



MÄK RTI 2.1a Release Notes

This document provides the following release-specific information for MÄK RTI 2.1a:

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Supported Systems

Table 1 lists the platforms supported by the MÄK RTI 2.1a. Please contact MÄK if you need it for another platform. Application code must be built with the indicated compilers in order to link to the MÄK RTI libraries.

Table 1: Platforms supported

Platform	Compiler
SGI IRIX6.5	MipsPro7.3 C + + compiler (available from SGI)
Sun Sparcstation with Solaris2.7 or later	SPARCompiler C + + version 5.2 (available from Sun)
PC with Red Hat Linux 9.0	GNU C + + (g + +) distributed with Red Hat distribution. gcc version 3.2
PC with Windows 2000/XP	Microsoft .NET

MÄK RTI 2.1a was built with VR-Link 3.9.1.

Qt Release Compatibility

The MÄK RTIspy GUI uses Trolltech's Qt cross-platform GUI toolkit. In particular, the GUI included with MÄK RTI 2.1a relies on Qt version 3.1.2. (The Qt run-time libraries are distributed with the MÄK RTI). If a federate also uses Qt, it must be sure to use the same version of Qt as the MÄK RTIspy GUI, in order for the RTIspy GUI to function properly for that federate. Federates built with other versions of Qt should disable the RTIspy GUI to avoid these incompatibility problems.

Backwards Compatibility

The MÄK RTI 2.1a libraries are not run-time compatible with previous versions. (In other words, you cannot have a federation execution in which some federates use MÄK RTI 2.1a and some use a previous version of the MÄK RTI.) However, the MÄK RTI 2.1a is link compatible with previous versions, so a federate does not need to be recompiled to use this version. We recommend that all federates use the same version of the RTI when operating within the same federation (or using the same rtiexec).

Network Compatibility

The MÄK RTI is not network compatible with the DMSO RTI. (In general, no two RTI implementations are network compatible, due to differences in the low-level network mechanisms that they use (which include, but are not limited to packet layout.)) Applications that want to interoperate in the same federation execution must all use the same RTI implementation. A federation can easily switch from one RTI implementation to another between runs, but during each run, all participants must agree on which RTI to use, much as they must also agree on which FOM to use.

Compatibility with the DMSO RTI

With the exception of several additional functions (such as, `DtReadFileDescriptor()`, described in MÄK RTI documentation), the MÄK RTI 2.1a has the exact same API as the DMSO RTI 1.3 NG (except v5). Unless you are using the `RtReadFileDescriptor` function, an application built against the DMSO RTI NG does not need to be recompiled in order to be used with the MÄK RTI 2.1a, or vice versa (except that the Linux version is not compatible with the DMSO RTI).

MÄK RTI 2.1a uses the same FED file format as the DMSO RTI, but a different RID file format. (RID file formats depend on the RTI-implementation.)



MÄK products, including the MÄK RTI 2.1a, are not run-time compatible with the DMSO RTI NG v5 due to changes in the how the DMSO RTI handles namespaces.

New Features and Updates

MÄK RTI 2.1a has the following new features and updates:

- ♦ Support for Red Hat Linux 9.0
- ♦ Support for Microsoft .NET
- ♦ Support for FLEXlm 9.2.

Support for Microsoft .NET

This release resolves compatability issues between the 1516 RTI libraries built under Visual Studio 6.0 and federate code built under Visual Studio 7.x. Differences in the STL implementations of the two compilers create breaking changes to backwards compatability. This version of the MÄK RTI is only required when using the 1516 RTI.

Support for FlexLM 9.2

MÄK RTI 2.1a uses FlexLM 9.2. If you have not already done so for another MÄK product, you must replace the files in the *flexlm* directory on your license server with the new files.



If this is the first time you are installing a MÄK product, just follow the steps for installing license management that are in *MÄK RTI Reference Manual*.

To update your *flexlm* directory:

1. If the license server is running, shut it down with *lmdown*.
2. Back up the files in the *flexlm* directory on the license server (*C:\flexlm* on Windows, typically */usr/local/flexlm* on UNIX). (For example, to *flexlm.old*.)
3. Copy all of the files in *makrti2.1a/flexlm92* to the *flexlm* directory on the license server.
4. Copy your license files (*.lic* or *.dat*) from the backup directory to the *flexlm* directory.
5. Start the license server.
6. Run a licensed MÄK product and verify that it is checking out a license.

FlexLM is backwards compatible, so you do not have to change your license file, and MÄK applications built with earlier versions of FlexLM will continue to work with FlexLM 9.2. If you have any problems or questions, contact MÄK support at support@mak.com.

Documentation Updates

The printed version of *MÄK RTI Reference Manual* states that the MÄK RTI comes with, or is included with, all MÄK products. These statements mean that the MÄK RTI software is on product CDs. It does not mean that purchase of a MÄK product includes a MÄK RTI license. The MÄK RTI is licensed separately from other MÄK products.

The following note has been added to [“Starting the rtiexec,”](#) on page 3-7, in *MÄK RTI Reference Manual*:



The *rtiexec* is a server application. Do not run more than one *rtiexec* per federation.

Known Problems

This release has the following known problems:

- ♦ The RTI can sometimes fail to throw an "ObjectAlreadyRegistered" exception if a federate tries to register an object with a name that is already being used by another object. The federate can register an object using a name that belongs to another object that is unknown to the local RTI component (LRC). The LRC only maintains the names of objects that are registered or discovered by the federate. While we plan to fix this problem, a good preventive measure is to always subscribe and tick the RTI before registering objects.
- ♦ If you are using the Linux version of the MÄK RTIspy with versions of MÄK products earlier than the most recent releases, the MÄK products may crash. If this happens, contact MÄK technical support and we will provide you with a fix for your application.

