

# MÄK Data Logger

## HLA and DIS Data Collection and Playback System

### Overview

The MÄK Data Logger is an easy to use system for capturing and replaying simulation data. The Data Logger's intuitive GUI enables you to record HLA or DIS messages to a file and replay them to review and critique simulation exercises. And with DVR-like features including pause, fast forward, and slow motion (both forward and reverse), you can create more effective demonstrations and analysis. Velocities and accelerations are scaled during non-real-time playback, to facilitate a smooth display in the MÄK Stealth, MÄK Plan View Display, or other visualization tools.

An interactive visual display of your simulation's timeline allows you to zoom to an area of interest, jump in time with a single click, or select a portion of a recording for playback. An object statistics graph demonstrates how the number of objects in your recording changes over time. You can bookmark key events or highlight intervals of time by creating and visually positioning point and range annotations. Jump to your annotations by name, or loop on a particular interval during After-Action-Review.

### Visual Navigation and Editing

The MÄK Data Logger allows you to visually edit your simulation recordings much like an audio or video editor. You can cut out unwanted sections of your recording, create new Logger files by merging, offsetting, or concatenating existing recordings, or break a long scenario into individually playable sections for easy viewing and editing.

### Export to SQL Database for Analysis

With the Data Logger's SQL Export Module, you can export simulation data to an SQL database while recording, during playback, or offline.\* Database output for HLA is FOM-independent; the Logger will read your FOM, and automatically generate a database schema to use for export. Once the data has been stored, you can use standard tools like MATLAB® or Excel® to analyze the results of your simulation. You can even run specific SQL queries from custom data mining applications.

### Logger Toolkit API

Using the Logger Toolkit API, you can embed Data Logger functionality into your own applications or build plug-ins to extend or alter the functionality of the Logger application. This gives you complete access to the stream of data, allowing data filtering, data modification, and conversion into alternate formats. A Logger File API provides direct offline access to the data stored in MÄK Logger files.\*\*

### Supported Platforms

- Windows® XP/Vista/7
- Linux®

\* MySQL® and Microsoft Access database configurations are currently supported.

\*\* Toolkit API requires a VR-Link® Developer's License.

### USE CASES

- AFTER ACTION REVIEW
- ANALYSIS
- DATA PRESERVATION

### FEATURES

- KEY COMPONENT OF AAR SYSTEM
- RECORD AND REPLAY USING ANY HLA FOM
- INTERACTIVE DISPLAY OF SIMULATION TIMELINE
- SLOWER OR FASTER THAN REAL-TIME PLAYBACK
- POINT AND RANGE ANNOTATIONS
- HLA TIME MANAGEMENT SUPPORT
- EXPORT DIS OR HLA DATA TO SQL DATABASES
- TOOLKIT API FOR CUSTOMIZATION
- VISUAL EDITING TOOLS
- USER CONFIGURABLE FILTERING
- PACKET HISTOGRAM DISPLAY
- RECORDING CAN BE CONVERTED TO TEXT
- SUPPORTS HLA 1.3, IEEE1516-2000, HLA EVOLVED, AND DIS

