



Rational Rose
RealTime
Release Notes

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Part Number: 507-012312-000

Revision 6.01, May 1999

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Chapter 1

Introduction

Thank you for selecting **Rational Rose RealTime**, real-time industry's leading new environment that unifies software teams by integrating with best-in-class Rational products including Rational ClearCase, Rational RequisitePro and Rational SoDA.

These release notes describe:

- “PLEASE READ FIRST” on page 2.
- Platform and Toolchain Requirements on page 3.
- Licensing Requirements on page 5.
- Integration Notes on page 7.
- Troubleshooting on page 9.
- Known Problems and Limitations on page 16.
- Documentation Updates on page 19.
- Technical Support on page 21.

Please read this release note before you install or use Rational Rose RealTime.

Note: *In some cases, you may note discrepancies between the printed documentation and the online documentation. In these cases, the online documentation is the most up-to-date and should be followed.*

Please visit the Rational Web site for the latest Release Notes, patches and information:

<http://www.rational.com/products/rosert>

If you encounter any problems while installing or running Rose RealTime, please check here first to see if you encountered a known problem. If you find a problem that is not yet documented, please call Rational Technical Support so we can investigate it, provide you with a workaround, and track the problem for further action.

Contact information for this release is in “Technical Support” on page 21.

PLEASE READ FIRST

You Must Install License Keys to Run this Product!

With your software shipment, you receive an envelope containing your Start-up License Key Certificates for this product. You need these keys in order to run your software. The start-up keys will expire a few weeks after shipment. Be sure to request your permanent license keys as soon as they are available. The availability date for your permanent keys is indicated in the top section of your Start-up License Key Certificate.

Please check the *Rational Rose Realtime Install Guide* for detailed instructions on how to install your start-up license keys and how to request your permanent license keys.

Note: Do not follow the instructions on the *Rational Start-up License Certificate* or on the envelope in which the certificate is delivered to you.

Notice To Rational Beta Customers

IF YOU WERE A BETA CUSTOMER FOR RATIONAL ROSE REALTIME, PLEASE UNINSTALL BOTH THE WINDOWS AND UNIX COMPONENTS OF THE BETA VERSION FROM YOUR SYSTEM BEFORE BEGINNING YOUR INSTALLATION. IF YOU PREVIOUSLY INSTALLED THE 6.0 RELEASE, PLEASE UNINSTALL IT BEFORE INSTALLING 6.01.



Chapter 2

Platform and Toolchain Requirements

Platform requirements — Windows NT

The minimum supported configuration for running Rose RealTime 6.0 on Windows NT is:

- Windows NT 4.0, Build 1381 with service pack 3 or service pack 4.
- Minimum Pentium 150 MHz or faster CPU.
- Minimum 64 MB of RAM, we recommend 128 MB RAM.
- Minimum 65 MB of disk space for the Rose RealTime installation.
- Minimum 800 * 600 * 256 color video resolution or better.
- Postscript printer for printing.
- Browser requirement - Internet Explorer 4 or Netscape Navigator 4.51. Internet Explorer 4 is recommended.

Platform requirements — Unix

The minimum supported configuration for running Rose RealTime 6.0 on Solaris is:

- Solaris 2.5.1, Solaris 2.6. or HP-UX 10.20
- We recommend 128 MB of RAM.
- Minimum 150 MB of disk space for the Rose RealTime installation.
- Postscript printer for printing.
- Browser requirement - Netscape Navigator 4.51.

Toolchain requirements

HTML Browser

An HTML browser is required to access the online Help provided with Rose RealTime. Supported browsers are:

- Netscape 4.51 or greater
- Internet Explorer version 4 or greater.

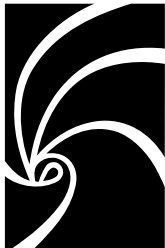
For optimum online Help performance, use Internet Explorer 4 or greater.

Compiler

You must have a C++ compiler installed on your system to make use of the code generation and execution capabilities for Rose RealTime. Different compilers are required for host workstation and for embedded system targets. The list of supported compilers and targets is provided in the *Getting Started Guide for Rational Rose RealTime*.

Real-time Operating System

If you are planning to deploy your model on a real-time operating system, your operating system, hardware and tool lineup must be one of the supported lineups listed in the *Getting Started Guide*. If you do not have a supported lineup, you may be able to get support for your lineup from a Rational RoseLink partner, or by customizing the Rose RealTime Services Library for your target. See the *C++ Target Guide* for instructions on customizing the Services Library and compiling for new target platforms.



