RTI Launcher

Release Notes

Version 6.0.0



© 2019 Real-Time Innovations, Inc.
All rights reserved.
Printed in U.S.A. First printing.
February 2019.

Trademarks

Real-Time Innovations, RTI, NDDS, RTI Data Distribution Service, Connext, 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.

This is an independent publication and is neither affiliated with, nor authorized, sponsored, or approved by, Microsoft Corporation.

The security features of this product include software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/).

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/

Contents

Chapter 1 Supported Platforms	1
Chapter 2 Compatibility	
Chapter 3 What's New in 6.0.0	_
3.1 New platforms	3
3.2 New buttons in Utilities Tab to open terminal window for Connext DDS Micro and Connext DDS Professional	3
3.3 Launcher runs a Service if there is at least one valid configuration	4
3.4 Splash screen	4
3.5 Improved validation process for each Launcher dialog	4
3.6 Support for new Recording Service in Launcher	4
3.7 Modified command confirmation dialog to allow adding new options to execution	4
3.8 Updated how Launcher creates and configures tabs	5
3.9 New option in Code Generator dialog to generate code for Connext DDS Micro	5
3.10 Updated Code Generator dialog with removed options	6
3.11 Added button, Copy Micro SDK, to Utilities tab	6
3.12 Removed databases from Database Integration Service dialog	6
Chapter 4 What's Fixed in 6.0.0	
4.1 Increased size of log font on Mac	7
4.2 Text fields' background color did not change while it had focus — OS X systems only	7
4.3 Launcher did not appear correctly on high resolution screens	7
4.4 Launcher opened a second command window when running a service or utility	8
4.5 GDK warnings when opening dialogs on some Linux platforms	8
4.6 Color of QoS File field in DDS Ping and Spy dialogs did not match validation status	8
4.7 Launcher showed invalid version number for Code Generator	8
4.8 Launcher crashed if an icon was missing	8
4.9 Product Filter field was case-sensitive	8

4.10 Missing online documentation for Queuing Service, Database Integration, and Spreadsheet Add-in	
4.11 Invalid working directory in Type Convert and Record Convert	
4.12 Launcher failed to start Persistence Service if application name had spaces and last character was ba	
4.13 Launcher failed to use a license copied to the home directory if there was a license in the installation ectory	
4.14 Unable to resize Launcher's main window after collapsing Log view	
4.15 Launcher failed to install an RTI Package from a location with spaces on Linux®	
4.16 Launcher failed to exit upon system shutdown on Mac	
4.17 Launcher overwrote content of PATH when starting execution shell	
4.18 Missing drag and drop support in some file fields in Launcher	
4.19 Cursor rollover issues with buttons in Launcher	
4.20 Possible crash first time Launcher started on Mac OS X 10.11 (El Capitan) system	
4.21 Launcher copied and renamed file before checking if it was valid license file	
4.22 Launcher failed to show user configurations in Prototyper dialog when using old <pre><pre>participant_libra</pre></pre>	ry> tag
4.23 Launcher failed to start any application from command line in KDE	
4.24 Crash after closing Launcher while RTI Package Installer dialog open	
4.25 Cloud Discovery Service did not start after opening Advanced dialog	
4.26 Error in Cloud Discovery Service if transport field empty	
4.27 Queuing Service Debug wasn't shown as one of the Installed Products	
4.28 Incorrect input values for Deadline and Time-based Filter fields in Ping and Spy Advanced Options	
4.29 Finder window opened by Launcher did not have complete navigability—Mac OS X systems only	
4.30 Spreadsheet Add-in for Microsoft® Excel® wasn't shown as one of the Installed Products	
4.31 Spy advanced options were active even when not valid	
4.32 Advanced dialog remained open after closing the Code Generator, DDS Ping, DDS Spy, Web Integration, and Cloud Discovery Service dialogs	
4.33 No error message when choosing expired or invalid license	
4.34 Missing required option to specify pre-processor options in the Code Generator dialog	
4.35 Launcher froze if Code Generator dialog failed to get list of available platforms	
4.36 Configuration list in service dialog not updated when reloading configuration file	
4.37 Launcher didn't update version of installed products until Launcher restarted	
4.38 Launcher failed to open any online link on certain Linux platforms	
Chapter 5 Known Issues	
5.1 Error when Updating GTK2 Libraries on Linux Platforms	
5.2 Command History Window cannot be Resized on Red Hat Enterprise Linux 7.0 Platforms	
5.3 GLib warnings when opening dialogs	
5.4 Launcher not Scaled Properly for Intermediate Factors on High-DPI Displays in Windows	

Chapter 1 Supported Platforms

RTI® Launcher is supported on the platforms listed in Table 1.1 Supported Platforms.

