

RTI Administration Console

Release Notes

Version 5.1.0



Your systems. Working as one.



© 2013 Real-Time Innovations, Inc.
All rights reserved.
Printed in U.S.A. First printing.
December 2013.

Trademarks

Real-Time Innovations, RTI, DataBus, and Connexx are trademarks or registered trademarks of Real-Time Innovations, Inc. All other trademarks used in this document are the property of 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

Website: <https://support.rti.com/>

Release Notes

1 Supported Platforms

Table 1.0 lists the platforms available with *Administration Console* 5.1.0.

Table 1.0 **Supported Platforms**

Platform	Operating System
Linux	CentOS 5.4, 5.5, 6.0, 6.2 - 6.4 Fedora 12 (2.6.32 kernel) Red Hat® Enterprise Linux 5.0 - 5.2, 5.4, 5.5, 6.0 - 6.4 Ubuntu® Server 12.04 LTS (3.x kernel)
Windows®	Windows 7 (32-bit and 64-bit Editions) Windows 8 (32-bit and 64-bit Editions) Windows Server 2003 (32-bit and 64-bit Editions) Windows Server 2008 R2 (64-bit Edition) Windows Server 2012 R2 (64-bit Edition) Windows Vista® (32-bit and 64-bit Editions) Windows XP Professional SP 2(32-bit and 64-bit Editions)

2 Compatibility

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

- ☐ RTI Distributed Logger
- ☐ RTI Persistence Service
- ☐ RTI Real-Time Connect
- ☐ RTI Recording Service (including its *Replay* and *Record* tools)
- ☐ RTI Routing Service

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

3 What's New in 5.1.0

3.1 New Platforms

This release adds support for the following platforms:

- ❑ CentOS and Red Hat Enterprise Linux 6.2 - 6.4
- ❑ Ubuntu Server 12.04 LTS (3.x kernel)
- ❑ Windows 8 (32-bit and 64-bit Editions)
- ❑ Windows Server 2012 R2 (64-bit Edition)

3.2 New Behavior for Configuration File Refresh Button

In the previous release, if you selected a configuration file to load and then clicked on the refresh button, nothing would happen. In this release, clicking on the refresh button in this scenario will reload the current file, potentially prompting for permission to discard any changes (if applicable).

3.3 New Location for Configuration Controls

The controls for the open configuration (save, refresh, send to service) used to be on the main toolbar. To make it easier to use these controls, now they are located directly inside the configuration editor tab along with the configuration itself.

3.4 Admin Console's QoS Information Now Available

The QoS settings used internally by *Admin Console* are now available as an example XML file, `<Admin Console install directory>/example/QoS/admin_console_example_profiles.xml`. This file can be copied, modified, and then added to the available QoS files in *Admin Console* in order to customize the behavior of the product. Care must be taken to not affect correctness when modifying this file, as many QoS specified in this file are not intended to be modified.

3.5 Stream Names now Displayed for Route's Tooltips in Routing Service View

The input and output stream names have been added to the tooltip display for Routes when looking at the Routing Service view.

3.6 Changes to Service Controls

The service editors and controls have been changed to better reflect the state of the service and provide better use of available UI real estate. This affects the Routing Service Editor, Persistence Service Editor, Recording Service Editor, and Replay Service Editor.

Among other improvements:

- ❑ The pause button is now disabled when the service is disabled.

- ❑ The configuration link (now a button) does not appear for services that do not support remote configuration.

3.7 Improvements to Controls for Service Log Table and Remote Logger Settings

- ❑ The service log table has been revised to better address situations in which distributed logging is not available.
- ❑ The remote-logger settings panel has been revised to provide better guidance and organization.

3.8 Routing Service Performance Data Now Displays Aggregated Information

The input and output samples and bytes data for *Routing Service* entities Domain Route, Session, and Auto Route now show data that is the aggregate of their logical children instead of the average.

3.9 Routing Service Latency Adjustments

The latency displayed for *Routing Service* entities has been adjusted through a new algorithm to be more meaningful. Previously, the latency displayed was the information reported directly from *Routing Service*. However, that latency information contains a flaw. When a route has had no samples go through it during the reporting period, the latency was considered to be zero. This was averaged into the aggregate latency and had the effect of bringing down the average artificially.

The display now shows the total latency divided by the number of samples output during that period. This is a more meaningful way to track the latency data.

4 What's Fixed in 5.1.0

4.1 Changes to User-Interface Theme did not Take Full Effect Until a Restart

You can change the user-interface color theme by going to the settings panel and selecting **General, Appearance** in the tree on the left and then selecting a new theme in the resulting panel.

In the previous release, following this process only resulted in a partial affect until the application was restarted. In this release, changing the theme as described above will have an immediate and complete affect, without needing to restart *Admin Console*.

[RTI Issue ID ADMINCONSOLE-63]

4.2 Tooltip for DomainRoute Showed Incorrect Information

The tooltip shown when hovering over a DomainRoute in the Routing Service view showed connection 1 information twice rather than showing information for connections 1 and 2. This problem has been resolved.

[RTI Issue ID ADMINCONSOLE-94]

4.3 Inaccurate State Displayed if Distributed Logger Disabled at Run Time

The Distributed Logger state information displayed in the 'Log' tab showed inaccurate values when it was disabled at run time.

[RTI Issue ID ADMINCONSOLE-95]

4.4 Welcome Screen Sometimes Blank

The Welcome screen sometimes appeared blank. This was due to the system missing support for an internal web browser. In this release, if an internal web browser is not supported, the Welcome screen will close and you will see a dialog explaining the situation.

[RTI Issue ID ADMINCONSOLE-103]

4.5 Warning Messages in Console Log

The Console Log window showed many warnings even during a normal startup. This problem has been resolved.

[RTI Issue ID ADMINCONSOLE-177]

5 Known Issues

5.1 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
```

5.2 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]

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

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}
```

[RTI Issue ID ADMINCONSOLE-270]

```
unable to find a Route named : {Route name} : associated with RoutingSer-
vice : {Routing Service name} : and DomainRoute : {Domain Route name} : and
Session : {Session name}
```

6 Third-Party Licenses

Portions of *RTI Administration Console* were developed using:

- ❑ Visualization Widget from Eclipse's Nebula project (<http://www.eclipse.org/nebula/widgets/visualization/visualization.php>), licensed under the Eclipse Public License.
- ❑ Apache Commons Lang from the Apache Software Foundation (<http://commons.apache.org/lang/>)
- ❑ Apache Commons Logging from the Apache Software Foundation (<http://commons.apache.org/logging/>)
- ❑ Apache Log4j from the Apache Software Foundation (<http://logging.apache.org/log4j/1.2/index.html>) Brief description: Logging API
- ❑ GlazedLists from (<http://www.glazedlists.com/>), licensed under the terms of GNU Lesser General Public License (LGPL)
- ❑ SWFObject from (<http://code.google.com/p/swfobject/>), licensed under the MIT License (MIT)
- ❑ Apache Software License: <http://www.apache.org/licenses/>

6.1 Apache License

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 responsibility, 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