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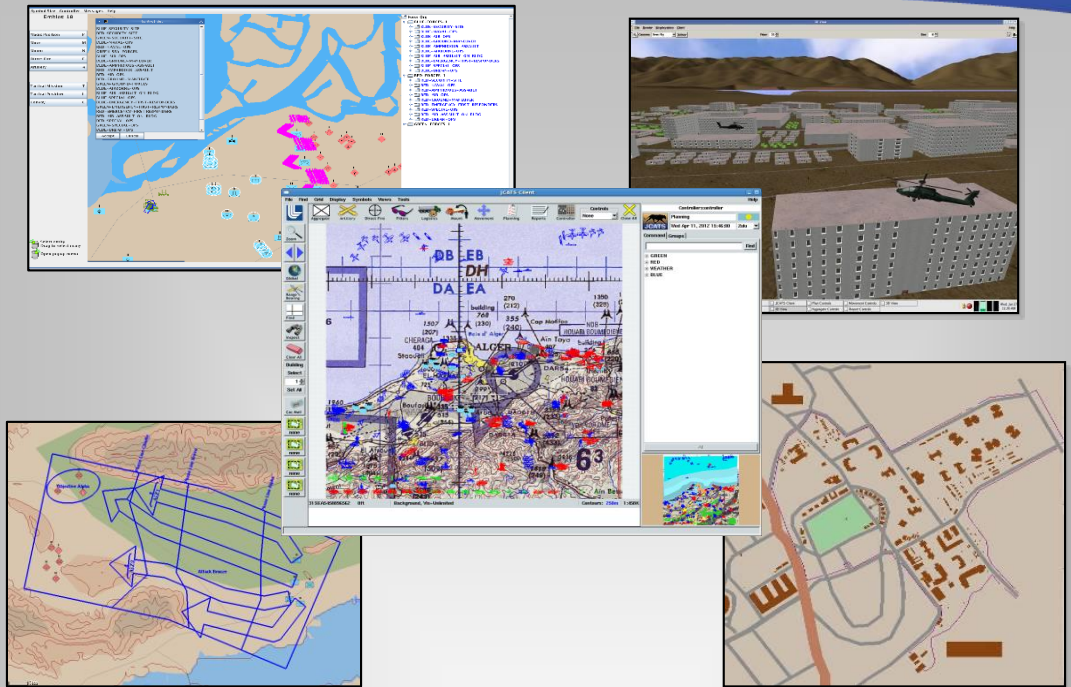
JCATS

Joint Conflict And Tactical Simulation



JCATS Customers

- Joint Staff J7
- US Army JLCCTC ERF Sites Worldwide
- 29 Palms -MCTOG Academic -Sim Center
- U.S. Army SMDC
- GDLS Battle Lab
- III Corps BCTC
- I Corps BCTC
- ARCENT, G7 Sim DIV
- HQ Air Force SFC
- JMISC /EUCOM Simulations Center
- 2 BCT 75th ID
- XVIII ABN Corps BSC
- JRTC/NTC
- NATO Modeling & Simulation Group
- DTRA
- Sandia National Labs
- Savannah River Site
- Idaho Nat'l Laboratory
- Fort Sam Houston
- B&W Y-12 DoE
- Hanford Site
- USSOUTHCOM J861
- MAGTF STP
- Naval Post Graduate School
- US Navy Strategic Systems Program
- Camp Casey, Korea
- BCTC, HI
- BCTP OPS GRP B,C
- FT Indiantown Gap
- FT Campbell, KY
- Camp Dodge BCTC
- FT Riley, KS
- USAF-DMOC
- West Point, NY
- Boeing
- 2/75th TNG Div
- FT Dix, NJ
- 5/75th TNG Div, Camp Parks, CA
- FT Bliss, TX
- FT Carson, CO
- FT Huachuca
- FT Stewart, GA
- USSOCOM
- USPACOM J731
- USAF-DMOC
- USAF Force Protection Battle lab



