

# *RTI Monitor*

## **Release Notes**

Version 5.2.3



© 2016 Real-Time Innovations, Inc.  
All rights reserved.  
Printed in U.S.A. First printing.  
April 2016.

### **Trademarks**

Real-Time Innovations, RTI, NDDS, RTI Data Distribution Service, DataBus, Connex, Micro DDS, the RTI logo, 1RTI and the phrase, "Your Systems. Working as one," are registered trademarks, trademarks or service marks of Real-Time Innovations, Inc. All other trademarks belong to their respective owners.

### **Copy and Use Restrictions**

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form (including electronic, mechanical, photocopy, and facsimile) without the prior written permission of Real-Time Innovations, Inc. The software described in this document is furnished under and subject to the RTI software license agreement. The software may be used or copied only under the terms of the license agreement.

### **Technical Support**

Real-Time Innovations, Inc.  
232 E. Java Drive  
Sunnyvale, CA 94089  
Phone: (408) 990-7444  
Email: [support@rti.com](mailto:support@rti.com)  
Website: <https://support.rti.com/>

# Release Notes

## 1 Supported Platforms

RTI® Monitor is supported on the platforms in [Table 1.1](#).

Table 1.1 **Supported Platforms**

Operating System	
Linux®	CentOS 5.4, 5.5, 6.0, 6.2 - 6.4, 7.0
	Red Hat® Enterprise Linux 5.0, 5.2, 5.4, 5.5, 6.0-6.5, 6.7
	Red Hat Enterprise Linux 7.0
	SUSE® Linux Enterprise Server 11 SP2, SP3
	SUSE Linux Enterprise Server 11 SP2
	Ubuntu® Server 12.04 LTS, Ubuntu 14.04 LTS
Mac®	All OS X platforms listed in the <i>RTI Connexx DDS Core Libraries Release Notes</i>
Windows®	All Windows platforms listed in the <i>RTI Connexx DDS Core Libraries Release Notes</i>

For details on these platforms, see the *RTI Connexx DDS Core Libraries Platform Notes*.

Monitor is also supported on the platform listed in [Table 1.2](#); this is a target platform for which RTI offers custom support. If you are interested in this platform, please contact your local RTI representative or email [sales@rti.com](mailto:sales@rti.com).

Table 1.2 **Custom Supported Platforms**

Operating System	
Linux	Red Hat Enterprise Linux 5.2

To use Monitor you will also need:

- RTI Connexx™ DDS with the same version number (already included in the bundle)
- JAVA 1.7 update 76 or later is suggested (already included in the bundle)
- For Windows systems: the appropriate Microsoft® Visual Studio® Redistributable libraries (already included in the Windows bundle)

## 2 Compatibility

Monitor can be used to monitor applications built with Connexx DDS that also use Monitoring Library (part of Connexx DDS). Use the same version number for Monitor and Connexx DDS.

**Note:** *Monitor* is built on top of *Connex DDS*. Therefore you should refer to the Compatibility section of the *RTI Connex DDS Core Libraries Release Notes* for other compatibility information.

---

## 3 What's New in 5.2.3

### 3.1 New Platforms

This release supports these new platforms:

- CentOS 7.0
  - OS X 10.11
  - Red Hat Enterprise Linux 6.7
  - Windows 10, Windows Server 2012 R2
- 

## 4 What's Fixed in 5.2.3

### 4.1 DestinationOrder's source\_timestamp\_tolerance Field in Description Panel's Builtin Topic Data Tab was Incorrect

The DestinationOrder QoS policy's **source\_timestamp\_tolerance** field is not currently propagated through discovery (related to RTI Issue ID CORE-6225). Because of this, the value displayed by *Monitor* did not reflect the actual setting for the remote entity.

This problem has been resolved. Now **source\_timestamp\_tolerance** is hidden when inspecting QoS values (sent through Discovery) from remote *DataReaders* and *DataWriters*. You can see the actual values in the Description Panel's QoS tab for entities that are being monitored.

[RTI Issue ID MONITOR-208]

### 4.2 Distributed Logger Message Details Pane did not Show All Content in Some Cases

The Distributed Logger Message Details pane did not show all the content in some cases. This problem occurred when the message content included HTML markup characters (specifically '<', '>', apostrophes, and quotation marks). This problem has been resolved.

