# Using AWS to deliver health content during disasters and disease outbreaks

**About the Customer**

It is the mission of the U.S. Department of Health & Human Services (HHS) to enhance and protect the health and well-being of all Americans. The Syndication project is a collaborative effort supported by the Centers for Disease Control and Prevention (CDC) and HHS to deliver authoritative and real time data to hospitals, health departments, local governments, and emergency responders.

CTAC built the content Syndication platform for HHS that is used to provide up-to-date and authoritative data for Zika, hurricanes, Ebola outbreaks, and thousands of other content relevant to health, safety, and emergency response. HHS generated content is delivered and shared between governments and local health departments through websites, social media, and mobile devices. The content is updated in real-time and requires no active staff effort to keep the pages up to date.

**The Need:**

HHS needed a highly available and fault tolerant solution (in contrast to a limited on premise hosting environment) to enable HHS syndication to scale during natural disasters and health epidemics so that HHS could continue to provide up-to-date information, prevent panic, and correct the spread of miss-information.

**The solution:**

CTAC's experience in syndication and collaboration between the Federal government and state and local governments to support disaster response was required to make this effort successful. CTAC was also required for migrating this system to AWS and then re-architecting it for increased scalability and availability during natural disasters and disease outbreaks. By hosting on the AWS platform HHS was able to achieve cost savings, auto scaling, multi-region disaster recovery, and high availability using services such as ElasticCache, S3, EC2, Lambda, ElasticSearch, RDS, Application Load Balancers, VPC, CloudWatch.

Currently there are about 20,000 pieces of up-to-date and authoritative content in the storefront that consumers can leverage. There are nearly 4,000 users of the system across 73 partner agencies/domains collaborating to share content. There are about 25,000 storefront (public facing content library available for searching) and nearly 30,000 API hits per week.

**About CTAC**

Communications Training Analysis Corporation (CTAC), a small business and the proposed prime contractor, has been a trusted information technology partner of Federal, State, and local governmental agencies, as well as the private sector, for over 22 years. CTAC has assisted and guided our clients to continuous success in reaching mission critical goals and objectives while exceeding expectations and providing rapid delivery of products and services. We continually enhance agency digital strategy with an "as-a-service" based approach to delivering technological innovations for effective Government operations and excellence in digital content Delivery. CTAC's project management which follows agile methodologies allows us to have the ability to meet all of the delivery requirements specified in the SOW on-time and within budget. CTAC has managed fixed-price cloud computing contracts at CPSC and beyond as a prime contractor on multiple occasions.

CTAC is an Advanced AWS Partner which has a number of advantages to our customers, including 18 AWS certified professional cloud solution and DevOps architects with the ability to design, architect, build, migrate, and manage workloads and applications on AWS, as well as access to a range of resources and training to support our customers in deploying, running, and managing applications in the AWS Cloud. In CTAC's case, we are also a Value-Added Reseller with AWS cloud solutions on our GSA IT 70 Federal Supply Schedule. CTAC is an Amazon Advanced partner, AWS letter of supply/GSA schedule holder, and leading provider of WordPress and Drupal platforms on Amazon AWS. CTAC solutions currently power top level domains (and subdomains) such as HHS.gov, GSA.gov, CPSC.gov, and USA.gov.

CTAC's cloud services focus on these important activities and deliverables:
- Disaster Preparedness and Response
- Cloud Orchestration and Cost Management with a proven ROI
- Migration from or Secure Integration with Existing On-Premise Environments
- SysOps, DevOps, and Agile Application & MicroService Development
- Serverless Architectures and Internet of Things (IoT)

- FedRAMP PaaS and SaaS solutions
- 24/7/365 AWS Cloud Technical and Billing Support