Chapter 3

Licensing Requirements

Please refer to the *Install Guide* for instructions on installing a Startup License on page 12 and on obtaining Permanent License Keys on page 14.

Note: *Do not follow the instructions on the Rational Start-up License Certificate or on the envelope in which the certificate is delivered to you.*



Chapter 4

Integration Notes

Requisite Pro 4.0

Before running Requisite Pro 4.0 (Req Pro) with Rose RealTime, you must first start Rose RealTime with a command line option so that the emulated REI is activated.

Note: *You cannot start Rose RealTime from the current version of Req Pro because of the way in which it starts Rose. Req Pro does not use the automation interface, but rather relies on the file association mapping.*

This can be done by creating a shortcut to the Rose RealTime executable and then editing the shortcut properties. Add the option -emulateREI to the command target in the shortcut

```
%ROSET_HOME%\bin\win32\RoseRealTime.exe -emulateREI.
```

When Rose RealTime is started, it will register a Rose98 compatible REI. The reason this is not done by default is so that Rose98(I) and Rose RealTime can coexist on the same machine.

Migrating from Rational Rose and ObjecTime Developer

In order to migrate models into Rose RealTime from either Rational Rose or ObjecTime Developer when models were previously stored in a configuration management system, the model must be brought into the Rational Rose or the ObjecTime Developer tool and written out to a single file. Please refer to “Model Upgrades and Conversions” on page 15 of the *Getting Started with Rational Rose RealTime* guide.

When importing a model from Rose 98/98i into Rose RealTime, you are encouraged to resolve any model errors in Rose98 (Tools > Check Model) before trying to import the model. In particular it is important to fix unresolved references. In general, Rose98 is not concerned with unresolved references; however, they are very important in Rose RealTime as they can result in incomplete code generation and compilation errors.

In order to export the ObjecTime model in a format which is readable by Rose RealTime, a patch must be applied to the 5.2 or 5.2.1 toolset to format the file in a single linear form file with all the required information. The patch will be made available by ObjecTime Customer Support for both the 5.2 and 5.2.1 product release only. Please contact the ObjecTime Customer Support group for further information.

Once the model has been imported into Rose RealTime, it can then be stored in the configuration management system.

Naming directories

Avoid using spaces in directory names if you plan to integrate with Tornado, OSE or VRTX embedded operating systems.

Microsoft development environment

We recommend that you install the latest service packs available from Microsoft for Visual Studio or Visual C++.



Chapter 5

Troubleshooting

Troubleshooting UNIX

This section lists common problems and errors encountered when installing and running Rose RealTime. With the description of the problem is the suggested course of action required to overcome the problem.

CD read errors

If you are installing from a CD-ROM drive across the network and you are using a fast CD-ROM device, you may see some tar read errors during the installation process. To avoid the problem, either copy the CD contents to a local disk drive and run the installation from there, or run `setup.sh` from the machine to which the CD-ROM drive is connected.

Supported Window Managers

Rational Rose RealTime supports the following window managers under Solaris with the exceptions listed below.

- olwm (Open Look Window Manager)
- olvwm (Open Look Virtual Window Manager)
- twm (Tab Window Manager)
- dtwm (Desk Top Window Manager)

Installation

Rose RealTime has “secondary windows” such as specification dialogs, which should remain above the main tool window. Configure your window manager as described below. See window manager documentation to make these settings system-wide defaults.

Olwm, olvwm

Add this line to your `.Xdefaults` file

```
OpenWindows.KeepTransientsAbove: True
```

then run

```
xrdb ~/.Xdefaults
```

Twm

Twm does not support keeping secondary windows on top of a main application window. If you use twm, place specification dialogs where they will not be covered up. If a specification dialog does not come up when an “Open Specification” menu item is selected, move the main window aside to look for it.

Dtwm

In the Style Manager - Window tool, ensure that “Allow Primary Windows On Top” is not selected.

To set this up as the default, add this line to your `.Xdefaults` file

```
Dtwm*secondariesOnTop: True
```

then run

```
xrdb ~/.Xdefaults
```

Online Help

If the platform in which the toolset is running does not have a browser installed an error message will be displayed when Help is launched.

Note: *Do not run more than one Help session at a time.*

Troubleshooting Windows NT

Video Inconsistencies

If there are any display inconsistencies and your system is set for 256 colors, increase the number of colors in your display settings.

