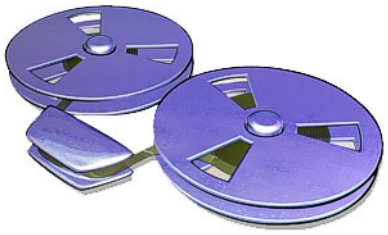

MÄK Data Logger 4.0 Release Notes

This document provides the following release-specific information 4.0:

Document ID: LOG-4.0-2-061009

Systems Supported

Table 1 lists the platforms currently supported by MÄK Logger 4.0. Application code must be built with the indicated compilers in order to link to Logger libraries.

Table 1: Platforms supported

Platform	Compiler
Red Hat Enterprise Linux Workstation 3.0	GNU C++ (GCC) 3.2
Red Hat Fedora Core 3	GNU C++ (GCC) 3.4.4
Red Hat Enterprise Linux Workstation 4.0	GNU C++ (GCC) 3.4.4
PC with Windows 2000/XP	Microsoft Visual C++ 7.1

Logger API

You must have VR-Link 3.10.1 and its required compiler versions to link the Logger libraries, but you do not need it to run the executables. Please see VR-Link documentation for information about required compilers.

You must have a VR-Link developer's license to compile plug-in or applications using the Logger API.

Qt Toolkit Compatibility

The Logger GUI is built using the Qt Toolkit, a cross-platform GUI toolkit. Logger 4.0 uses Qt 3.3.5. You do not need Qt to do development that does not affect the GUI.

Compiler Compatibility on Windows

Current and prior releases of MÄK product have been compiled using Visual C++ 6.0, 7.1, and 8.0. When you run MÄK products together, for example, the Logger and the Stealth, we strongly recommend that you run versions created with the same compiler. Mixing products compiled with different compilers can result in program instability.

Network Compatibility

HLA only

Logger 4.0 was built against VR-Link 3.10.1 and is compliant with:

- RPR-FOM 1.0 and a subset of 2.0 (draft 6, 14, and 17)
- MÄK RTI 3.0.1 (please see "Known Problems," on page 5.)

DIS only

Logger 4.0 supports DIS 2.0.4, IEEE 1278.1, 2.1.4, and IEEE 1278.1a, and can therefore interoperate with DIS applications of any of these

RTI Support

Logger 4.0 works with the MÄK RTI 3.0.1 and should work with other RTIs that conform to the HLA 1.3 specification or the IEEE 1516 SISO DLC API and are built using the same compilers.

As of this release, we no longer provide an MSVC ++ 6.0 version of the Logger. Therefore, it is no longer compatible with the DMSO RTI-NG.

Logger 4.0 works with older versions of the MÄK RTI, but we recommend using it with release 3.0.1 (please see "Known Problems," on page 5.) To use Logger 4.0 with RTIspy®, you must use a version of the MÄK RTI built with Qt 3.3.5.

When using the MÄK RTI, remember to make sure that the Logger can find your FED file, and optional *rid.mtl,* file by either putting them in the directory from which you are running, or by setting the environment variable the directory that contains them.

FOM Support

Logger 4.0 has built-in support for versions 0.5, 0.7, 0.8, 1.0, and 2.0, drafts 6, 14, and 17, of the RPR FOM. It also supports VR-Link's ability to support alternative FOMs through the FOM Mapper. By default, Logger 4.0 uses RPR FOM 1.0.

For information about FOM mapping and selecting the correct FOM Configuring the Logger for HLA in Chapter 2, "Installing and Configuring the Logger", in *MÄK Data Logger User's Guide*.

New Features

This release completely redesigns the Logger API and GUI. The new Logger is fully documented in *MÄK Data Logger User's Guide*.

The new Logger interface keeps the VCR-like controls. It adds an interface similar to that used in audio and video editing applications that lets you quickly:

- Change the playback timepoint
- Set the playback range
- Zoom the timeline
- Add and edit annotations
- Set playback speed
- Set the end-of-file action

Logger 4.0 uses FLEXlm 10.8.

