



VBS2 FIRES™

Bohemia
Interactive
SIMULATIONS

SIMCENTRIC
Technologies

A ground-breaking call-for-fire solution for offensive support specialists



Comprehensive call-for-fire simulation

VBS2Fires is a comprehensive and sophisticated call-for-fire training application that simulates fire support from a wide range of platforms.

VBS2Fires enables offensive support specialists to construct a call-for-fire, which is then seamlessly processed and actioned within VBS2.

VBS2Fires simulates exterior and terminal ballistics to high levels of detail, enabling gun-to-target visualization of artillery orders in VBS2. It supports a wide array of munitions, fuse types, and firing platforms, and allows instructions ranging from basic skills to decision-making, from individual to battalion level.

Seamless integration of VBS2Fires with existing VBS2 training programs enables call-for-fire to be conducted simultaneously with other warfighter skills, in the same virtual environment.



Artificially intelligent gunlines can respond to call-for-fire

Multiple use cases

VBS2Fires is built upon VBS2 and is fully integrated with all VBS2's standard features, such as the after-action review and the real-time editor. The underlying VBS2 framework enables VBS2Fires to have a wide range of applications:

- ❑ Individual or one-on-one training (from general officer to experienced forward observers)
- ❑ Instructor-led or monitored group training
- ❑ Instructor-led training during combined exercises
- ❑ Enhanced offensive support simulation for VBS2 training exercises
- ❑ Artificial Intelligence (AI)-driven indirect fire in support of VBS2 exercises
- ❑ Conducting call-for-fire training from a helicopter
- ❑ Performing a danger close mission while infantry participants conduct a mounted assault
- ❑ Executing an infiltration exercise that involves an artillery strike on key enemy targets
- ❑ Training FiST teams in deployment to and from operations
- ❑ Assessing team communication during coordinated joint forces advancement



Offensive support specialists can order call-for-fire in a VBS2 operation

Features:

Highly detailed exterior ballistics model

The model simulates gravity, drag, wind drift, pressure, temperature, spin drift, and Coriolis effects. Additionally, it models the change of these parameters at varying altitudes.

Customizable properties

Users can build their own projectiles with customizable ballistics properties. VBS2Fires supports field guns, self-propelled guns, and naval fire platforms. It has customizable munitions, firing characteristics, and operational reloading and relaying times.

Wide selection of munitions and fuses

Munitions include HE, WP, Smoke (multiple colours), SADARM, DPICM, RAAMS, ADAM, ILLUM (multiple colours), and Copperhead. Fuses include Quick, VT, Time-delay, Seek and Destroy, and Laser-guided.

Wide selection of fire distributions

Fire distributions include Converging, Circular, Linear, Range and Lateral Spread, Parallel Lines of Fire, and user-defined custom distributions.

High-fidelity terminal ballistics models

Terminal ballistics are modelled both visually and functionally to accurately reflect real-world effects. Functional damage models reflect side lobe patterns of explosive rounds, defined by both round and explosive velocity.

Range of call-for-fire entry options

A call-for-fire is initiated by manually entering commands or by using a wizard-based GUI. These are automatically interpreted by the system. Additionally, human instructors and trainees can communicate verbally, with the instructor then able to manually enter fire control information into the system.

Artificial Intelligence (AI) engine

VBS2Fires will automatically respond to a call-for-fire entered by the trainee through a detailed AI suite. Alternatively, the instructor can manually respond to a call-for-fire and inject errors as appropriate.

Rapid scenario design

VBS2Fires leverages the VBS2 scenario editor; building a VBS2Fires scenario is no more complex than building a standard VBS2 scenario. This saves time and money.



After-action review (AAR)

VBS2Fires is completely integrated into the VBS2 AAR system. Bookmarks can be dynamically added and all projectile paths and effects are captured and replayed. In addition, terrain and ballistics analysis tools are included.

Fire Planning

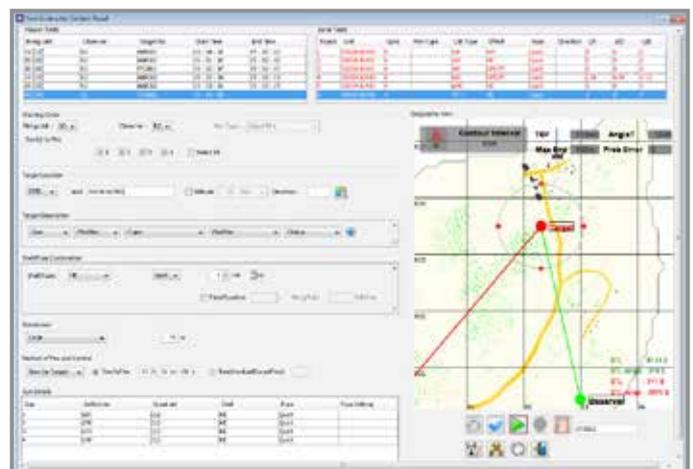
As well as supporting Call-For-Fire, VBS2Fires facilitates Fire Planning. Fire Plans can be entered and viewed on a time-line. These Fire Plans can then be executed within VBS2. Fire Plans can be dynamically interacted with during execution, supporting features such as dwell, rejoin, assigning new targets and checking fire.

Flexible network-based architecture

VBS2Fires is operable in instructor, trainee or stand-alone mode. It can be run on the same machine as VBS2 or on a separate machine connected over the network.

Seamlessly links with VBS2 COTS desktop trainer

VBS2Fires can be used as part of a larger training exercise. As the system leverages the VBS2 engine, call-for-fire training can be implemented as part of a larger training scenario with combined arms participants.



Instructor control panel



Integrate call-for-fire operations into existing training exercises