No custom target platforms are supported.

Table 1.1 Supported Platforms

Platforms	Description
Linux®	All platforms on x86/x64 CPUs listed in the RTI Connext DDS Core Libraries Release Notes for the same version number, except not supported on SUSE Linux Enterprise Server 11, not supported on Wind River® Linux platforms. Not supported on ARM® CPUs.
OS X®	All OS X platforms listed in the RTI Connext DDS Core Libraries Release Notes for the same version number.
Windows®	All Windows platforms in the RTI Connext DDS Core Libraries Release Notes for the same version number.

For more information, see the RTI Connext DDS Core Libraries Platform Notes.

Chapter 2 Compatibility

For backward compatibility information between 6.0.0 and previous releases, see the *Migration Guide* on the RTI Community Portal (https://community.rti.com/documentation).

Launcher has been tested with Oracle JRE version 8, which is included in the installation package. No other versions of Java are supported.

To run *Launcher* in Linux, *Launcher* requires at least GTK+ 2 version 2.24.0 and its dependencies. As a result, *Launcher* might not be able to run in some operating systems, such as SuSE 11 SP2 (which has an older version of GTK+ 2).

Chapter 3 What's New in 6.0.0

This section highlights new platforms and improvements in 6.0.0. These enhancements have been made since 5.3.1 was released.

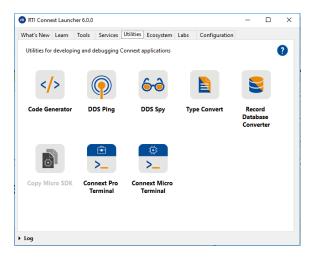
3.1 New platforms

This release adds support for these platforms:

- SUSE Linux Enterprise Server 12 (x64Linux2.6gcc4.3.4)
- Ubuntu 18.04 LTS (x64Linux4gcc7.3.0)

3.2 New buttons in Utilities Tab to open terminal window for Connext DDS Micro and Connext DDS Professional

There are two new buttons in the Utilities tab to open a terminal window for configuring the environment variables necessary for building *Connext DDS Micro* and *Connext DDS Professional*.



3.3 Launcher runs a Service if there is at least one valid configuration

Previously, the default behavior in *Launcher* was to allow running a Service only if all the configuration files were valid. This behavior has changed; now *Launcher* allows running a Service if there is at least one valid configuration.

3.4 Splash screen

Launcher will now show a splash screen on start-up while it is loading its resources.

3.5 Improved validation process for each Launcher dialog

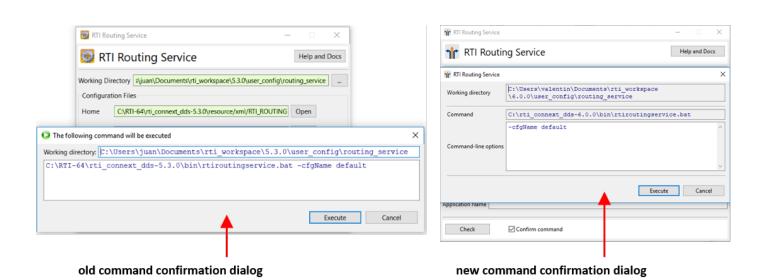
For each dialog (such as the Code Generator dialog), *Launcher* now validates each input a second time when you click the Run button. (Previously for example, if you had kept *Launcher* open and deleted a file that was already selected in the Input file field, the file path was still shown as valid even though the file had been deleted and even when you closed and reopened the dialog.) Now if the dialog has invalid entries, the Run button will be disabled and the command will not be executed. Additionally, the input field will highlight in red with a message showing that the input is not valid (for example, that the file is not present).

