

Using Wireshark

with
RTI Connex

Release Notes

Version 1.2.3.20120831



Your systems. Working as one.



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Release Notes

1 System Requirements

The RTI® distribution of *Wireshark*™ is compatible with *RTI Connex*™ (formerly *RTI Data Distribution Service*) 4.5 and higher, as well as *RTI Data Distribution Service* 4.0-4.5; it is supported on these operating systems:

Operating System		CPU	Compiler	RTI Architecture Abbreviation
Linux	CentOS 5.4, 5.5 (2.6 kernel)	x86	gcc 4.1.2	i86Linux2.6gcc4.1.2
		x64	gcc 4.1.2	x64Linux2.6gcc4.1.2
	Fedora 12 (2.6 kernel)	x64	gcc 4.4.4	x64Linux2.6gcc4.4.4
	Red Hat Enterprise Linux 5.0 (2.6 kernel)	x86	gcc 4.1.1	i86Linux2.6gcc4.1.1
		x64	gcc 4.1.1	x64Linux2.6gcc4.1.1
	Red Hat Enterprise Linux 5.1, 5.2, 5.4, 5.5 (2.6 kernel)	x86	gcc 4.1.2	i86Linux2.6gcc4.1.2
		x64	gcc 4.1.2	x64Linux2.6gcc4.1.2
	Red Hat Enterprise Linux 6.0, 6.1 (2.6 kernel)	x86	gcc 4.4.5	i86Linux2.6gcc4.4.5
		x64	gcc 4.4.5	x64Linux2.6gcc4.4.5
	Ubuntu Server 10.04 (2.6 kernel)	x86	gcc 4.4.3	i86Linux2.6gcc4.4.3
		x64	gcc 4.4.3	x64Linux2.6gcc4.4.3

Operating System		CPU	Compiler	RTI Architecture Abbreviation
Solaris	Solaris 2.9	UltraSPARC	CC 5.4 (Forte Dev 7, Sun One Studio 7)	sparcSol2.9cc5.4
			gcc 3.2	sparcSol2.9gcc3.2
			Sun Java Platform Standard Edition JDK 1.5 and 1.6	sparcSol2.9jdk
	Solaris 2.10	UltraSPARC	gcc3.4.2	sparcSol2.10gcc3.4.2
			Sun Java Platform Standard Edition JDK 1.5 or 1.6	sparcSol2.10jdk
		UltraSPARC (with native 64-bit support)	gcc3.4.2	sparc64Sol2.10gcc3.4.2
			Sun Java Platform Standard Edition JDK 1.5 or 1.6	sparc64Sol2.10jdk
Windows	All Windows platforms described in the <i>Connext Release Notes</i> for 4.5f			

1.1 Additional Libraries for Solaris Systems

On Solaris systems, you need the files listed in [Table 1.1](#) and [Table 1.2](#). These packages are available at no cost from <http://www.sunfreeware.com>. These are the minimum required packages (higher versions are acceptable).

After installing these files, see [Rebuilding the Cache Configuration File \(Section 1.1.1\)](#).

Table 1.1 Required Packages for Solaris 2.9

atk-1.18	libiconv-1.11
cairo-1.4.10	libintl-3.4.0
expat-2.0.1	libpcap-1.0.0
fontconfig-2.7.0	libpng-1.2.40
freetype-2.3.9	pango-1.18.2
gcc-3.4.6 (glibc-3.4.6 is sufficient)	pcre-7.9

Table 1.1 Required Packages for Solaris 2.9

glib-2.20.4	render-0.8
gmp-4.2.1	renderproto-0.9.3
gtk+-2.12.0	tiff-3.9.1
jpeg-7	xrender-0.8.3
krb5-1.7	zlib-1.2.3

