ds.tools
DISTRIBUTED SIMULATION TOOLS

coreDS

HLA and DIS made easy with coreDS™

Overview

coreDS™ is an easy to use multi-platform C++ API to rapidly connect to a HLA Federation or a DIS simulation.

Save time and money; needs as low as 5 lines of code to have a complete integration.

Once integrated, no more recompilation, everything is done at runtime through our provided GUIs, including data mapping and distributed simulation configuration.

coreDS™ provides an elegant and cost-effective solution to add HLA and DIS support to your C++ software.

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.
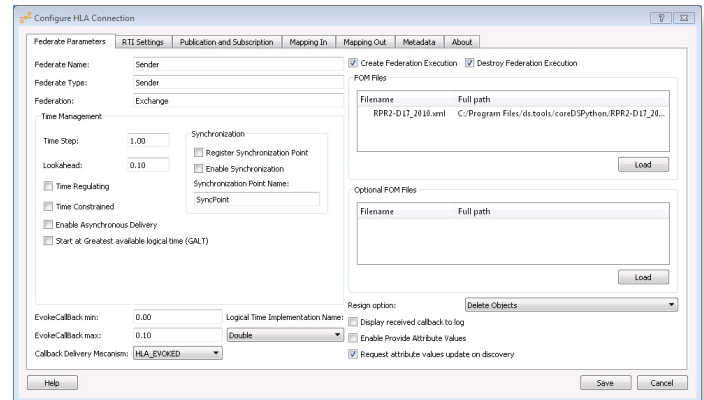
High-Level Architecture (HLA)

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