Install/Uninstall Problems

Install will not proceed for non-Administrators

The user doing the install must be in the Administrator group to run Rose RealTime Install. There is a concept of Administrator privileges on the System in NT, rather than network administrator. To add the user administrator privileges, you have to log in as an administrator for the system (not a network administrator) and run "User Manager" utility in Start Menu\Programs\Administrative Tools(Common). Select Administrators group and add the user to the group. Refer to Windows NT documentation for further details.

Uninstall leaves incrementally installed Rose RealTime files on the disk

Always run the uninstall program before re-installing Rose RealTime. If components have been incrementally installed they will not be removed by the uninstall and must be removed manually.

Listbox is empty

During setup the user can go to the Directory Browser to select the destination directory for 'Rose RealTime Install'. When the user enters the browser a second time (for example: click Cancel and click Browse again) sometimes the user will not see mapped network drives, the listbox will be empty. This is a known limitation related to the InstallShield software, the installation utility used by Rose RealTime.

To work around the problem, press then network button on the browser and press cancel in the network dialog to go back to the Browser.

Online Help

If the Windows NT platform in which the toolset is running, does not have a browser installed, an error message will be displayed when Help is launched.

Compilation problems

Compile fails on valid C++ model with VC++ 5.0 / 6.0

The INCLUDE and LIB environment variables may not be properly set. Set the environment variables. Refer to the VC++ documentation for further details and the Install Guide for environment setting verification information.

Windows NT Compilation Command Line Limits

If you encounter a compilation error message that complains about the command line being too long, the cause may be that the length of your compile or linker has exceeded a limit.

Windows NT compilation has command line limits in two areas: source compilation and linking. Both limits have been explored for the Visual C++ 5.0, Visual C++ 6.0, VRTX PPC Microtec 1.4 and Tornado 1.0.1 PPC Cygnus 2.7.2 compilers.

Source File Compilation

The variables in source compilation are the update name, the %ROBERT_HOME% path, compilation options, the local working directory and include directories. The only compiler that has a measurable limit is Microtec's VRTX compiler. The command line limit is 768 characters.

A workaround for the problem is to reduce the number of include directories by combining include files. Other solutions are to shorten paths and names for the variables listed in the previous paragraph.

Linking

The variables in linking are the update name, the %ROBERT_HOME% path (Windows NT), the link options, the number and name length of libraries, the library search paths and the local working directory. The link limits are shown in Figure 1, "Link Limits," on page 13:

Table 1 Link Limits

Platforms	Link Limit
Visual C++ 5.0:	more than 20875 characters
VRTX PPC Microtec 1.4	4147 characters
Tornado 1.0.1 PPC Cygnus 2.7.2	4150 characters
HP-UX 10.20	16384 characters (make: "couldn't load shell.stop")

A workaround for the problem is to shorten paths and names for the variables listed in the previous paragraph.

MSVSS Library problems

MSVSS Library Interface commands fail to execute with the message 'Cannot execute MSVSS command '

Possible cause: MSVSS binaries are not on the path.

Solution: Add MSVSS binaries directory to the path and restart the Rose RealTime session.

MSVSS Library Interface commands fail to execute with a message 'Cannot create project <Project Name> '

Possible cause: You are not configured as a SourceSafe user.

Solution: Each user has to be configured, before using SourceSafe, through SourceSafe Administrator. Request that your MSVSS administrator add you as a user and restart Rose RealTime session.

Mailing exception files

Windows Messaging must be installed before either exception files or comment files are automatically mailed. The format supported is SMTP (internet format addresses).

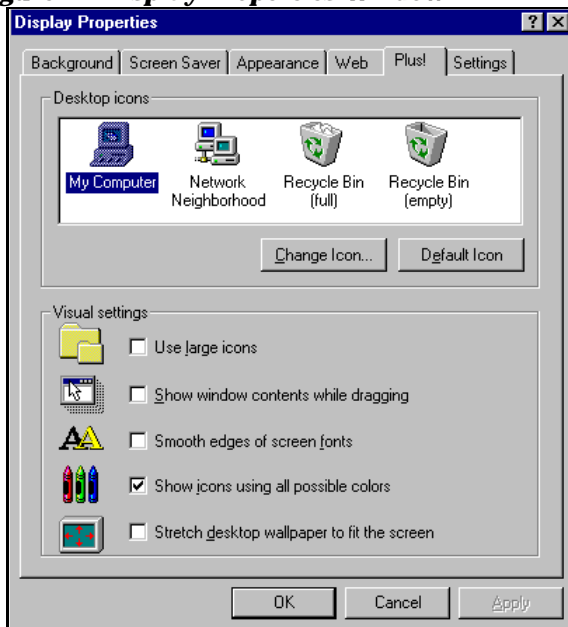
Troubleshooting License Manager

For License Manager troubleshooting tips please refer to page 25 of the *Install Guide*.

