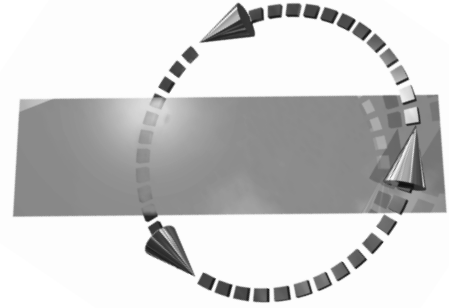




MÄK VR-Link 3.8.1-ngc Release Notes

This release note provides the following release-specific information for MÄK VR-Link Release 3.8.1-ngc:

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Systems Supported

Table 1 lists the platforms currently supported by MÄK VR-Link 3.8.1-ngc. Please contact MÄK if you are interested in purchasing VR-Link for other platforms. Application code must be built with the indicated compilers in order to link to VR-Link libraries.

Table 1: Platforms supported

Platform	Compiler
SGI IRIX6.5	MipsPro7.3 C++ compiler (available from SGI)
Sun Sparcstation with Solaris2.7 or later	SPARCCompiler C++ version 5.2 (available from Sun)
PC with Red Hat Linux 8.0	GNU C++ (GCC) 3.2
PC with Windows NT/2000/XP	Microsoft Visual C++ 6.0 SP5

Disk Space Requirements

On SGI IRIX, you need approximately 270 MB for VR-Link files and 60 MB for all documentation files. Other UNIX installations require approximately 50 MB for VR-Link files and an additional 60 MB for documentation files.

On PCs, you need 50 MB for VR-Link files and 60 MB for all documentation files.

Online Help Browser Requirements

The online help system for the FOM Mapper Builder is an HTML-based system. To view online help, you must have a web browser installed that supports Javascript. Javascript must be enabled.

Backward Compatibility

VR-Link 3.8.1-ngc is highly compatible with VR-Link 3.8-ngc. For example, the *talk* and *listen* example programs from VR-Link 3.8-ngc and previous versions compile and link unmodified against VR-Link 3.8.1-ngc.

Network Compatibility

HLA only

VR-Link 3.8.1-ngc is compliant with:

- ♦ RPR-FOM 0.5, 0.7, 0.8, 1.0, and a subset of 2.0 (draft 6 and 14)
- ♦ MÄK RTI 2.0.1-ngc
- ♦ DMSO RTI NG 4.0, and 6.0 (but not 5.0). The Linux version is not compatible with DMSO RTI NG.

DIS only

This release 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 versions.

RPR FOM Versions Supported

VR-Link 3.8.1-ngc has built-in support for versions 0.5, 0.7, 0.8, 1.0, and 2.0 of the RPR FOM. It also supports VR-Link's ability to support alternative FOMs through the FOM Mapper. By default, VR-Link 3.8.1-ngc uses RPR FOM 1.0.

The keywords for specifying different versions of the RPR FOM are:

- ♦ RPR FOM 0.5: `v1RPR05`
- ♦ RPR FOM 0.7: `v1RPR07`
- ♦ RPR FOM 0.8: `v1RPR08`
- ♦ RPR FOM 1.0: `v1RPR10`
- ♦ RPR FOM 2.0 darft 6: `v1RPR20006`
- ♦ RPR FOM 2.0 draft 14: `v1RPR20014`.

If you want to use a version of the RPR FOM other than 1.0, pass the version number (0.5, 0.7, 0.8, or 2.0) to the *DtRprFomMapper* constructor and pass the resulting object to the *DtExerciseConn* constructor. Also, make sure you are using a federation execution name that corresponds to the right FED file. For example:

```
DtExerciseConn conn("VR-Link20006", "MyApp", new DtRprFomMapper(2.0006));
```

VR-Link examples like *f18* and *hlaNetdump* have a command line option, `-f`, that you can use to choose an RPR FOM version by passing a RPR FOM keyword as the argument to `-f`.

RTI Support

VR-Link 3.8.1-ngc comes with the MÄK RTI 2.0-ngc, which is fully compliant and is link-compatible with DMSO RTI NG. VR-Link 3.8.1-ngc has been tested with DMSO RTI NG v6.



The Linux version of VR-Link 3.8.1-ngc is not compatible with the DMSO RTI. If you need a Linux version of VR-Link that is compatible with the DMSO RTI, contact us at support@mak.com.

VR-Link 3.8.1-ngc may work with older versions of the MÄK RTI, but we recommend using it with release 2.0.1-ngc.

If you use the MÄK RTI, remember to make sure that VR-Link can find your FED file, and optional *rid.mtl*. Put the FED file in the directory from which you are running, or set the environment variable `RTI_CONFIG` to the directory that contains it. See *MÄK RTI Reference Manual* for a list of the options for specifying the location of the *rid.mtl* file.

New Features and Changes

This section describes the following features and changes to VR-Link:

- Changes to header file names
- Time-outs are based on real time, not simulation time
- Support for additional DIS PDUs
- The symbol `AGGREGATE_SR_MARKING_TEXT_LENGTH` was changed from a macro to an enumerated type.

Changes to Header File Names

The following header files were renamed:

- *radioXmitDec.h* was renamed to *hRadioXmitDec.h*
- *radioXmitEnc.h* was renamed to *hRadioXmitEnc.h*
- *radioRecvrEnc.h* was renamed to *hRadioRecvrEnc.h*
- *radioRecvrDec.h* was renamed to *hRadioRecvrDec.h*

There was no change to the content of these files.



The class reference was not updated to reflect this change.

Time-outs are Based on Real Time

In previous versions of VR-Link, entities were timed out based on passage simulation time. In this release, entities are timed out based on the passage of real time. This brings VR-Link into conformance with the DIS specification.

Support for Additional PDUs

VR-Link now supports the ReceiverPDU and the DesignatorPDU.

Change to AGGREGATE_SR_MARKING_TEXT_LENGTH

The symbol AGGREGATE_SR_MARKING_TEXT_LENGTH, defined in *aggregateSR.h*, was formerly a macro, but has been changed to an enumerated type. The value is the same.

Bug Fixes

VR-Link 3.8.1-ngc fixes the following bugs:

- ♦ A bug in the class *DtFedReader* caused a crash on Solaris if *DtNotifyLevel* was set to verbose. The member function `processObjClass()` tried to print a null value to `sprintf`.