JCATS is a joint multi-sided, real-time, stochastic, high resolution, interactive computer based simulation system that models force-on-force interactions from the Joint Task Force level to the individual person. It is a data-driven, effects and physics based simulation that accurately replicates entity-level combat. The model employs the same terrain data used in the military Command & Control mapping systems and utilizes validated military data and algorithms for digital terrain, Army Acquisition modeling, and Joint munitions data. JCATS accurately represents observation, sensors, systems, weapons, munitions, and vehicle systems for land, sea, and air components. The model is DIS and HLA compliant, which facilitates linking with other military simulation models and transferring systems and units with JLOD. A streamlined Web Client interface is also available. Below are some major capabilities of JCATS:

LAND

- Maneuver
- Direct/Indirect Fire
- ADA/TBM/CM
- Engineering Operations
- Logistics Operations
- Casualty/Maintenance
- Tactical Behaviors

AIR

- Interdiction
- CAS, Escort
- Counter Air
- Air Refueling
- Airlift/Air-drop
- Airborne Surveillance
- Air Missions

SEA

- Surface-Land Fires Support
- Amphibious Operations
- Submarine Warfare
- Anti-Submarine Warfare
- Naval Aviation



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JCATS

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Current Uses

- Primary Ground Constructive driver for JLVC
- US Army Joint Land Component Constructive Training Capability (JLCTC) Entity Resolution Federation (ERF)
- COCOM Joint Training
- Coalition Training
- Mission Rehearsals
- Site & Border Security
- Battle Staff Training
- Peacekeeping
- Counter-terrorism
- Counter-drug
- Disaster Relief, Floods, Earthquake
- Chem/Bio
- NEO/Hostages
- Civil Support
- Evacuation Plans
- Crowd Control
- Logistics
- Area/Bldg Security
- Analysis
- Experimentation

The JCATS software runs under Red Hat Enterprise Linux on both desktop and laptop computers. JCATS provides dynamic control of entity capabilities and activities in the battle space. It is a person-on-person simulation with live opponents replicating enemy tactics and responses. Leaders are able to control their forces on an individual workstation and use their actual C2 systems to report to their commanders and higher headquarters. JCATS can provide the means to ascertain the full impact of systems and tactics on battlefield scenarios. The JCATS playbox incorporates scalable, multi-resolution terrain capable of representing enhanced urban environment with individual building construction (floor plans, windows, doors, keys, locks, tunnels, etc.). Terrain files with a playbox size up to 24 degrees Lat/Lon are supported. JCATS creates a detailed simulated picture with simultaneous individual and aggregate engagements that are modeled at the entity level. High fidelity, entity-level modeling is implemented for individual weapons, platforms, sensors, munitions, human health, training, fatigue factors, and individual logistics. JCATS is the primary ground maneuver simulation model used by the U.S. Army in their Entity Resolution (ERF), Live Virtual Constructive Integrating Architecture (LVC-IA), U.S. Joint Staff J7 Joint Live Virtual Constructive (JLVC) federations, and NATO.

Ongoing Improvements

- JCATS Web Client
- JLVC HLA Federation
- JCATS Standard Database
- JCATS synch w/ JTDS
- Reducing operator workload
- Introducing automated behaviors
- Robust editing tools
- Enhance ability to distribute
- Enhance the Digital Battlefield
- Enhance the Air Model
- Enhance the Naval Model
- Enhance analytical capabilities
- Homeland security features
- Complete set of manuals
- Automated Offense/Defense orders

International Users

- Turkey
- Canada
- Singapore
- Nigeria
- Romania
- Ukraine
- Denmark
- Oman
- Bulgaria
- Lithuania
- Azerbaijan
- Italy
- Bosnia
- Australia
- Macedonia
- Pakistan
- Estonia
- Taiwan
- NATO HQ
 - Norway
 - Poland
 - Netherlands
 - Turkey
- Croatia
- Jordan
- Slovenia
- Saudi Arabia
- Georgia
- Serbia
- Uzbekistan
- Albania
- Colombia
- Poland



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