ds.tools
DISTRIBUTED SIMULATION TOOLS

coreDS C#

HLA and DIS made easy with coreDS™

Overview

coreDS™ C# provides an elegant and cost-effective solution to connect your C# code to a HLA federation and/or DIS simulation.

Since coreDS™ C# is powered by the coreDS™ technology, it supports all RTIs, all HLA versions, all DIS versions and PDUs. Everything can be configured at runtime using our full featured GUIs.

Using our High-Level API, you need about 5 lines of C# code to turn your program into a full-featured HLA and/or DIS simulator. You now have the ability to use the full power of the C# programming language to interact with a HLA federation or a DIS simulation.

If you want full control over your HLA and/or DIS connection, all the calls and callback are available in C# - there are no limitations!

Main features

- Cost-effective solution using proven technologies - save time and money;
- Provides configuration Graphical User Interfaces you can integrate in your software;
- Switch configuration at runtime from HLA to DIS, or to a new set of mapping, or FOM, or anything you can think of;
- Lightweight scripting engine (LUA) to do on-the-fly data conversion, reply to messages or update objects;
- Data mapping at run time. Change your FOM file or PDU mapping on the fly;
- Automatic data encoding/decoding;
- Integrated dead reckoning;
- No code generation required;
- Integrated data filtering;
- Support most distributed simulation concepts out of the box.

High-Level Architecture (HLA)

Supported protocols

- HLA - DOD 1.3
- HLA - IEEE 1516
- HLA - IEEE 1516e

Supported RTIs

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

Supported FOM

- Support any valid FOM File
- Tested with the RPR-FOM, 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)

Supported PDUs

- All PDUs are supported
- Custom PDUs are supported