

RTI Administration Console

Release Notes

Version 5.3.1



Your systems. Working as one.



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Release Notes

1 Supported Platforms

RTI® *Administration Console* is supported on the following platforms. For details on these platforms, see the *RTI Connex*® *DDS Core Libraries Platform Notes* for this release.

- All Linux® platforms on x86 and x64 CPUs listed in the *RTI Connex DDS Release Notes* for this release except Wind River® Linux.
- All Mac® OS X® platforms listed in the *RTI Connex DDS Core Libraries Release Notes* for this release. Note: See [Limited to Single Instance of Admin Console on Mac OS X Platforms \(Section 5.2\)](#).
- All Windows® platforms listed in the *RTI Connex DDS Core Libraries Release Notes* for this release.

2 Compatibility

Admin Console is compatible with these components, with the same version number:

- *RTI Database Integration Service*
- *RTI Distributed Logger*
- *RTI Persistence Service*
- *RTI Queuing Service*
- *RTI Recording Service* (including its *Replay* and *Record* tools)
- *RTI Routing Service*

In *RTI Connex DDS* 5.1.0, the default **message_size_max** for the UDPv4, UDPv6, TCP, Secure WAN, and shared-memory transports changed to provide better out-of-the-box performance.

Admin Console 5.1.0 and higher also uses the new default value for **message_size_max**. Consequently, *Admin Console* is not out-of-the-box compatible with applications running older versions (5.0 or lower) of *Connex DDS* or *RTI Data Distribution Service*. Please see the *RTI Connex DDS Core Libraries Release Notes* for instructions on how to resolve this compatibility issue with older *Connex DDS* and *RTI Data Distribution Service* applications.

The types of the remote administration and monitoring topics are not compatible with 5.0.0. Therefore:

- *Admin Console* 5.0.0 and other 5.0.0 *RTI* components that perform monitoring/administration are not compatible with *Admin Console* 5.1.0.

- *Admin Console* 5.1.0 and other 5.1.0 RTI components that perform monitoring/administration are not compatible with *Admin Console* 5.0.0.

2.1 QoS Profiles for Backward Compatibility with Versions Prior to 5.2.0

Admin Console provides four built-in QoS profiles, two of which are aimed at providing backward compatibility with versions prior to 5.2.0. These two profiles are:

- **AdminConsole::Administration.510TransportCompatibility** can be configured in Settings->Administration if you want to interact with a system that uses the non-standard transport identifiers (all *Connex DDS* versions prior to 5.2.0).
- **AdminConsole::DataVisualization.510TransportCompatibility** can be used when subscribing to Topics published by an application using the non-standard transport identifiers.

3 What's Fixed in 5.3.1

This section describes bugs fixed in 5.3.1. These fixes have been made since 5.3.0.

3.1 Multiple RTI Connex DDS Micro Applications Displayed as One

Multiple *RTI Connex DDS Micro* applications were previously displayed as a single application. This problem has been resolved.

[RTI Issue ID ADMINCONSOLE-556]

3.2 Error Message 'Trouble Restoring QoS File'

The 5.3.0 release would sometimes log an error message related to 'trouble restoring QoS file.' This error message occurred whether there was actually a problem or not. This problem has been resolved. Now the error message will only appear if there is actually a problem restoring the QoS file.

[RTI Issue ID ADMINCONSOLE-557]

3.3 Missing Links for QoS Fields

The links for Publisher and Subscriber QoS fields were missing in the 5.3.0 release. This problem has been resolved.

[RTI Issue ID ADMINCONSOLE-564]

3.4 Extraneous Partition Mismatches Reported

Admin Console sometimes reported partition QoS mismatches when, in fact, the *DataReader* or *DataWriter* did contain matching partitions. This problem has been resolved.

[RTI Issue ID ADMINCONSOLE-579]

3.5 Failures During Import of Discovery Data

During export of discovery data from *Admin Console*, the resulting XML file sometimes contained type information, which could not be imported back into *Admin Console*. This happened when the serialized representation of the type exceeded 64KB. The problem was not noticeable during export; it showed up only when attempting to import the discovery data back into *Admin Console*. This problem has been resolved.

[RTI Issue ID ADMINCONSOLE-588]

4 Previous Release

4.1 What's New in 5.3.0

This section highlights improvements in 5.3.0. These enhancements have been made since 5.2.3.