[RTI Issue ID MONITOR-211]

---

## 5 Previous Releases

This section includes:

- [What's New in 5.2.0 \(Section 5.1\)](#)
- [What's Fixed in 5.2.0 \(Section 5.2\)](#)

### 5.1 What's New in 5.2.0

#### 5.1.1 New Platforms

This release adds support for these platforms:

- Mac OS X 10.8 and 10.10
- Red Hat Enterprise Linux 6.5
- Ubuntu 14
- Windows platforms that use Visual Studio 2013 (Windows Server 2012 R2, Windows 8, and Windows 8.1).

### 5.1.2 Removed Platforms

These platforms are no longer supported:

- Fedora 12
- Windows platforms that used Visual Studio 2005 are no longer supported.

### 5.1.3 Ability to Detect Incompatible Transport Locator IDs

*Connex DDS* 5.1.0 and earlier releases used a UDPv6 locator value that was not compliant with the value noted in the RTPS specification (the value was 5 when it should have been 2). Because of this issue, *Connex DDS* could not interoperate with other DDS vendors over UDPv6. *Connex DDS* 5.2.0 corrects this issue.

Because the locator value has changed, applications that use 5.2.0 are not compatible with applications that use 5.1.0 or lower when using the UDPv6 and/or shared-memory transports.

This release of *Monitor* will detect if two applications are using incompatible transport locators. If this occurs, *Monitor's* Notifications panel will show a “warning” state for the involved DomainParticipants.

## 5.2 What's Fixed in 5.2.0

### 5.2.1 TypeObject Serialized Size now Available

The serialized size of TypeObject representations is now available in both the Description Panel and System Types Table. This information can be used to fine tune QoS settings related to TypeObject size. Note that the TypeCode sizes were previously provided and continue to be provided in this release.

[RTI Issue ID MONITOR-164]

### 5.2.2 Host Improperly Identified when no IPv4 Interfaces Available

The host identity was not properly determined when there were no IPv4 interfaces available. This typically manifested when only IPv6 interfaces were available on the host. This problem has been resolved.

[RTI Issue ID MONITOR-170]

### 5.2.3 Type Consistency Algorithm did not Match Documentation

The algorithm to check for type consistency did not match the documentation. This problem has been resolved.

[RTI Issue ID MONITOR-192]

## 6 Known Issues

- ❑ *Monitor* will show monitoring information for an application properly only if all the monitoring Description topics are published and not filtered (this is the default setting).  
The \***Description** topics are needed to properly place objects in the tree views. The per-matched and per-locator topics are needed for the System Overview panel's Matches option to work properly.
- ❑ The aggregation capability will not work correctly with applications that publish monitoring data at a rate that is different than the aggregation rate used in *Monitor*.
- ❑ *Monitor* does not support DomainParticipants that use WireProtocolQosPolicyAutoKind RTPS\_AUTO\_ID\_FROM\_MAC.
- ❑ The internal DomainParticipant (1) and DataWriters (13) created by *Monitor* are incorrectly included in the counts for remote participants or remote writers in the Status panel, even though the monitoring library has been configured to exclude internally created entities in the count.
- ❑ Type information is not available when loading historical data. The Description panel will not show the equivalent IDL, the System Types Table will be empty, and type conflicts will not be reported. {RTI Issue ID DIABLO-766}

## 7 Third-Party Licenses

Portions of *RTI Monitor* were developed using:

- ❑ **Apache log4j** from the Apache Software Foundation (<http://logging.apache.org/log4j/>)
- ❑ **JCommon**, licensed under the terms of the GNU Lesser General Public Licence (LGPL) version 2.1 or later (<http://www.jfree.org/jcommon/>)
- ❑ **JFreeChart** from Object Refinery Ltd. (<http://www.jfree.org/jfreechart/>), licensed under the terms of the GNU Lesser General Public Licence (LGPL) version 2.1 or later
- ❑ **SwingX** from SwingLabs (<https://swingx.dev.java.net/>), licensed under the terms of the GNU Lesser General Public Licence (LGPL) version 2.1 or later

### 7.1 Apache Software License Version 2.0

Apache License

Version 2.0, January 2004

<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document. "Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such

entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions:

- (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and
- (b) You must cause any modified files to carry prominent notices stating that You changed the files; and
- (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and
- (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License.

You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibil-



ity, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

END OF TERMS AND CONDITIONS