



REVOLUTIONIZE TRAINING WITH VR TACTICAL SIMULATION



„By integrating the GTS into the training system, the Defence Forces can become one of the most capable armies on the battlefield.”

Contact Us

www.infinitysimulation.com

sales@infinitysimulation.com

mark.takacs@infinitysimulation.com

+36 20 446 7293

GTS PRODUCT SUMMARY

ADVANCED VR MILITARY SIMULATION SOFTWARE

GTS software enhances land forces' training and preparedness by combining immersive, realistic environments with flexible, instructor-controlled scenarios and robust group training capabilities. It integrates realistic hardware like haptic feedback devices, motion tracking systems, and weapon simulators, providing tactile and immersive interactions. This realism helps trainees develop muscle memory and operational proficiency, ensuring a seamless transition from virtual training to real-world operations.

IWS

The Instructor Work Station provides comprehensive tools for real-time scenario control, performance monitoring, and detailed analytics, empowering instructors to deliver highly effective training sessions.

Data Analysis

The system's advanced data analysis capabilities track and evaluate trainee performance in real-time, providing detailed reports and insights into individual and team effectiveness. This data-driven approach allows instructors to identify strengths and areas for improvement, ensuring that training is both efficient and targeted.

Muscle Memory

The realistic hardware integration, including haptic vest, helmet devices and weapon simulators, enhances muscle memory development, ensuring trainees can seamlessly transit from virtual training to real-world operations.

Group Training

One of the standout features of our VR military simulation software is its robust support for group training. This capability ensures that entire units can train together in a cohesive and coordinated manner, replicating real-world team dynamics and operational scenarios.

Realistic Hardware Integration

To enhance the immersive experience, our software integrates a realistic hardware that replicates the physical sensations and interactions of real-world operations.

GTS SOFTWARE: SAVINGS IN TRAINING, STRENGTH IN COMBAT

VR MILITARY TRAINING SYSTEM (GTS) FROM INFINIT SIMULATION



Power data with AI

The system records and analyzes trainee data throughout their career, providing unique tactical performance insights. This identifies weak skills for targeted improvement and challenges top performers with complex scenarios. It smooths out skill differences, allowing for effective specialization. AI-driven analyses optimize team compositions and training methodologies, enhancing overall effectiveness.



Implementation

GTS is vital for enhancing skills and survival chances. Broad GTS implementation will ensure realistic and comprehensive training for a more lethal and resilient force.



Lessons Learned and Preparations

Scalable and customizable, our solution quickly adopts to specific needs, such as mission rehearsals.



INSTRUCTOR WORK STATION (IWS)

The IWS is a central hub for managing training session.



GROUP TRAINING CAPABILITIES

GTS supports synchronized training for entire units, allowing coordinated team exercises in realistic virtual environments. This fosters effective communication, teamwork, and tactical proficiency.



ZERO-LEARNING-CURVE

Trainees use 1:1 weapon replicas with realistic handling and safety procedures. This ensures muscle memory development, similar to live shooting practice. The system is intuitive, requiring no additional coaching for those without computer skills.



COST SAVING

Unlock savings with our comprehensive training plan, cutting ammunition costs by up to \$31,000 per individual soldier, (amounting to \$12,400,000 annually for 400 reserve soldiers' training). Implementing the full training plan from individual to squad level saves \$162,087 per squadron per cycle, (totaling \$1,458,00 yearly for a single infantry company's 9 squads). Achieve substantial reductions with items like the \$3,000 Carl Gustaf missile, while also benefiting from decreased weapon amortization, logistics, and other costs.

TRAIN AS YOU FIGHT - REAL LIFE SKILLS

GTS immerses trainees in realistic environments, replicating real-life combat stress. Soldiers under simulated enemy fire show elevated heart rates and cognitive regression. Practicing in this environment improves performance, making skills transferable to real-world situations. This cost-effective approach benefits both new recruits and elite warriors.



Did You Know?

Based on our scientific measurements, VR simulation results in a cumulative improvement of **58%** even for a single fire team.

