Success on the modern battlefield is a complex and rapidly evolving pursuit, as new enemies and technologies continue to emerge. The only way to ensure readiness in the face of this shifting landscape is for warfighters to train using the same scenarios, obstacles, and teamwork they’ll use on the field of battle, no matter how it changes.

AN ENRICHED TRAINING APPROACH
Basic, stand-alone classroom training is not enough to build a force that is ready to meet any challenge. But training at scale has traditionally been expensive and involved extensive manual tuning. Fortunately, today’s modeling and simulation technologies can help U.S. defense and national security leaders enrich training for refined strategies, more predictable outcomes, and optimal results.

Through distributed, highly-scalable, integrated training that incorporates live, virtual, computer-to-computer, and gaming elements, U.S. warfighters can learn and reinforce their skills in real-world environments. Facing these challenges in advance will help them better prepare, adapt, and handle uncertainty in the field.

UNPRECEDEDENTED MISSION READINESS
At Alion, we help defense and national security clients train like they fight, using advanced modeling and simulation technology. By creating environments that mimic real-world situations, we provide an opportunity for warfighters to prepare in ways that would otherwise be difficult, dangerous, and expensive.

Our secure, comprehensive solutions encompass software, hardware, and networks to bring together live, virtual, and constructive (LVC) assets in a fully-integrated, unified training battlespace. We are enhancing LVC training and simulation with machine learning, to test and calibrate remote system elements, while using deep learning to automate content creation. The result is the development of training and rehearsal products that deliver unprecedented speed and quality.

With practical military experience, our training professionals partner with clients to conduct successful events that meet all desired training objectives, while ensuring that the results of each simulation are applicable in the real world.
ALION’S MODELING & SIMULATION SOLUTIONS

Training done right means the people who brave battle are prepared for whatever comes their way, so they can make their way home. Our engineers, technologists, program managers, and first-class experts apply an agile engineering methodology to every project and problem, saving time and money for our clients while delivering proven modeling and simulation solutions to support every training need.

SPOTLIGHT ON: RAVE

Our Real-Time Automated Visualization Environment (RAVE) enables whole-world training using the commercial game engine Unity3D as a framework. RAVE provides live streaming, full-motion video, and imagery products for use during synthetic training.

As a trusted partner on the Navy’s enterprise tactical training solution, we overcame the traditional game engine limitations of small terrain play boxes, curved earth, and native simulation interoperability to develop this environment. RAVE is currently used to support Navy training in exercises scaling more than 150,000 platforms.

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