

RTI Monitor

for RTI Data Distribution Service

Release Notes

Version 1.0.1



The Global Leader in DDS



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Printed in U.S.A. First printing.
Jan. 2011.

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Release Notes

1 Dependencies, Available Architectures and Compatibility

Dependencies:

- ☐ RTI® Data Distribution Service 4.5d (already included in the bundle)
- ☐ Java® 1.6 update 10 or later is suggested (already included in the bundle)
- ☐ For Windows® platforms, the Microsoft Visual C++ 2005 SP1 Redistribution libraries (already included in the bundle)

Supported Architectures:

- ☐ Linux:
 - CentOS 5.4, 5.5 (x86 and x64)
 - Red Hat® Enterprise Linux 4.0, 5.0-5.2, 5.4, 5.5 (x86 and x64)
 - Ubuntu® Server 10.04 (x86 and x64)
- ☐ Windows:
 - Windows 7 (x86)
 - Window 2000 (x86)
 - Windows 2003 (x86 and x64)
 - Windows Server 2008 R2 (x64)
 - Windows Vista® (x86 and x64)
 - Windows XP Professional (x86 and x64)

Compatibility:

- ❑ Applications built with *RTI Data Distribution Service 4.5d* that also use *RTI Monitoring Library 1.0.1*.
- ❑ Applications built with *RTI Data Distribution Service 4.5c* that also use *RTI Monitoring Library 1.0.0*.

2 What's New in 1.0.1

- ❑ Added a display for sequence numbers.

The Status Panel now displays sequence numbers from `DataWriterProtocolStatus` and `DataReaderProtocolStatus` for `DataWriters` and `DataReaders`, respectively. The `DataWriterProtocolStatus` is displayed for reliable `DataWriters` when "Filter by match" is set to "All Matches." The `DataReaderProtocolStatus` is only displayed when "Filter by match" is set to a specific `DataWriter`.

The *User's Manual* has been updated accordingly (see Section 3.3.1).

3 What's Fixed in 1.0.1

3.1 Failure on Attempt to Leave Domain When No Domains Joined

If you selected the Leave Domain button or menu item when there were no joined domains, *RTI Monitor* would throw an exception.

[RTI Bug # 13654]

3.2 Entity States Not Updated in Tree for Topics and DomainParticipants

The states displayed for Topics and DomainParticipants in the tree views may not have been accurate.

[RTI Bug # 13655]

3.3 Readers and Writers not Properly Sorted in DDS Logical View

In the DDS Logical View, `DataReaders` and `DataWriters` were not always properly organized in the display.

[RTI Bug # 13656]

3.4 Exception on Conversion of Invalid QoS Policy ID

It was possible for *RTI Monitor* to throw an exception if the conversion of a QoS policy ID to a string failed. *RTI Monitor* is now more robust in dealing with any potential invalid QoS policy IDs from *RTI Monitoring Library*.

[RTI Bug # 13657]

3.5 Incorrect Status Displayed

The following status display issues have been resolved:

- ☐ The 'Offered Deadlines Missed Counts' chart entry was mistakenly displayed for DataReaders and Subscribers.
- ☐ If "Filter by match" was used to select a match, then used to go back to "All Matches," the chart data entries did not refill correctly.
- ☐ The 'Requested Deadlines Missed Counts' chart entry was mistakenly displayed for DataWriters and Publishers.

[RTI Bug # 13772]

3.6 Installing in Directory Path That Contained Spaces

If *RTI Monitor* was installed in a directory path which contained spaces, the script would fail to launch *RTI Monitor* properly. This problem has been resolved.

[RTI Bug # 13707]

4 Previous Releases

This section describes:

- ☐ [What's New in 1.0.0 \(Section 4.1\)](#)
- ☐ [What's Fixed in 1.0.0 \(Section 4.2\)](#)

4.1 What's New in 1.0.0

- ☐ New Command-line Options

- **-notificationHistoryDepth**: Sets the number of notifications to keep per entity (similar to the history depth but specific to notifications).
- **-matchRefreshPeriodSeconds**: Controls how often *RTI Monitor* will refresh the System Overview panel's matches.
- **-pruneDeadObjectsPeriodSeconds**: Sets the period at which *RTI Monitor* should clean up user-interface objects that are no longer current. This number should be increased when dealing with very large systems where the time to complete discovery is longer than the default value of 3 seconds.
- **-spawnReadThreads**: This option instructs *RTI Monitor* to use multiple threads to retrieve data from its DDS DataReaders (containing the monitoring information). This is typically only needed for very large systems.
- **-verbosity**: Sets the standard tool verbosity for DDS. It does not affect *RTI Monitor's* verbosity.

☐ Removed Command-line Options

- **-dontRunStateCalculator**
- **-minStatusDurationSeconds**

☐ Added support for 64-bit Windows systems.

☐ Added type-code equality checking to look for potential type-conflicts.

☐ The *RTI Monitor* bundle has been modified to include the DDS libraries, actual installation of the JRE and Visual Studio service pack for Windows systems. *RTI Monitor* now runs standalone—without the requirement to install anything else.

☐ The QoS profile shipped with *RTI Monitor* now uses the default maximum type-code serialized size, and default shared-memory and UDPv4 transport settings; this allows *RTI Monitor* to work better out of the box with DDS applications that also have default settings.

☐ Usability improvements:

- All panels are now “dynamic” — the panel's content now depends on the currently selected entity, instead of having one panel per entity kind.
- New toolbar makes it easier to create new panels.
- New options for selecting Basic or Advanced mode in the Status panel; this helps reduce the amount of data that needs to be shown.
- Ability to leave the domain(s) and to show the currently joined domain.

- New timestamp on all the panels that have data being updated periodically.
- Updated the System Overview panel to show notifications, matches and measurement information.
- Status panel no longer shows data that is irrelevant for best-effort readers and writers.
- New panels: Processes Table, System Types Table, All Notifications Table.
- New options for auto-tiling and clearing notifications.
- Ability to save and load data.

4.2 What's Fixed in 1.0.0

- ❑ Resources associated with per-matched-endpoint and per-matched-locator are now reclaimed. [RTI Bug # 13400]
- ❑ Defunct objects are now properly cleaned up on a periodic basis. [RTI Bug # 13381]

5 Known Issues

- ❑ *RTI Monitor* will show monitoring information for a DDS application properly only if all the monitoring Description topics are published and not filtered (this is the default setting). See the *RTI Monitoring Library Getting Started Guide* for details about monitoring topic filters.

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 *RTI Monitor*.
- ❑ *RTI Monitor* does not support DomainParticipants which use the WireProtocolQosPolicyAutoKind of RTPS_AUTO_ID_FROM_MAC.

- ❑ The internal participant (1) and data writers (13) created by the *RTI Monitor* GUI 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.

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