



DEPARTMENT OF ADMINISTRATIVE SERVICES
BUREAU OF ENTERPRISE SYSTEMS AND TECHNOLOGY
55 Farmington Avenue, Hartford, CT 06105

Sandy Hook Report Media Release

Category	Emerging and Innovative Technologies
State	Connecticut
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Project Initiation	December 23, 2013

End Date	December 30, 2013
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Executive Summary

In two weeks during December 2013, the State of Connecticut executed a contract, and delivered a project to provide massive scale content delivery to media and the general public by only spending \$6,700. By leveraging cloud content capabilities in a new way, the State met an emerging need that would have overwhelmed the State's existing infrastructure. News outlets and interested parties from 182 countries around the world found that the State of Connecticut could deliver commercial scale content within the confines of government budgets. Finally, and most importantly, the creativity and dedication of a very small team of individuals pushed contractual and technology obstacles aside to provide a solution to an extremely sensitive event.

Concept:

On December 12, 2012, the State of Connecticut and much of the world experienced a major tragedy when a lone gunman entered Sandy Hook Elementary School in Newtown CT and killed 20 school children and 6 adults. The Connecticut State Police, a division of the Department of Emergency Services and Public Protection (DESPP), led the massive investigation, which included coordinating assistance from numerous federal, state and municipal law enforcement agencies. A summary report was provided to the public by the State's Attorney's Office on November 23, 2013. Because this was only a summary prosecutor's report, its size was small enough that the State could distribute to media outlets and the public via traditional channels, despite the fact that the demand was still very high. However, the State Police's investigative report was unprecedented in volume and content and could not be disseminated through traditional means. The Department received (and continues to receive) a record number of Freedom of Information Act requests for the report.

In December 2013, DESPP began to discuss a distribution strategy for the release of the redacted State Police investigative report, which included publicly releasable written reports, photographs, video and audio. This dissemination totaled more than 10GB of information. The Department of Administrative Services / Bureau of Enterprise Systems and Technology (DAS/BEST) began an urgent conversation with DESPP and the Office of the Governor on how to meet the needs of this critical media event.

Traditionally, the State Police responds to Freedom of Information Act or media requests by providing paper copies, or, for larger requests, digital copies on DVD or by electronic means. At other times, information can be disseminated through the Department's official website. However, the size and anticipated demand of this data ruled out that possibility. A massive amount of traffic would have overloaded both the content delivery platform and the primary Internet Service Provider DESPP explored the possibility of disseminating the report via DVDs or flash drives. It was determined that this was also not a feasible solution based upon a desire to distribute the report to all requesters and media outlets simultaneously. To meet this demand, DAS/BEST worked alongside the DAS Procurement office to establish a contract for utilization of cloud services for meeting this critical demand. Within the period of one week, the State established a relationship with Amazon Web Services and staged the files for release to the public.

The State utilized Amazon's content distribution network to stage this information all over the globe to ensure adequacy of access regardless of location. On December 27th, the investigation materials were released to all parties at 3pm Eastern.

Demand for the content was greater than we had imagined. Availability of the materials was reported on Twitter by news outlets across the globe. Over the next 3 days, in excess of 263,000 downloads were reported by people from over 182 countries. On the first day of the release (3pm – midnight) the content average throughput was over 12 gigabits a second. The content spike was close to 20 gigabits per second.

By the following week, interest had diminished to the point that we could contemplate bringing the service back in house. We left the files on the Amazon Cloud Service for 3 weeks and then shut down the site.

At the end of the exercise, the State spent just over \$6,700 for the hosting service and had met a global need for content when none of our internal systems could have done so. We applied emerging technology (at the time) to provide a cost effective public service in a way that the technology wasn't the story. Any attempts to have done this another way would have created a story about the inefficiency of technology.

Noting that cloud use and acceptance has advanced significantly in the last two years, the State of Connecticut believed that it was still important to tell the story about how a modest, but innovative use of an emerging technology helped meet an emergent and sensitive need.

Significance:

It was critical through this process that we fully and completely met the needs of very different constituency groups: General Public, Media and the State. The media needed ubiquity of access and speed to analyze the data. The State could not be seen as favoring only the larger outlets with better access to technology or those that could afford to visit the state. The public also had an unprecedented desire to review the report, and needed access to do so. Finally, the State agencies needed a predictable solution that would scale to very large demands, yet would not normally be needed.

While the cloud technology is now in more general use, the use of the elastic cloud infrastructure to meet emerging media data sharing had not been used within the State previously and now serves as a repeatable model for any large media event. In addition, as the information we provide grows in volume to include more video and audio content, we now have an approach that scales to those new media needs.

This effort directly tied to Governor Dannel Malloy's focus on:

- Increased Transparency
- Increased Government Efficiency and
- Improved Agency Operations.

Impact:

The impact of this project can be easy to underestimate. Since the State made many great decisions to make this a success in a very short period of time, we did not allow the project to fail. Simply stated, by putting an existing technology in place to meet a new and emerging business need, the State allowed the focus to be on the story and the victims instead of a failure to deliver technology.

Had the State selected not to stage this content across the world, we would have been faced troubleshooting slow access requests from public and media. The State would have seen severe negative press about the inability to deliver even a “simple download” without difficulty. For a very limited amount of funding we created both an initial offering and a durable capability that we can access should a future event occur of similar magnitude.