



MÄK Gateway 4.4 Release Notes

This release note provides release-specific information for MÄK Gateway Release 4.4.

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System Requirements

This section lists supported platforms and hardware and software requirements.

Platforms Supported

The Gateway Release 4.4 supports:

- Windows XP MSVC++ 7.1 and 8.0; Windows Vista MSVC++ 8.0
- Red Hat Linux Enterprise Workstation 4.0, Enterprise Workstation 5.0, Fedora 7.



You must have administrator privileges to install MÄK products on Windows Vista.

Software Requirements

The Gateway requires installation of the MÄK RTI or another RTI that complies with the HLA 1.3 specification or the SISO DLC HLA API 1516 (SISO-STD-004.1-2004 version of the IEEE 1516 specification.) The installed RTI must have been built with the same compiler as the installed version of the Gateway.

Compiler Compatibility on Windows

MÄK provides versions of product releases that have been compiled with Microsoft Visual C++ 7.1 and 8.0. When you run MÄK products together, for example, the Gateway and the Stealth, we strongly recommend that you run versions compiled with the same compiler. Mixing products compiled with different versions of the compiler can result in program instability.

Libraries and Binaries Built with Visual Studio 2005

All MÄK products built with Microsoft Visual Studio require the C Runtime Library to function. The C runtime libraries have always been available from Microsoft for download, they are also installed on a user's machine when a Microsoft compiler is installed. The C runtime libraries are not part of the normal Windows installation. For customers who plan to use MÄK products on machines that do not have a compiler installed, MÄK has historically distributed a copy of the C Runtime Libraries with MÄK products. These libraries were put in the *bin* directory used by the MÄK products. MÄK products would then use the libraries in the *bin* directory and customers would not have a problem if copies of the libraries were not already installed.

Unfortunately, with the release of the new C Runtime Libraries required by Microsoft Visual Studio 2005 (MSVC++8.0), the libraries can no longer just be copied into the *bin* directory of an application. The libraries need to be installed correctly into Windows system folders. (The process is actually a little more complicated, a manifest file needs to be created to tell Windows where to find the libraries.)

To accommodate this change, MÄK is distributing the Windows installer for the C runtime libraries with all MÄK products released for MSVC++8.0. The installer is named *vcredist_x86.exe* and is in the base directory of any installed MÄK product.

Running the installer requires Administrator privileges for the machine the installer is run on. MÄK has chosen to not integrate the MÄK installer and the Microsoft installer so as not to require users to have Administrator privileges to install MÄK products. Therefore, if you who do not have a compiler installed, or get error messages like “Software has not been installed correctly, please re-install”, you must apply the patch.

For more information see this Microsoft URL:

<http://msdn2.microsoft.com/en-us/library/ms235299.aspx>

RPR FOM Support

The Gateway 4.4 release supports the following versions of the RPR FOM:

- ♦ RPR FOM 0.5 – *VR-Link05.fed*
- ♦ RPR FOM 0.7 – *VR-Link07.fed*
- ♦ RPR FOM 0.8 – *VR-Link08.fed*
- ♦ RPR FOM 1.0 – *VR-Link10.fed*
- ♦ RPR FOM 2.0 draft 6 – *VR-Link20006.fed*
- ♦ RPR FOM 2.0 draft 14 – *VR-Link20014.fed*
- ♦ RPR FOM 2.0 draft 17 – *VR-Link20017-1.fed*

Please see Section 3.2.2, “Specifying the FOM Mapper and FED File to Use,” in *MÄK Gateway User’s Guide* for details about how to use different versions of the RPR FOM.

DIS Protocols and RTIs Supported

HLA only

Gateway 4.4 was built against VR-Link 3.12 and is compliant with:

- ♦ RPR-FOM 1.0 and a subset of 2.0 (draft 6, 14, and 17)
- ♦ MÄK RTI 3.x.

Gateway 4.4 is compatible with applications that use earlier versions of VR-Link if they support versions of the RPR FOM listed above.

DIS only

Gateway 4.4 supports DIS 2.0.4, IEEE 1278.1, and IEEE 1278.1a, and can therefore interoperate with DIS applications of any of these versions. By default, the Gateway receives all three versions of DIS and sends IEEE 1278.1.

New Features and Updates

This release of MÄK Gateway has been updated to support applications built with VR-Link 3.12.

A new configuration parameter, **hlaRPRFOMRevision**, has been added. This new parameter supports a bug fix for encoding and decoding the RTIObjectIdArrayStruct. If you are using the Gateway with RPR FOM 2.0 draft 17 with MÄK products built with VR-Link 3.11.1 or earlier that are also using RPR FOM 2.0 draft 17, set **hlaRPRFOMRevision** to 1. If you are using the Gateway with RPR FOM 2.0 draft 17 and products built with VR-Link 3.12 that are also using RPR FOM 2.0 draft 17, or with non-MÄK products, set **hlaRPRFOMRevision** to 2.

Bug Fixes

The RTIObjectIdArrayStruct was not properly encoded and decoded for RPR FOM 2.0 draft 17.

Known Problems

The Gateway cannot translate EnvironmentalProcess PDUs generated by VR-Forces.