## C\# coreDS C\#

## HLA and DIS made easy with coreDS ${ }^{\text {M }}$

## Overview

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

Since coreDSTM C\# is powered by the coreDSTM 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 have been reimplemented 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 (skinnable);
- 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