Compatibility Issues

- Recordings made with previous versions of the Logger are forward compatible. However, recordings made with Logger 4.0 cannot be played on previous versions of the Logger.
- If you open a recording made with a previous release of the Logger and the recording is not indexed, Logger 4.0 does not index it. You can play such a recording, but time jumps will be slower than they are for indexed recordings. If you have a recent version of the Logger that offered the option to index unindexed recordings, you can use that version to index your old recordings for use in Logger 4.0.
- Annotation files from previous versions of the Logger are compatible with Logger 4.0.
- Plug-ins made with previous versions of the Logger are not compatible with Logger 4.0.
- Applications that use previous versions of the Logger Control Toolkit should work with Logger 4.0.

Unimplemented Features

The following features that were present in previous releases, or are implied by the Logger 4.0 GUI, have not yet been implemented in Logger 4.0, but will be added to future releases:

- Time management (HLA)
- Logger utilities
- Additional checkpoint policies
- Subscription lists (HLA)
- Export of Logger data to a SQL database.

The HLA 1516 Definition File

The HLA 1516 version of the Logger loads *VR-Link.xml* by default. If you do not specify a FDD file, it appends *.xml* to the federation name to identify the FDD file to load.

Support for FLEXlm 10.8

You must use FLEXlm 10.8 with Logger 4.0. If you already have MÄK products installed, replace your license server files with the files in the *logger4.0/flexlm10.8* directory. You do not need to replace your license files. FLEXlm 10.8 is backwards compatible with license files.

Documentation

MÄK Data Logger User's Guide has been completely updated and reprinted for this release.

Section 3.4 of the PDF version of MAK Data Logger User's Guide should contain the following paragraph:

If you assign a log file a name with the extension *.lgr*, the Logger adds a *.log* extension to ensure that the log file is not confused with a Logger recording, or worse, overwrites a recording.

Known Problems

This section lists known problems with Logger functionality:

- If you run Logger 4.0 with a version of the MÄK RTI prior to 3.0.1, it crashes on exit. The Logger should run correctly prior to exit.
- The text-based command interface does not support lists of strings. Therefore, you cannot enter the following commands through the text interface:
  - SetConnectionParameters
  - AddCustomPDU
  - SetCommonEntityTypes.

  These commands are supported in *lgrConfig.xml*.
- On Linux, the Logger does not exit cleanly. To exit and return to the command prompt, enter **`Ctrl+C`**.

Playing HLA 1.3 Logger Files in HLA 1516 Federations

In general, the Logger uses the same file format for HLA 1.3 and HLA 1516 Logger files. You can record a Logger file from an HLA 1.3 federation, and play it back into an HLA 1516 federation (and vice versa). However, you must be FOM representation used during record and playback. For example, an HLA-1.3-style FED file during recording, you must use an HLA-during playback, even if you are using the IEEE 1516 version of and an IEEE 1516 RTI. (VR-Link and the MÄK RTI allow you to use HLA-1.3-style FED files with IEEE-1516-based federates, and vice versa).

The main reason that consistency in FOM format is necessary is IEEE 1516 use different names for the "Root" classes of the Object class hierarchies. A 1.3-style FED file requires a Root class a 1516-style XML files requires a Root class called *HLAObjectRoot*. The reason this can be a problem is that if the Logger is playing an HLA-1.3-based Logger file into a federation that is using a 1516-based XML file it might come class called, for example, "ObjectRoot.Vehicle". If it tries to class, the RTI will complain that no such class exists. There HLAObjectRoot.Vehicle in the current FOM, but the RTI or Logger does not know that this is actually the same class.

In future versions of the Logger, we intend to rectify this situation, and allow playback of FED-based Logger files in federations that use XML-based FOM representations (as long as the FOMs otherwise describe a consistent set of classes, ters.