ds.tools
DISTRIBUTED SIMULATION TOOLS

coreDS Unreal

HLA and DIS made easy with coreDS™

Overview

coreDS™ Unreal allows for easy deployment of HLA and/or DIS enabled Unreal Engine based software. Integrate once and support HLA and DIS without any other modifications. No code is required!

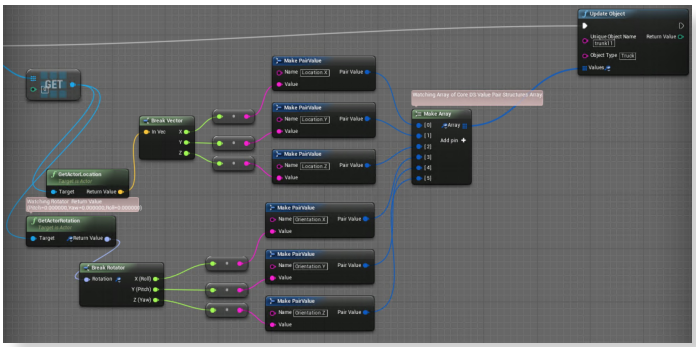
Connecting to a HLA Federation or a DIS simulation is a challenging ordeal. coreDS™ Unreal is a key enabler that helps you integrate HLA and DIS into your simulator applications.

coreDS™ Unreal provides an extensive feature set that eases the integration process, allowing for reduced implementation time, flexibility and highly customizable simulation behaviour.

coreDS™ Unreal allows complete control over your HLA and DIS connection either: Through the editor / Using BluePrint / Using the C++ framework.

Main features

- Supports Unreal Engine 5;
- 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

UNREAL DEV GRANT RECIPIENT