ds.tools
DISTRIBUTED SIMULATION TOOLS

coreDS™ X-Plane

Distributed simulation made easy with coreDS™

Overview

coreDS™ X-Plane is a plugin that gives your X-Plane flight simulator full HLA, DIS and CIGI connectivity.

Scripting functionality provides the flexibility end users need to fully customize the simulator's behaviour. coreDS™ X-Plane also provides a complete LUA scripting engine deeply integrated with X-Plane. For instance, you can create an OpenGL object when a given interaction or PDU is received.

The software provides all the configuration GUIs, data encoding, a scripting engine, rate-limiting capability and default configurations.

Main features

- Supports X-Plane 11 and 12;
- Cost-effective solution using proven technologies – save time and money;
- Provides configuration GUIs;
- Switches configuration at runtime – between HLA, DIS and CIGI, to a new set of mappings, to a different FOM, or anything else you can think of;
- Lightweight scripting engine (LUA) for on-the-fly data conversion;
- Data mapping at runtime – change your FOM file or PDU mapping on the fly;
- Integrated dead reckoning;
- Supports most distributed simulation concepts out of the box.

Advanced features

- Weapon and collision support;
- Displays external entities and events on the local map and/or IOS;
- Displays external entities and events in the 3D world with custom models;
- Multiplayer mode;
- Multi-screen support;
- Built-in debugging tools.



High-Level Architecture (HLA)

Supported protocols

- HLA – DOD 1.3
- HLA – IEEE 1516-2000
- HLA – IEEE 1516-2010 (HLA1516e)
- HLA – IEEE 1516-2025 (HLA4)

Supported RTIs

- All commercial RTIs (Pitch, MAK, RTI Ng Pro, RTI-S, Raytheon RTI, CAE RTI)
- Most OpenSource RTIs (Portico, CERTI, OpenRTI)

Supported FOMs

- Supports any valid FOM file
- Tested with the RPR FOM and NETN FOM

Distributed Interactive Simulation (DIS)

Supported protocols

- DIS 5 (IEEE 1278.1-1995)
- DIS 6 (IEEE 1278.1a-1998)
- DIS 7 (IEEE 1278.1-2012)
- DIS 8 (IEEE 1278.1-202X)
- C-DIS (SISO-STD-023-2024)

Supported PDUs

- All PDUs are supported
- Custom PDUs are supported

Common Image Generator Interface (CIGI)

Supported protocols

- CIGI 4
- CIGI 3.0 to 3.3