RTI Recorder

for RTI Data Distribution Service

Release Notes

Version 1.5.2

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Trademarks

Copy and Use Restrictions

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Release Notes

This document provides release-specific information about *RTI® Recorder* 1.5.2.

RTI Recorder is an *RTI Data Distribution Service* application that records both *RTI Data Distribution Service* discovery and topic data. All recorded data is stored in one or more SQL database files.

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1 System Requirements

RTI Recorder 1.5.2 is supported on the following platforms::

- ❏ Linux® systems:
  - Red Hat® Linux 9.0 (x86)
  - Red Hat Enterprise Linux 3.0 (x86)
  - Red Hat Enterprise Linux 4.0 and 5.0 (x86 and x64)
  - Yellow Dog™ Linux 4.0 (PPC 74xx)
- ❏ Windows® systems:
  - Windows 7 (x86 and x64)
  - Windows 2000 (x86)
  - Windows 2003 (x86 and x64)
  - Windows CE (x86)
  - Windows Server® 2008 R2 (x64)
  - Windows Vista® (x86 and x64)
  - Windows XP Professional (x86 and x64)

2 Compatibility with Other RTI Products

RTI Recorder 1.5.2 is compatible with *RTI Data Distribution Service* 4.5c, 4.5b, 4.4d, 4.4b, 4.3e and 4.2e[1].

RTI Recorder supports the standard *RTI Data Distribution Service* transports (UDPv4, UDPv6, and shared memory), as well as the *RTI Secure WAN Transport* plugins.

3 What's New in RTI Recorder 1.5.2

- *RTI Recorder* has a new command-line option, **-listCfg**, which lists the available configuration profiles.
- The *RTI Recorder User's Manual* has new examples of how to use advanced remote commands.
- *RTI Converter* (**rtirecconv**) can now convert to a SQL database format. To do so, use the new **'-format sql'** option. The result will be a SQL database file with tables of deserialized data.
- Topic groups in the *RTI Recorder* configuration now have the option to exempt the recording of certain topics.
- *RTI Recorder* and *RTI Converter* can now be configured to take in type information from XML type-configuration files. For more information on generating and using XML type-configuration files see the *RTI Data Distribution Service User's Manual*. For more information on configuration *RTI Recorder* and *RTI Converter* to use XML type-configuration files see the *RTI Recorder User's Manual*.
- The format for configuring topic groups has changed. There are two new tags, <topics> and <exemption>. The <exemption> tag exempts specific topics from being recorded. Both the <topic_expr> tag and the new <exemption> tag must be within the new <topics> tag.

  The <exemption> tag supports a comma-separated list of expressions (similar to the field_expr tag) that should *not* be recorded. For example, the following means that you want to record all fields for all topics *except* Circles, Squares, and Triangles:

1. To support compatibility with 4.2e, please see the *RTI Data Distribution Service Release Notes* for 4.5b.

```
<topic_group name="AllMinusShapes">
    <topics>
        <topic_expr> * </topic_expr>
        <exemption> Circle, Square, Triangle </exemption>
    </topics>
    <field_expr> * </field_expr>
</topic_group>
```

4 What's Fixed in RTI Recorder 1.5.2

- *RTI Converter* issued a segmentation fault if it tried to convert a topic that was recorded with a field expression. This type of conversion is not supported. In this release, *RTI Converter* will simply print an error message. [RTI Bug # 13185]
- *RTI Recorder's* remote administration **pause** command did not work on topic groups. This problem has been resolved. [RTI Bug # 13253]
- *RTI Recorder* 1.5.1 and *RTI Converter* 1.5.1 could not parse XML files that had type-configuration information embedded in the *RTI Recorder* configuration file. This problem has been resolved. [RTI Bug # 13313]
- The parsing of XML type definitions that include boolean constants where the type is a typedef of a boolean used to cause an error. For example:

  ```
  <typedef name="MyBoolean" type="boolean"/>
  <const name="MyBooleanConst" type="nonBasic"
   nonBasicTypeName="MyBoolean" value="false"/>
  ```

  This problem has been resolved. [RTI Bug # 13312]

5 Known Issues

- To record a data type that has more than 1,950 primitive types, you must set the **deserialize_mode** property to RTIDDS_DESERIALIZEMODE_NEVER. Otherwise, you will see the following error message and recording will fail:

  ```
  "exception:[RTIDRTUserDataTable_update@610]:too
  many SQL variables"
  ```

  [RTI Bug # 12794]

- RTI does not recommend using files that are mounted over NFS to store recorded data. *RTI Recorder* uses file-locking, which has known issues working over NFS. If file-locking is not working, *RTI Recorder* will hang. In particular, this problem may appear on Yellow Dog Linux systems.
- Leading and trailing spaces in a Topic Name are ignored. However, spaces within the string are allowed. For example, " My Topic " will be treated as "My Topic".
- Fully qualified field names in struct's cannot be longer than 1,024 characters.
- Sequence and array indices cannot be used in Topic or Field expressions.
- *RTI Recorder* and *RTI Converter* (**rtirecconv**) cannot deserialize bitfields. If this type is used, the deserialize mode must be RTIDDS_DESERIALIZEMODE_NEVER.
- In files recorded on Windows systems, the recorded timestamp is the number of microseconds since the device was booted, not since January 1, 1970. Therefore the **-time gmt** option to *RTI Converter* (**rtirecconv**) will not show the correct time.
- *RTI Converter* (**rtirecconv**) cannot convert tables with only a subset of the data. In general, if you record in deserialized mode, use the **sqlite3** command to convert to HTML and CSV; if you record in serialized mode, use *RTI Converter*.
- If the *RTI Data Distribution Service* application being recorded has a keyed data-type and **DataWriterProtocolQosPolicy.disable_inline_keyhash** is set to TRUE (not the default), then *RTI Recorder* may misinterpret samples as being from the wrong instance.
- Remote Shell: If you start an instance of *RTI Recorder* using command-line options (not a configuration file), then sending a new configuration to that instance of *RTI Recorder* using the remote shell will not work.