Table 1.2 Required Packages for Solaris 2.10

atk-1.18.0-sol10-sparc-local	libgpgerror-1.5-sol10-sparc-local
cairo-1.4.10-sol10-sparc-local	libconv-1.11-sol10-sparc-local
expat-2.0.1-sol10-sparc-local	libintl-3.4.0-sol10-sparc-local
fontconfig-2.4.2-sol10-sparc-local	libpcap-1.0.0-sol10-sparc-local
freetype-2.3.9-sol10-sparc-local	libpng-1.2.40-sol10-sparc-local
glib-2.14.1-sol10-sparc-local	pango-1.18.2-sol10-sparc-local
gnutls-1.4.1-sol10-sparc-local	pcre-7.9-sol10-sparc-local
gtk+-2.12.0-sol10-sparc-local	render-0.8-sol10-sparc-local
intltool-0.40.3-sol10-sparc-local	renderproto-0.9.3-sol10-sparc-local
jpeg-7-sol10-sparc-local	tiff-3.9.1-sol10-sparc-local
krb5-1.7-sol10-sparc-local	xrender-0.8.3-sol10-sparc-local
libgcrypt-1.2.4-sol10-sparc-local	zlib-1.2.3-sol10-sparc-local

1.1.1 Rebuilding the Cache Configuration File

Once you've installed the required packages, modify the font cache configuration file and rebuild the font cache as described below:

Important: Run these steps as root.

1. Edit the file `/usr/local/etc/fonts/fonts.conf`.
2. Make sure that the following directories are in the section "Font directory list". If they are missing, add them:
 - `<dir>/usr/share/fonts</dir>`
 - `<dir>/usr/openwin/lib/X11/fonts</dir>` (This one in particular is normally missing from the existing installation)
 - `<dir>~/.fonts</dir>`

3. Rebuild the cache with this command:

```
/usr/local/bin/fc-cache -f -v
```

1.2 Additional Debian packages for Linux (Ubuntu) Systems

For Linux (Ubuntu) systems, the Debian package **snmp-mibs-downloader** is required.

1.3 System Hardware

To minimize the chance of packet capture loss and to optimize the overall performance of *Wireshark*, you should have a 1.7-GHz (or better) processor with at least 512 MB RAM. (The minimum values are 600-MHz and 256 MB RAM.)

1.4 Network Adapters

For information on the network adapters supported by *Wireshark*, see [Wireshark's FAQ page \(www.wireshark.org/faq.html\)](http://www.wireshark.org/faq.html).

2 What's New in Version 1.2.3.20120831

- ☐ Provides compatibility with *Connex* 5.0.0.
- ☐ Updated to use WinPcap 4.1 instead of 4.0.2.
- ☐ Supports parsing new RTPS parameters: TypeObject Type ID and Kind, Type Consistency Kind, Acknowledgment Kind
- ☐ Supports parsing new RTPS submessages: Application-Level Acknowledgement (APP_ACK) and Application-Level Acknowledgement Confirmation (APP_ACK_CONF)

3 Available Documentation

- ❑ *RTI Wireshark Getting Started Guide.* Please see **RTI_Wireshark_GettingStarted.pdf** to learn how to install and use *Wireshark* to analyze *Connex*t applications.
- ❑ *Wireshark online help.* There is extensive online help included with *Wireshark*. Select **Help**, **Contents** from the menu-bar for a detailed user's guide in HTML format.
- ❑ *Wireshark User's Guide.* This PDF document describes how to use *Wireshark*'s features. It is not included in the installation, but can be downloaded from *Wireshark*'s website (www.wireshark.org/docs). Note that it may pertain to a slightly different version of *Wireshark*.
- ❑ *RTI Core Libraries and Utilities User's Manual.* This document provides details on the *Connex*t API and describes how RTPS packets are used by *Connex*t-based applications. In particular, you should review the Discovery chapter. Open <NDDSHOME>/doc/pdf/RTI_CoreLibrariesAndUtilities_UsersManual.pdf, where <NDDSHOME> is where you installed *Connex*t.

4 Custom Supported Platforms

Wireshark is also supported on the platforms listed in [Table 4.1](#); these are target platforms for which RTI offers custom support. If you are interested in these platforms, please contact your local RTI representative or email sales@rti.com.

Table 4.1 Custom Supported Platforms

Operating System		CPU	Compiler	RTI Architecture Abbreviation
Linux	Red Hat Enterprise Linux 5.2 (2.6 kernel)	Pentium class	gcc 4.2.1	i86Linux2.6gcc4.2.1
			Sun Java Platform Standard Edition JDK 1.6	i86Linux2.6gcc4.2.1jdk
	RedHawk Linux 5.4 (2.6 kernel)	Pentium class	gcc 4.2.1	i86RedHawk5.4gcc4.2.1
			Sun Java Platform Standard Edition JDK 1.6	i86RedHawk5.4gcc4.2.1jdk

