Defense Information Systems Agency Fulfills Department of Defense Real-time Global Streaming Requirements while Slashing Costs

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— Civil Engineer Support Personnel, DISA

The Situation
The Defense Information Systems Agency (DISA) is a combat support agency of the Department of Defense (DoD). The agency comprises nearly 6,000 civilian employees; more than 1,500 active duty military personnel from the Army, Air Force, Navy, and Marine Corps; and approximately 7,500 defense contractors.

DISA provides, operates, and assures command and control and information-sharing capabilities, along with a globally accessible enterprise information infrastructure. All of this is to directly support joint warfighters, national level leaders, and other mission and coalition partners across the full spectrum of military operations.

The Challenge
The DoD is working within a constrained budget, as such, agencies such as DISA are charged with reducing or eliminating travel for meetings and conferences to help lower temporary duty costs. DISA departed from its in-person conference model and turned to virtual conferences and meetings to stream its mission-critical and sensitive information. However, this can be challenging when needing to reach a significant concentration of users deployed in austere environments or at sea with poor network connectivity. Historically, the agency would resort to technologies such as video teleconferencing to deliver their messages, but this incurred substantial costs as the equipment was expensive and resources were needed to install, operate and maintain the audio/video equipment. Plus, it was no small feat delivering and scaling the infrastructure needed to deliver the content around the globe to a distributed audience.

The Goals
DISA needed to meet three key requirements to support DoD objectives:

• Contain costs. DISA wanted to make it possible for those it served to reduce their travel and logistics expenses for virtual meetings and conferences.
• Boost productivity. The agency wanted to enable more on-demand trainings so its constituents could view trainings at their convenience.
• Improve information access. DISA wanted to empower high-ranking military officials to more quickly and easily disseminate information in a controlled format.

Why Akamai
Turning to a Trusted Partner
For years, DISA had used Aura Managed CDN within its internal networks called Global Content Delivery Service (GCDS, the white-label name for Akamai’s MCDN) to deliver its web applications to warfighters around the world. DISA’s overarching mission is to provide an enterprise-level service for the DoD to accelerate delivery and improve the reliability of web applications. “With Akamai’s technology, the DoD has been able to realize significant cost savings while delivering critical content to military personnel across the world. Using Akamai to deliver streaming content to the warfighter was a logical extension of the partnership,” explains a civil engineer support personnel.

Company
Defense Information Systems Agency
Washington, DC
www.disa.mil

Industry
Public Sector

Solutions
• Managed Content Delivery Network (MCDN)
• HD Streaming
• NetStorage
• Akamai Media Player

Key Impacts
• Gained ability to serve streaming content for large-scale events
• Air Force saved over $5 million on event costs
• Supported peak viewership of over 5,000 concurrent streams
• Expanded reach without building out infrastructure
• Reduced operational and temporary-duty costs associated with events
• Drastically reduced travel and conference setup expenses
Gaining Streaming Capabilities
By adding streaming capabilities to GCDS, DISA successfully eased the technical burdens associated with delivering customers’ video while providing multiple options to disseminate information. Akamai’s HD platform (accredited and operational 24x7 on NIPRNet and SIPRNet) and customized media player featuring adaptive bit rate technology enabled the DoD to serve streaming content for large-scale events, whether planned or ad hoc. This included commander briefings, all-hands meetings, town halls, virtual conferences, trainings and more.

Using these streaming capabilities allowed the DoD to stream high-definition web content directly from user’s desktops. Commanders gained the ability to stay at their desks and brief their globally dispersed soldiers, sailors, airmen, Marines and civilians using the Unclassified-But-Sensitive Internet Protocol Router Network or the Secure Internet Protocol Router Network. As a result, DISA and its mission partners have been able to reach worldwide audiences in real time without building out a delivery infrastructure or website.

Satisfying Worldwide Access to Mission-Critical Information
Urgency is paramount for high-ranking officials to deliver mission-critical information throughout the broader community. According to civil engineer support personnel, using DISA’s streaming service helped ensure that the message was seen and heard by all regardless of viewers’ location and time. Plus, DISA’s customers were alleviated of the technical burdens associated with delivering their messages, all the while reducing their operational and temporary-duty costs associated with events. Anyone with access to a DoD network could participate in GCDS-hosted events, including Airmen who are serving in contingency operations.

Saving Millions by Streaming Conferences
Each year, DISA hosts the DISA Mission Partner conference to showcase and market its capabilities to the DoD. In 2013, DISA used Akamai to stream this event and realized major benefits as a result. “By virtualizing the conference, we drastically reduced travel and setup expenses. Plus, as this was the first time an event of this scale was streamed inside DoD networks, we demonstrated our ability to deliver a high-quality experience that can replace an in-person conference,” says the Defense Information Systems Agency (DISA).

Since then, Akamai has empowered DISA and its mission partners to stream all-hands meetings, virtual trainings and more virtual conferences, helping the DoD realize significant cost savings. For example, Akamai helped the Air Force stream the two-day 2014 Resource Worldwide Conference, with peak viewership of over 5,000 concurrent streams. “According to the Air Force’s analysis, it saved over $5 million by utilizing Akamai to deliver this event. The Chief Financial Officer of the Air Force Office of Civil Engineering specifically called out Akamai as a key reason for the success of the event and cost savings to the Air Force,” continues the civil engineer support personnel.

Expanding Uptake throughout the DoD
As organizations within the DoD were instructed to slash budgets and use common enterprise services, they began to discover this streaming service as an alternative to their costly and complex in-house solutions. For example, the Navy leveraged DISA’s on-demand streaming capability to deliver virtual trainings to multiple offices. Its traditional HR training model was to send a DVD or instructor to multiple physical locations and train students on the same topic. By using GCDS, the trainer was able to pre-record the training session, and send a link with the video to all enrolled students, via which they can view the training at their leisure. Through this model, the Navy was able to save on shipping and travel costs and make required training more efficient.

Reaching Bigger Audiences in the Future
Since taking advantage of Akamai’s HD Streaming Network and Media Player, GCDS has streamed over 272 live events with over 59,000 playbacks globally. Going forward, DISA expects a significant increase in peak viewer-ship per quarter as more organizations grasp the value of delivering their messages and events virtually.

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