

PLEXSYS

For over 30 years, PLEXSYS has been a key readiness training provider to Air Force and Joint and Coalition partners with a unique capability to produce the entire synthetic battlespace. This battlespace is flexible, agile, and scalable in construct, including scenario design, datalink simulation and translation, full communication suites, diagnostics, and after-action review capabilities to monitor, record, and replay entire training events.

INNOVATIVE EXERCISE AND SIMULATION SUPPORT FOR THE MODERN WORLD

Environment and Scenario Generation

Our flagship product is the Advanced Simulation Combat Operations Trainer (ASCOT[®]). In order to create the backbone of the battlespace environment, each instance of ASCOT supports scenario generation to include the entire battlespace with dynamic air, land, maritime, space, and life-form entities for individual, team, collective team, exercise training anywhere on the globe. The ease of use, the power of data link, smart entity logic, tactics editor, and many other modules make ASCOT extremely tailorable as the foundation for any LVC training program, with reduced White Force effort.

Radio Simulation and LVC Communications

Our communication products sonomarc[®] and PLEXCommVR[®], provide the most robust distributed communications capability in the industry. sonomarc is a server-based system that supports all types of radio simulation and LVC communications. Whether supporting a single soldier, a 5th gen fighter, a multicrew C2ISR platform, an Operations Center, or white force, sonomarc caters to all operator and instructor needs. PLEXCommVR is a stand-alone, lightweight application that is DIS and HLA compatible, allowing you to talk and listen on multiple radios and nets simultaneously using Windows or Linux OS.

Distributed After Action Review

In supporting the key and essential requirement for accurate, timely and efficient after action review, our second generation solution, Video, Audio, Data, After Action Review (VADAAR 2), provides scalability and effective training feedback, all in a cloud computing technology friendly application. VADAAR 2 delivers synchronized video audio and data recording and playback of mission activity across a LAN/WAN, with bookmark and DVR functionality, available at each location in the distributed network.

Data-Link Translation

Direct Link Interface (DLI) is a hardware and software solution for customers with a requirement to interface operational data link terminals and live participants with virtual or constructive participants in a simulated, virtual world. DLI performs the data-link translation, thus bridging the interactions between 1553 busses, JREAP-C and SIMPLE.



Common Architecture for Secure Environments - Virtualized

CASE-V is a common framework designed to solve the most stringent compliance and integration challenges in today's modern datacenter and training environments. In a nutshell, CASE-V is a secure computing environment on a hyper-converged infrastructure supporting a virtual device infrastructure. Implementation and integration of the hardware and software also set CASE-V up as a service-oriented architecture. As such, it provides complete visibility to disparate system components, organic and third-party hardware and software, and cybersecurity toolsets and dashboards. Centralized management allows administrators to update, patch, and monitor all operational and security-related aspects of the system. Virtual machines and software containers support the delivery of a consistent, stable, and always updated environment.

Simulation Network Traffic Analysis

DIS PDU Analyzer (DPA) logs DIS Protocol Data Units (PDU) and provides display filters, which allow users to efficiently observe, sort, and analyze simulation data. DPA allows the user to troubleshoot and analyze their simulation network traffic using easy-to-read dialogs that arrange PDU data in a logical sequence. A similar application for analyzing HLA network traffic is also available.

The Future is here...

A new framework in simulation operability to meet future LVC needs

PLEXSYS is focusing current development efforts towards 5th generation training and the incorporation of synthetic training into the live range environment. With that in mind, PLEXSYS developed EnGen, the next generation simulation framework. EnGen is a powerful new global simulation core, based on a framework that allows for efficient deployment, configuration and execution of various simulation modeling components. The modular design makes it easy to customize, including plug-ins necessary for future growth in both military and commercial applications.



PLEXSYS environment products powered by EnGen:

Powered by GENGEN

- **SIMWORKS** is our non-ITAR environment generator, created to meet the needs of a wide variety of simulation users
- Continuing our history of world class environment generation, ASCOT 7 delivers constructive air, land, maritime, space, life form and cultural feature environment generation as well as scenario generation white force tools for worldwide 5th and 6th generation military applications

Set U has the capability to easily integrate GOTS and COTS models and databases. Powered by EnGen, the synthetic battlespace of the future will be flexible, agile, scalable and future proof.

