



LLNL – PRES: 533071

JLOD

JCATS Low Overhead Driver



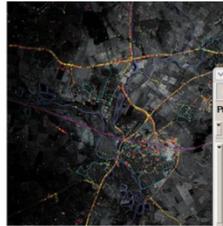
JLOD Customers

- JCW
- JCW J7 OPS
- USMC, MSTP Quantico, VA
- JMSC/EUCOM
- Australia
- NATO

Current Uses

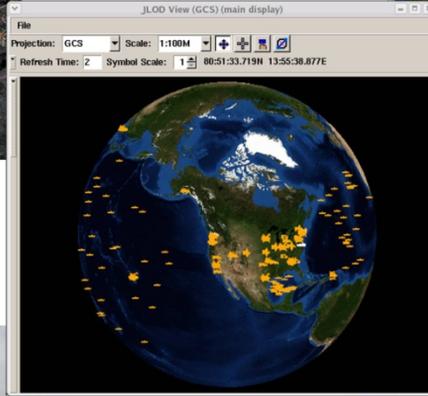
- Generates position & other message information for Stimulation of C4I systems & Virtual models
- Intel driver & Stimulator
- Antiaccess & Area-Denial
- COCOM Joint Training
- Coalition Training
- Peacekeeping
- Counter-terrorism
- Counter-drug
- Civil Support
- Crowd Control
- Logistics
- Area Security
- Exercise Planning

JCATS Low Overhead Driver (JLOD) adds realism to military training and mission rehearsal exercises

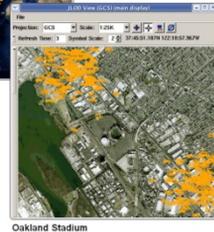


JLOD stimulates many training audiences including Joint Surveillance Target Attack Radar System (JSTARS)

JLOD provides joint multi-service interoperability and is capable of conducting activities from tactical to multi-regional conflicts at operational levels.



Commercial Shipping

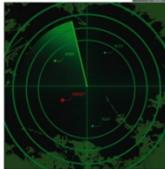


Oakland Stadium

JLOD creates a synthetic environment of the whole world in a single model.



Launcher signatures generated for TEL vehicles



Radars and jammer signatures

JLOD feeds the intelligence picture with radio communications, radars, and jammers.

JLOD Civilians seen through a first person viewer



JLOD brings a city to life. Populations move about a city generating realistic signatures (movement and communications).

Controlling population movement and communications with JLOD



JLOD Civilians Seen Through a UAV

JLOD is a joint multi-sided, real-time, high resolution, interactive simulation that models force interactions on a global level down to the individual soldier. JLOD is designed as a White Cell tool to provide wrap around signatures for JCATS and the Joint Live Virtual Constructive (JLVC) federation. JLOD provides world wide representation of on-going operations in support of distributed events using HLA as its backbone and generates position and other tactical message information for stimulation of C4I systems. Currently, JLOD is JLVC focused and is designed to portray large entity counts and entity movement for military and civilian operations. JLOD also has a stand-alone Planner tool which allows operators to plan orders in parallel to an ongoing exercise ensuring order correctness and proper signature generation before they are injected into the exercise.



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JLOD

JCATS Low Overhead Driver



JLOD Applications

- Simulation
- Workstation
- Planner
- Force Generator
- Symbol Editor
- Terrain Editor
- Vista Editor

Current Capabilities:

- Uses JCATS data files & Joint Training Data Services (JTDS) for scenario builds
- Whole earth modeled
- Reads JCATS elevation data & roads
- Display/Outline JCATS Playboxes
- Unlimited entity count (hardware & network restricted)
- Dynamically activate & deactivate forces
- Dynamically create/modify Alarms which alerts user to activities on the Simulation or Workstation
- Detailed emitter & communication signatures
- TBM & Cruise Missile support
- Integrated Air Defense Network operations
- Convoy operations
- Population modeling (Virtual Patterns of Life)
- Air, Sea, Rail, Ground movement modeling Bee line movement or Navigation (pathing) on roads
- Damage from direct & indirect fires
- Logistics operation support & consumption
- Display JCATS CAC graphics & Checkpoints
- Transfer of systems and units between JCATS & JLOD
- Display and publish into the federation DMPs & Facilities
- Population modeling that can be acquired and effects movement in the JLVC.
- Dynamic unit creation
- Enhance Integrated Air Defense networks to acquire using passive radars and transferring C2 responsibilities to alternate C2 Nodes
- Population modeling that can be acquired and effects movement in the JLVC
- Dynamic unit creation
- Redesign of how JLOD Simulation and Workstation communicate to aid in network bandwidth reduction
- Enhance Integrated Air Defense networks to acquire using passive radars and transferring C2 responsibilities to alternate C2 Nodes
- Engineering obstacle play (wire, land mines, sea mines, ditch, etc.)



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