Virtual Training Tool Allows First Responders to Train Across Jurisdictions and Disciplines

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A free virtual training tool is available that allows first responders from different disciplines to train together for critical incidents using game-based software.

The Enhanced Dynamic Geo-Social Environment (EDGE) tool was funded by the U.S. Department of Homeland Security Science and Technology Directorate (DHS S&T) and the U.S. Army Research Laboratory, and developed with input from first responders. Officially launched in June 2017, it allows users to assume discipline-based avatars and role-play complex response scenarios. Users need internet capability and a desktop or laptop computer with a dedicated video card.

The first scenario developed involves an active-shooter incident at a 26-story hotel, with equipment and vehicles,but users can create whatever scenario they want in the hotel environment, with public areas, elevators and rooms rendered in realistic detail. A single agency can train its staff, or multiple law enforcement, fire and emergency medical service agencies across jurisdictions can use the tool to train together. The scenario includes dispatch, fire, and law enforcement communication channels.

Milt Nenneman, the DHS S&T First Responder Group program manager for the project, participated in a Tech Talk about EDGE held in August 2017.

“Basically it’s about cross-discipline training with a lot of collaboration, communication, unified command and a certain amount of team skills,” Nenneman says. “We don’t want to tell local responders how to respond to an event. This was intentionally developed with agnostic tactics; it is for agencies to develop plans and policies on how to respond to incidents.

“It’s important that this provides agencies like fire and law enforcement an opportunity to train together. Very seldom do they have the opportunity to train together in real-life, and it is hard to get those agencies time away from their regular duties.”

Responders manipulate their avatars as they would in a real emergency according to their agency policies. EDGE has a training component so users can get familiar with the system.

Agencies can access EDGE software either on the Web or choose to install the program locally on their own local area network. Requests for access are vetted by DHS. Several hundred EDGE accounts have been opened since it became available.

“An event can be replayed for after-action review. This is a virtual training tool to be used to reinforce training needs, but it needs to be accompanied by some type of course instruction,” Nenneman says. “The program allows someone to act as

instructor to monitor the training activity so they can intervene at a teachable moment. You can see if someone did something correct and reinforce it, or if there was a negative outcome you can go back and review events that led up to that."

The impetus for developing EDGE came from first responders, who identified virtual training as a capability gap.

"From the beginning we were very clear and adamant about involving the first responders, and as we developed something we would go back and ask them will this meet your training needs, because at the end of the day we want to ensure that we are meeting the training needs of the first responder community," Nenneman says.

A second EDGE environment in a school is being developed. It will provide first responders with the opportunity to train for active-shooter situations in schools repeatedly without disrupting students. Teachers and school administrators would be able to train with first responders so that everyone knows what to do and how to work together.

"Sometimes people are reluctant to run down hallways doing active-shooter drills in schools, and schools don't want to traumatize kids," Nenneman says. "You want to be prepared for those eventualities, but at the same time, you don't want to negatively impact the student body. In a virtual training environment you can train repetitively."

To learn more and request access to EDGE, go to www.cesiedgetraining.com. Agencies can also call (877) 334-3011 to reach the EDGE help desk. Also visit https://www.dhs.gov/science-and-technology/enhanced-dynamic-geo-social-environment-edge for more information.

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