UNDER DEVELOPMENT...



Our VR system is expanding to include simulations for advanced vehicles such as helicopters and tanks. This will allow trainees to practice piloting and operating these vehicles in realistic combat scenarios. The integration of these vehicles will further enhance the breadth and depth of our military training solutions.

GTS HARDWARES

Our custom-designed hardware technology, including haptic vests, helmets, and weapon simulators, offers unparalleled realism by providing tactile feedback that mimics real-world interactions. This advanced hardware integration ensures that trainees develop accurate muscle memory, enhancing their readiness and proficiency in actual combat situations. By seamlessly blending physical sensations with virtual environments, our technology creates an immersive training experience that is both engaging and highly effective.

Circuit system

Our custom circuit system ensures seamless and precise integration of all hardware components for optimal performance.

Realistic recoil system

The realistic recoil system provides authentic feedback, simulating the true feel of firing a weapon.

Realistic fire selector switch system

The realistic fire selector switch system accurately replicates the functionality of real-world weapon modes.

Realistic magazine change

This feature ensures trainees experience authentic weapon handling and reloading during simulations.

HELMET

Our custom-designed helmet is equipped with advanced sensors, providing a highly immersive training experience by simulating realistic head movements and impacts. Integrated with our VR system, the helmet offers a wide field of view, high-resolution display, and built-in headphones with realistic 3D sound, ensuring trainees can engage with the virtual environment with unparalleled clarity and realism. This innovative design enhances situational awareness and contributes to the development of critical skills needed for real-world operations.

ADVANTAGES COMPARED TO COMPETITORS

Interactive simulation systems are partly determined by the technology used, but the software that runs gives the greatest competitive advantage. Testing and monitoring the competition shows that our system is much more complex, better thought out and much more extensible which is a result of the combination of 7 years of VR development experience and 10+ years of military training research and development.



Did You Know!

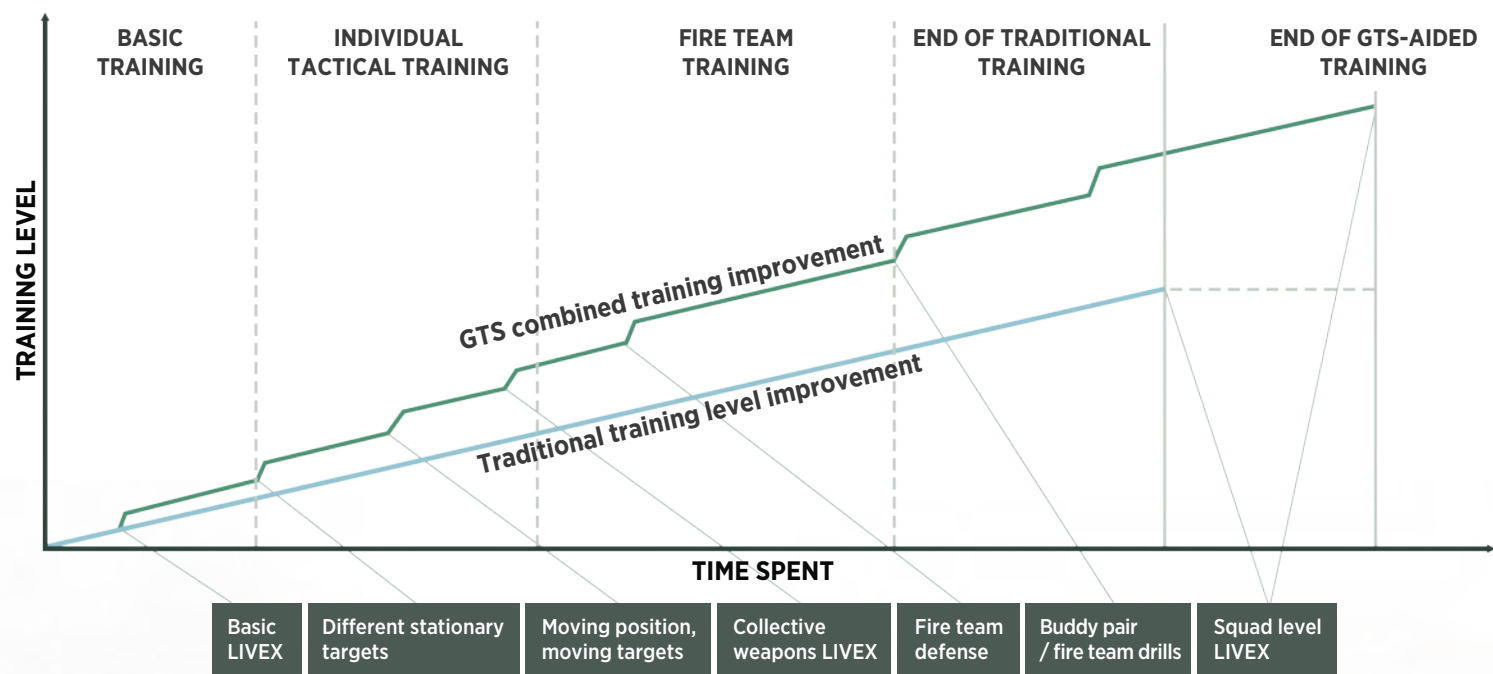
Owning all source codes and both software and hardware documentation the GTS is completely bespoke. Furthermore, the GTS can be integrated in all major battlefield simulation systems (e.g. VBS) for even more complex training exercises.