ICON Display

If the Rose RealTime icon, which is displayed under Windows NT, does not match the documentation, you may need to increase the number of colors which Windows NT uses to display the program icons. In order to correct this issue, bring up Display Properties from the Desktop of your Windows NT workstation and check the “Show icons using all possible colors” box as shown in Figure 1, “Display Properties Window,” on page 14.

Figure 1 Display Properties Window





Chapter 6

Known Problems and Limitations

The following is a list of the problems and limitations in the Rose RealTime product at the time of release. Some of these problems may have been addressed by the time you read this. For the most recent list of known problems and any fixes that may have been published, please visit the Rose RealTime web site at:
[/www.rational.com/products/rosert](http://www.rational.com/products/rosert)

File association for compiled scripts

Windows NT: Rose RealTime does not install a file association for compiled scripts (.ebx). This means that they cannot be automatically run by double-clicking on the file from a Windows Explorer.

Shared packages

Rose RealTime 6.0 and 6.0.1 does not support the use of shared packages.

Probes

When a message hit causes a probe to halt the execution of a running model, there is no way of finding out which probe in the model causes the model to stop executing. To determine which probe execution is halted on, open trace windows for each enabled probe.

Start-up problems

If Rose RealTime has problems starting up, look at the task bar and use the Task Manager to check for running copies of the tool. Terminating them will allow new copies of the tool to start properly. Note that more than one copy of the tool can be run at the same time; however, if startup problems exist, find and terminate any runaway processes.

Uninstall

Sometimes files are left behind after an Uninstall. For example, if a model has been saved in one of the Rose RealTime subdirectories, the subdirectory and its parents will not be removed. You must remove these manually if you wish to return your system to a clean state.

Rational Suites License Administrator

If after installing Rational Rose RealTime, you are having problems running the Rational Suites License Administrator, please delete the registry key:

```
HKEY_LOCAL_MACHINE\SOFTWARE\FLEXIm License Manager\rational_LICENSE_FILE.
```

Matching signal names and external code may cause problems

Signal names are in global scope. If they are the same as some external code (either in a header file, or as a symbol in a library), then compilation errors may occur.

Visual Differencing tool not responding

If the Visual Differencing tool is not responding, check for additional Rose RealTime processes that may be running. Stop the running Rose RealTime processes and restart both Rose RealTime and the Visual Differencing tool. On Unix, the **RoseRT -cleanup** command removes any Rose RealTime processes which have been started in error.

Note: The **RoseRT -cleanup** command will terminate any active Rose RealTime sessions.

Visual Differencing Tool on HP-UX

At the time of release Visual Differencing RealTime was not supported on HP-UX. Support will be available through a patch that will be made available from the Rational Rose RealTime web site (www.rational.com/products/rosert).

Changes to code that uses default arguments

ObjecTime Developer models which used the RTTimespec constructor with only one parameter, as in the following code:

```
timer.informIn(RTTimespec(2));
```

will result in a compile error after conversion of the model to Rational Rose RealTime. The compile error will appear something like:

```
..\rtg\Driver.cpp(67) : error C2440: 'type cast' : cannot  
convert from 'const int' to 'struct RTTimespec'  
No constructor could take the source type, or constructor  
overload resolution was ambiguous.
```

The reason is that in ObjecTime Developer, the RTTimespec constructor included default arguments, that is, RTTimespec (long=0, long=0). The default constructor values are not supported on RTTimespec in Rose RealTime. Any code that made use of the default arguments needs to be changed to supply both constructor arguments. For example:

```
OTD = RTTimespec (2);
```

must be changed to:

```
RRT = RTTimespec (2, 0);
```

Spaces in directory names

Spaces in directory names are not supported by the following Target operating systems:

OSE32T.ppc603-Diab-4.1a.NT4

VRTX4T.ppc603-Microtec-1.4.NT40

TORNADO101T.i960-cygnus-2.7.2-960126.NT40

TORNADO101T.m68040-cygnus-2.7.2-960126.NT40

TORNADO101T.ppc-cygnus-2.7.2-960126.NT40

TORNADO101T.x86-cygnus-2.7.2-960126.NT40

Do not install Rational Rose RealTime into a directory that has spaces or if you do then copy the C++/TargetRTS subdirectory into a new directory such that there are no spaces in the path to the TargetRTS Directory. Make sure you change component specifications to reference the new Services directory location.

