

# MODULAR ADAPTIVE SYNTHETIC CONTROLLER (MASC)

**The Modular Adaptive Synthetic Controller (MASC)** enables the use of organic and simulated military equipment inside live, virtual, constructive, and gaming tools (LVC-G) with the same form, fit, function, or use of the actual equipment. MASC combines the tactile experience of organic systems with robust training scenarios in virtual environments to reinforce the psychomotor and cognitive aspects of training.

## MASC ENABLES GREATER FLEXIBILITY TO SUPPORT TRAINING NEEDS

MASC allows commanders greater flexibility to train at the point-of-need and conduct sustainment or skills assessment. A virtual reality (VR) solution augmented with MASC increases the realism required for target/threat identification and engagement, weapon proficiencies, and crew drills. A soldier can have a 360-degree virtual experience while simultaneously engaging with a surrogate or organic weapons system that provides proficiency of the live weapon. MASC also enables commanders to overcome environmental restrictions on individual or collective training events, such as frequency management and airspace coordination.



## MASC INTEGRATES WITH EXISTING SYSTEMS

MASC is game engine agnostic, which reduces development time and promotes ease of integration with existing systems. Following the Army's Modular Open Systems Approach (MOSA) to development, MASC applications can be rapidly prototyped or versioned for new equipment models. Combined with the Extended Reality Analytics Engine (XRAE), MASC-integrated environments enable soldiers to achieve the lifecycle of training from performance to evaluation.

## MASC CREATES CONSIDERABLE COST SAVINGS FOR THE GOVERNMENT

Low-cost, accessible surrogate or use of organic equipment widens the training footprint, allowing soldiers more active time in training scenarios while using fewer resources, such as expendables, equipment, or travel time/coordination. MASC can be set up in a matter of minutes and is tailorable to a unit's training needs. Integration of MASC in virtual or augmented environments ensures a wholistic, efficient, effective, and cost-effective approach to training.

*"Modular Adaptive Synthetic Controller prepared me for the actual range ... good experience on my (organic) weapon system."*

— SGT Jones,  
82nd Airborne Division

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