4.1.1 New QoS View Capabilities

The QoS view has been improved by separating out Publisher/Subscriber QoS properties when viewing DataWriter/DataReader QoS. Additionally, the DomainParticipant QoS has been added so that a more complete picture of the available QoS data is presented.

4.1.2 Ability to Import and Export Discovery Data

Now Admin Console can export discovery data to an XML file. This feature, in conjunction with the ability to import discovery data, provide a mechanism to capture a system state and share it with others. One use case for these new features is that data can be sent to RTI Support to assist customers with resolving issues.

4.1.3 Discovery Peers Feature

Now you can add discovery peers from the Administration Preferences page. These peers will be added to each DomainParticipant through the `add_peer()` API call.

4.1.4 Guidance Now Displays instead of Empty Panels

Admin Console will now display information and help in views which otherwise would have been empty. The text explains why the view doesn't have data to show and includes hyperlinks to help documentation with more background.

4.1.5 Shutdown Command now Available for Routing Service

Admin Console has a new shutdown command that you can use to request that *RTI Routing Service* instances shut down.

4.1.6 Ability to Show Host IP Address Changes

Admin Console now reflects host IP address changes. These changes can happen when a network interface is enabled (such as connecting to WiFi). The addresses shown for the host will update as the underlying DomainParticipant is updated.

4.1.7 Keyed Column Added to Datatypes View

A new column indicates whether or not the associated DataWriter or DataReader uses a keyed type. This column can be very helpful when debugging differences in whether or not a key is used for a Topic.

4.1.8 Non-Existent QoS Files now Automatically Removed from Startup List

Admin Console allows you to create a list of QoS files that should be loaded at startup (under View, Preferences). However, if you added a QoS file to the startup list and the file was later moved/deleted, you had to manually remove the file from the list, otherwise *Admin Console* reported this as an error. Starting in this release, *Admin Console* will still report the error, but it will also remove the missing file from the startup list.

4.1.9 Preference Given to Local HTML Documentation over RTI Community Website

When you click on a QoS to see its API Reference HTML documentation, *Admin Console* will first try to find the file in your *Connex DDS* installation directory. If it is not found there, *Admin Console* will use the RTI Community website to show the information.

4.1.10 View for Connex DDS Secure Log Messages

A new view has been created to display the log messages from *RTI Connex DDS Secure*. These are only available when the distribution of log messages is enabled in the *RTI Connex DDS Secure* configuration properties.

4.1.11 Default Character Encoding for Strings Received in Data Visualization Now UTF-8

The default character encoding for strings received when visualizing Topics has been changed to UTF-8 (from ISO-8859-1). There is also a preference where this setting can be changed. There is just a single setting which is applied to all Topic data.

4.2 What's Fixed in 5.3.0

This section describes bugs fixed in 5.3.0. These fixes have been made since 5.2.3.

4.2.1 Occasionally Incorrect Discovery State after OS Sleep/Wake Cycle

Admin Console sometimes reported incorrect discovery state after the operating system was asleep and then awoken. This would most often manifest in the form of missing DataWriters or DataReaders. The problem did not happen consistently on each sleep/wake cycle and many cycles may have happened without observing the problem.

This problem has been resolved.

[RTI Issue ID ADMINCONSOLE-377]

4.2.2 Exported IDL not Directly Usable by Code Generator

The IDL exported from *Admin Console* was not directly usable by the code generator. Modules were missing and arrays had their dimensions specified ahead of the name rather than after. This problem has been resolved.

[RTI Issue ID ADMINCONSOLE-445]

4.2.3 Sample Inspector Showed Misleading Information

When clicking on the Instance column of a Sample Log view when the row was in the alive state but the corresponding DDS instance had since changed state to not alive, the Sample Inspector showed the status as not alive. This problem has been resolved.

[RTI Issue ID ADMINCONSOLE-490]

4.2.4 Admin Console Slow/Unresponsive on Large Systems

Admin Console may have become slow or unresponsive when used on a system containing a large number of processes. These are symptoms of *Admin Console's* increased CPU and memory consumption when used in large systems. A crash may have occurred if available memory was exhausted. Typically this was not a problem unless there were a few hundred processes or more. This problem has been resolved.

[RTI Issue ID ADMINCONSOLE-493]

4.2.5 **Replay Service State Sometimes Inaccurate**

The state of Replay Service instances in the system was not always accurately reflected by *Admin Console*. This problem has been resolved. Now the state is queried on a periodic basis so that it is more accurately reflected.