3.6 Support for new Recording Service in Launcher

- Launcher now calls the new Recording Service when using the Recording and Replay Services, and the Record Database Converter utility.
- Launcher has added new advance options for Recording Service and Replay Service.
- Record Convert has been renamed Record Database Converter and only accepts XML files to convert the databases that are generated by Recording Service.

3.7 Modified command confirmation dialog to allow adding new options to execution

The command confirmation dialog has been modified to allow adding more options to the execution. To make this process easier, the dialog's design has also changed: now the Command and its Options are separated. (See information about the "Confirm command" checkbox in the *RTI Launcher User's Manual*.)



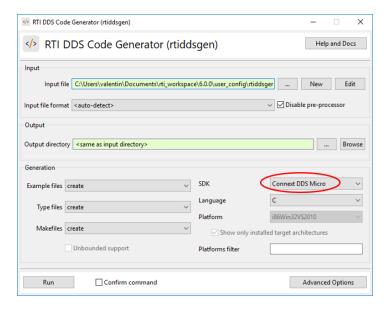
3.8 Updated how Launcher creates and configures tabs

Tabs in the *Launcher* graphical user interface (GUI) are not defined inside an XML file. Instead, each tab is defined by a folder inside the panels directory located in <NDDSHOME>/resource/app/app_sup-port/launcher/panels. (The labs and the user tabs are located in rti_workspace/6.0.0/user_config/launcher/panels.) Inside each tab folder, there is an XML file for each button and a configuration file, which specifies the order of the buttons and adds a description to the tab.

Because of this change, *Launcher* is not compatible with older XML files. For further details, see the *Migration Guide* on the RTI Community Portal (https://community.rti.com/documentation) or check "Configuring Launcher" in the *RTI Launcher User's Manual*.

3.9 New option in Code Generator dialog to generate code for Connext DDS Micro

There is a new option in the Code Generator dialog to generate code for *Connext DDS Micro*. When using this option, the Code Generator dialog is updated to disable elements that are not supported when generating code for *Connext DDS Micro*.



3.10 Updated Code Generator dialog with removed options

Since *Code Generator* no longer supports the **-notypecode** option, the "Generate typecode" check box has been removed from the Code Generator dialog.

The "Use C++ STL types" check box has also been removed from the Code Generator dialog. It has been replaced with a "Use legacy C++03/11 plugin" check box in the advanced options for Code Generator.

For more information on these changes in *Code Generator*, see "What's New" in the Code Generator Release Notes.

3.11 Added button, Copy Micro SDK, to Utilities tab

There is a new button, **Copy Micro SDK**, in the Utilities Tab. This button copies the *Connext DDS Micro SDK* (source code + code generator) to a specified directory.

3.12 Removed databases from Database Integration Service dialog

The following databases have been removed from the *RTI Database Integration Service* dialog, since they are no longer supported:

- Oracle® TimesTen
- Oracle Database

Chapter 4 What's Fixed in 6.0.0

This section describes bugs fixed in 6.0.0. These fixes have been made since 5.3.1 was released.

4.1 Increased size of log font on Mac

The size of the Log font has been increased on Mac computers, because it was smaller than the fonts used on other operating systems.

[RTI Issue ID LAUNCHER-67]

4.2 Text fields' background color did not change while it had focus – OS X systems only

On OS X Systems, the background color of any text field did not change while it had the focus (while the cursor bar was in the text field). For example, the background color should have changed to red in a field specifying an invalid license file. This problem has been resolved; now the background color will change properly while the text field has the focus.

Installation Directory

C:\Program Files\rti_connext_dds-6.0.0

[RTI Issue ID LAUNCHER-122]

4.3 Launcher did not appear correctly on high resolution screens

Launcher's labels, windows, and text did not show up correctly on monitors with a very high resolution (> 96 dpi). This problem has been resolved.

[RTI Issue ID LAUNCHER-128]

4.4 Launcher opened a second command window when running a service or utility

Running a service or utility from *Launcher* opened a second command window in the background. This command window remained open until you closed *Launcher*. This problem has been resolved.

[RTI Issue ID LAUNCHER-164]

4.5 GDK warnings when opening dialogs on some Linux platforms

On certain Linux platforms, Launcher issued the following warning when opening a dialog:

```
Gdk-WARNING **: gdk window set icon list: icons too large
```

This problem has been resolved.