FROM ZERO TO HERO WITH THE GTS

	Infinitt Simulation	Other VR based platforms	AR based platforms	Laser based platforms
Continuous technical updates	✓	✓	✓	✓
Perfectly tailored to the needs of the costumer	✓	✓	✓	✗
Biometric sensor integration	✓	✗	✗	✓
Customizable haptic feedback	✓	✗	✗	✗
No training room setup needed	✓	✓	✗	✗
Unlimited variety of scenarios	✓	✓	✗	✗
No nausea	✓	✓	✗	✓
IWS with instant AI backed data	✓	✓	✗	✗
No need of heavy, special equipment	✓	✓	✓	✗
Cutting edge graphics	✓	✗	✗	✗
From basic training to complex combined-arms training	✓	✗	✓	✗
Complex tactical situations with all inputs	✓	✗	✗	✗
Easy to deploy	✓	✓	✗	✗

KNOWLEDGE LEVEL CHANGE WITH GTS

This chart presents the training cycle from the basic training up to the squad-level live firing exercise (LIVEX) with the shooting and tactical training in focus. On the chart, a blue line marks the training level achieved with the traditional training procedures. The green line marks the achievable training level with the help of the GTS. The chart's data is based on our scientific research which according to with 25% more time of training (that time is solemnly allocated to the GTS) up to 58% higher training level can be achieved at an average.



The whole training cycle begins with the basic training. It is followed by individual tactical training, collective weapons training, and subsequently the fire team and squad-level training phases. In each phase, even more complex and dangerous LIVEXs are executed. With the help of the GTS, the soldiers will accomplish these tasks more safely and more efficiently than before.

The reason behind this advancement is that with the help of the GTS, the soldiers can deepen their knowledge in the areas of safe weapon handling, the coordination of fire and maneuver, and organizing a system of fires of different weapons. Furthermore, the soldiers can do so in a diverse and immersive environment. Therefore, before each LIVEX, the soldiers will obtain deep knowledge and they will build an accurate muscle memory with all the good practices based on which they will execute the LIVEXs more safely and at the same time, far better results.





GTS is not just a training tool but a comprehensive solution designed to elevate the readiness and effectiveness of land forces. By continually integrating the latest technological advancements and training methodologies, we ensure that our software remains at the cutting edge of military training solutions, providing a competitive advantage to those who utilize it.



Contact Us

www.infinitsimulation.com

sales@infinitsimulation.com

mark.takacs@infinitsimulation.com

+36 20 446 7293