[RTI Issue ID ADMINCONSOLE-497]

4.2.6 **'Cleanup Period for Not Present Entities' Displayed Incorrectly**

In the Preferences->Administration panel, after setting the cleanup period to something larger than 100 and then reopening it, the display would never show a value greater than 100. This is in spite of the higher value actually being correctly set, and in use. This problem has been resolved.

[RTI Issue ID ADMINCONSOLE-511]

4.2.7 **Some Data Types Missing from Display**

Due to a logic issue (CORE-7987) in the DDS Java APIs, there were cases in which not all of the data types for a Topic were shown. This happened when the data types both had a base class but the base class for one was different than the other. These were mistakenly considered to be the same type even though they were actually different. This problem has been resolved.

[RTI Issue ID ADMINCONSOLE-516]

4.2.8 **Incorrect Host Name Displayed**

The host name was incorrectly displayed if the application used shared memory and non-standard transport identifiers (versions prior to 5.2 or which explicitly enabled backward-compatible transport IDs). This problem has been resolved.

[RTI Issue ID ADMINCONSOLE-530]

4.2.9 **Topics using Valuetype or Union could not be Subscribed to using XML Type File**

When subscribing to a Topic that used a valuetype or union, and that type information had to be specified through an XML file, *Admin Console* failed to recognize the data type. This problem has been resolved.

[RTI Issue ID ADMINCONSOLE-545]

5 **Known Issues**

5.1 **Preferences Dialog Shows Error Message**

The Preferences dialog will show an error message when viewing the preference for XML -> XML Files -> Editor:

```
"org.eclipse.wst.sse.ui.preferences.editor not found."
```

This error message has no affect on functionality and will be removed in a future release.

[RTI Issue ID ADMINCONSOLE-199]

5.2 **Limited to Single Instance of Admin Console on Mac OS X Platforms**

On Mac OS X platforms, only one instance of *Admin Console* can be run at a time. This limitation is not present on other platforms.

[RTI Issue ID ADMINCONSOLE-403]

5.3 Limited Support for Keyed, Unbounded Sequences

There is limited support when using a data type that contains a field that is an unbounded sequence and that field participates in the key. The limitation is that only a subset of the total possible (2,147,483,647) sequence elements can be used. This limitation protects against high memory and CPU consumption by the application.

The limited number of fields chosen to represent the key can be seen in the Topic Data tab and when selecting data instances for the Time Chart.

[RTI Issue ID ADMINCONSOLE-399]

5.4 Additional Library Needed on Fedora 12 64-bit Systems

On Fedora 12 64-bit systems, before starting *Admin Console*, follow these steps:

1. Login as super user
2. Enter this command:

```
yum install libsoup
```

5.5 Interaction between Admin Console and RTI Recording Console

This issue only applies if you are using *Admin Console* and *Recording Console* at the same time, and you have configured *Admin Console* to join domain ID 99. In this scenario, do not use *Admin Console* to pause or disable any *Recording Console* services (their names begin with "RTI-Recorder-" or "RTI-Replay-"). Doing so may cause an error in *Recording Console*.

[RTI Issue ID RECORD-253]

5.6 Admin Console Incompatible with RTI Routing Service Configurations that use DomainParticipant Name QoS

This issue only occurs when using *Admin Console 5.3* with *RTI Routing Service 5.2* or older.

Admin Console will not correctly display or administer instances of *RTI Routing Service* that have overridden the default DomainParticipant QoS participant_name. These names are used to identify the process as *RTI Routing Service*. You may see error messages in *Admin Console's* log such as:

```
expecting process model : RoutingService : corresponding to instance handle : {X} : to be a Routing Service instance when it is not
cannot add monitoring capabilities for the RoutingService since the model
was not found for instance handle : {X}
unable to find a DomainRoute named : {Domain Route name} : associated with
RoutingService : {Routing Service name}
unable to find a Session named : {Session name} : associated with Routing-
Service : {Routing Service name} : and DomainRoute : {Domain Route name}
unable to find an AutoRoute named : {Auto Route name} : associated with
RoutingService : {Routing Service name} : and DomainRoute : {Domain Route
name} : and Session : {Session name}
unable to find a Route named : {Route name} : associated with RoutingSer-
vice : {Routing Service name} : and DomainRoute : {Domain Route name} : and
Session : {Session name}
```

[RTI Issue ID ADMINCONSOLE-270]

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