the school year with district officials working in a new virtual environment and with all students learning through a period of virtual instruction.

In November of 2020, the digital infrastructure that makes remote learning and district operations possible, got hit with a cyberattack resulting in district data being locked away from school users and officials. The data became encrypted and it was not known if it was being lost or stolen. This attack preventing school operations from occurring by disrupting district websites, email systems, grading systems, and remote learning programs. School was shut down for three days while an investigation was underway.

One of the only a few systems left unaffected by the attack was Focus School Software running on the secure Amazon cloud. Focus was being used as the district's scheduling module housing data containing student demographics, grades data, testing data, enrollment data, scheduling data and staff data.

Focus Solution

The Focus Scheduling module provided BCPS with a secondary tool for master schedule building as well as the scheduling of students. The migrated student demographics, grades data, testing data, enrollment data, and staff data as well as the campus and student level schedules were secure from the attack due to Amazon Web Services secure, cloud-based data.

Focus utilizes Guard Duty, Cloud Watch and Anomaly Detection, and AWS Security Groups as a part of their AWS services. This allows for Focus to easily meet peak usage and on demand usage for its districts.

BCPS and Focus partnered together to use the secure data to rebuild student report cards and transcripts as well as elementary schedules. Enrollment forms,

Baltimore County Public Schools

Based on 2022-23 enrollment Baltimore County Public Schools, is the 3rd largest in the state, and 25th largest in the nation, serving 111,000+ students.

Located in Towson, Maryland, BCPS contains 176 schools, centers, and programs with 21,000+ employees.

BCPS proudly contains 26 Maryland Blue Ribbon Schools.

attendance taking and reporting was quickly but thoughtfully stood up allowing BCPS to keep their schools running, teachers teaching, and students learning.

Furthermore, Focus provided additional solutions to BCPS in the form of a full SIS system, securely housed on the Amazon cloud. Focus offered to immediately increase the scalability of their environment, size it up to full SIS production size and import their data. With an accelerated time line, Focus and BCPS collaborated to meet the district needs and provide a full SIS solution.

Results and Benefits

Baltimore County Public Schools embarked on the road to recover with a newly implemented Focus SIS solution. The secure system hosted on the Amazon cloud eliminates the risk of future ransomware attacks.

Focus and BCPS worked together daily to restore data, redefine processes and reimage how an SIS can benefit the stakeholders in BCPS; fostering the relationship of trust and system support that Focus prides itself on.

About Focus School Software

Focus is a team of 120+ professionals dedicated to education who develop features to improve communication, streamline processes, and guide data informed decisions. Focus offers products that include a K12 Student Information System, CTE/Adult Ed Student Information System, Enterprise Resource Planning System, Assessment System, Before and After-Care Solution, Special Student Services System, Attendance and Tardy Solution, Community Mobile App, Analytics and Dashboards as well as Gradebook and Scheduling Solutions. Focus currently serves 2,500,000+ students across the country, 5 of the largest districts in the country, and 3 out of every 4 Florida school districts.

FOCUS School Software