Sequence diagrams

There still remain a few conditions under which the Sequence Diagram will incorrectly draw Messages / FOCs. If a Message or FOC appears to be incorrectly drawn, select the Message (or the Message that starts the FOC) and, using the center 'reorient' handle, slightly move the Message. This will force the Diagram to recalculate the correct display values for that message.

Case sensitivity within paths

The Unix temporary directory name is translated to all lower case. If you set the environment variable TEMP, make sure the path name is all lower case or the directory will not be found. This will cause problems when Help is started.

CM integration

You must use the controlled all units option if you plan to store models in CM systems.

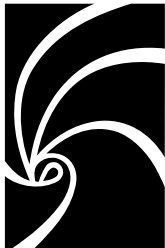


Chapter 7

Documentation Updates

For the most recent documentation updates please visit the Rose RealTime web site at:

<http://www.rational.com/products/rosert>



Chapter 8

Technical Support

When contacting Rational Technical Support, please be prepared to supply the following information:

- Name, telephone number, and company name
- Product name and version number
- Operating system and version number (for example, Windows NT 4.0, Solaris 2.5.1/2.6, or HP-UX 10.20)
- Computer make and model
- Your case id (if you're calling about a previously reported problem)
- A summary description of the problem, related errors, and how it was made to occur

If your organization has a designated, on-site support person, please try to contact that person before contacting Rational Technical Support.

You can obtain technical assistance by sending electronic mail to the appropriate e-mail address. Electronic mail is acknowledged immediately and is usually answered within one working day of its arrival at Rational. When sending an email place "Rational Rose RealTime" in the subject line, and in the body of your message include a description of your problem.

When sending email concerning a previously-reported problem, please include in the subject field: "CaseID: v0XXXXX", where XXXXX is the caseid number of the issue. For example:

```
CaseID: v0176528 New data on rational rose realtime install issue
```

Sometimes Rational technical support engineers will ask you to fax information to help them diagnose problems. You can also report a technical problem by fax if you prefer. Please mark faxes “Attention: Technical Support” and add your fax number to the information requested above.

Telephone and fax numbers for Rational Technical Support are contained in the following table. If you have problems or questions regarding licensing, please see “License support contact information” on page 23.

Table 2 Support Telephone and Fax

Region	Telephone Number	Fax Number
Americas	800-433-5444	408-863-4300
Asia Pacific (includes support for Japan, China, India, Korea, Taiwan)	+61 2 9419 0111	+61 2 9419 0123
Europe, Middle East, and Africa (includes support for Israel)	+31 23 569 4310	+31 23 569 4302
Scandinavia	+46 8 566 28200	
Other worldwide locations	408-863-5000	

Email addresses for Rational Technical Support are listed in the following table.

Table 3 Support Email

Region	Email Address
Americas and other worldwide locations	support@rational.com
Asia Pacific (includes support for Japan, China, India, Korea, Taiwan)	support@apac.rational.com
Europe, Middle East, Africa (includes support for Israel), and Scandinavia	support@europe.rational.com

License support contact information

If you have a problem or questions regarding the licensing of your Rational Software products, please contact the Licensing Support office nearest you.

Telephone numbers for license support are listed in the following table.

Table 4 License Support Telephone and Fax

Region	Telephone Number	Fax Number
Americas	408-863-9900 or 800-728-1212	781-676-2510
Europe, Israel, and Africa	+31 23 554 10 62	+31 23 554 10 69
North Asia Pacific (Mainland China, Hong Kong, Taiwan)	+852 2143 6382	+852 2143 6018
Korea	+82 2 556 9420	+82 2 556 9426
South Asia Pacific Australia, New Zealand, Malaysia, Singapore, Indonesia, Thailand, The Philippines, Vietnam, Guam and India	+612 9419 0100	+612 9419 0160
Japan	+81 3 5423 3611	+81 3 5423 3622

Email addresses for license support are listed in the following table.

Table 5 License Support Email

Region	Email Address
Americas	lic_americas@rational.com
Europe, Israel, and Africa	lic_europe@rational.com
North Asia Pacific Mainland China, Hong Kong, Taiwan, and Korea	lic_apac@rational.com
South Asia Pacific Australia, New Zealand, Malaysia, Singapore, Indonesia, Thailand, The Philippines, Vietnam, Guam and India	lic_apac@rational.com
Japan	lic_japan@rational.com