SCALABLE ADVANCED GRAPHICS ENGINE – GROUND
RICH VISUALS DELIVERING A REALISTIC TRAINING EXPERIENCE

LOCKHEED MARTIN
We never forget who we’re working for®
Effects and Environments
With SAGE, art and engineering intersect to create a training environment that’s true to life. Realism comes from integrating gaming technologies including Havok™ physics, destruction, animation, artificial intelligence, cloth and script technologies. Dynamic terrain is based on the physical makeup and properties of the underlying soil.

Where Is SAGE Today?
• U.S. Army
  - M1A1 and M1A2 Advanced Gunnery Training Systems (AGTS)
  - Stryker Mobile Gun System
  - Advanced Gunnery Training System
  - Bradley Conduct of Fire Trainer Situational Awareness
  - Common Embedded Training System
• U.S. Marine Corps
  - M1A1 and LAV-25 AGTS
  - Combat Convoy Simulators
• International Military
  - Kuwait National Guard Virtual Combat Convoy Trainers
  - Royal Saudi Land Forces AGTS
  - Saudi Arabia National Guard AGTS
  - United Kingdom Combined Arms Tactical Trainer
  - Egypt Tank Driver Trainer and AGTS
  - Australia Tabletop AGTS

Lockheed Martin’s Scalable Advanced Graphics Engine (SAGE) is a hybrid gaming visual solution that provides richly detailed images and motion. SAGE models scenarios such as traffic on city streets or the effects of a mortar to provide a detailed training experience.

How It Works
SAGE leverages commercial gaming technology as the foundation for image generation. It is an affordable way to reap the benefits of advances in the commercial market without incurring the cost of a unique development effort.

The SAGE system:
• Runs on commercially available off-the-shelf computer hardware
• Provides the option for scalable configurations from a single desktop to distributed multi-channel, multi-machine configurations
• Draws from existing databases, models and custom-built databases
  - Includes a scenario generation tool for the quick addition of autonomous, reactive patterns of computer-generated avatars