[RTI Issue ID LAUNCHER-165]

4.6 Color of QoS File field in DDS Ping and Spy dialogs did not match validation status

Modifying the value of the QoS File field in the DDS Ping or DDS Spy dialogs to an invalid one, such as a path that does not exist, did not change the background color of that field. This problem has been resolved.

[RTI Issue ID LAUNCHER-169]

4.7 Launcher showed invalid version number for Code Generator

Launcher showed an invalid version number for Code Generator. This problem has been resolved; now Launcher shows the correction version number.

[RTI Issue ID LAUNCHER-178]

4.8 Launcher crashed if an icon was missing

Launcher crashed if an icon was missing from the GUI while Launcher was running. This problem has been resolved.

[RTI Issue ID LAUNCHER-179]

4.9 Product Filter field was case-sensitive

Unlike previous versions of *Launcher*, the Installed Products "Filter" field in the Installation tab (now the Configuration tab) is now case-insensitive.

[RTI Issue ID LAUNCHER-185]

4.10 Missing online documentation for Queuing Service, Database Integration, and Spreadsheet Add-in

This release adds links to the online documentation for Queuing Service, Database Integration, and Spreadsheet Add-in for Microsoft Excel that were previously missing in *Launcher*.

[RTI Issue ID LAUNCHER-188]

4.11 Invalid working directory in Type Convert and Record Convert

The working directory in which Type Convert and Record Convert were run was not the correct one. This problem has been resolved. Type Convert and Record Convert now use the input or output directory as their working directory.

[RTI Issue ID LAUNCHER-190]

4.12 Launcher failed to start Persistence Service if application name had spaces and last character was backslash

If the Application Name field in the Persistence Service tab contained spaces and its last character was a backslash, *Launcher* failed to start *Persistence Service*. This problem has been resolved.

[RTI Issue ID LAUNCHER-219]

4.13 Launcher failed to use a license copied to the home directory if there was a license in the installation directory

Launcher failed to use a license copied to the home directory if there was a license in the installation directory. This problem has been resolved. Now Launcher chooses the correct license (in this case, the one in the home directory).

[RTI Issue ID LAUNCHER-227]

4.14 Unable to resize Launcher's main window after collapsing Log view

After the Log view in the Installation tab (now the Configuration tab) was opened and collapsed, you could no longer resize *Launcher's* main window to a smaller size. This problem has been resolved.

[RTI Issue ID LAUNCHER-229]

4.15 Launcher failed to install an RTI Package from a location with spaces on Linux®

Launcher failed to install an RTI Package from a location with spaces on Linux. This problem has been resolved.

[RTI Issue ID LAUNCHER-230]

4.16 Launcher failed to exit upon system shutdown on Mac

Launcher failed to exit upon a system shutdown on the Mac. This problem has been resolved.

[RTI Issue ID LAUNCHER-235]

4.17 Launcher overwrote content of PATH when starting execution shell

When *Launcher* started an execution shell on a Windows, Linux, or Mac system, it overwrote the PATH instead of appending the new content at the end. This problem has been resolved.

[RTI Issue ID LAUNCHER-237]

4.18 Missing drag and drop support in some file fields in Launcher

The following file fields in Launcher did not support drag and drop:

- "Output directory" field in the Code Generator dialog.
- "Pre-processor executable" field in the Code Generator advanced options dialog.
- Access Log File, SSL Certificate, and Access Control List fields in the *Web Integration Service* advanced options dialog.

This problem has been resolved.

[RTI Issue ID LAUNCHER-238]

4.19 Cursor rollover issues with buttons in Launcher

When you moved the cursor over a button in *Launcher*, space highlighted around it that wasn't clickable. Now, a button is clickable only when the cursor is inside the icon. Also, the tooltip window lingered longer than intended after the cursor moved outside of a button in *Launcher*. These problems have been resolved.

[RTI Issue ID LAUNCHER-239]

4.20 Possible crash first time Launcher started on Mac OS X 10.11 (El Capitan) system

Launcher may have crashed when launching Recording Service on a Mac OS X 10.11 system. This may have happened if you had never opened any other RTI application from Launcher (that is, Recording Service was the first application to be run from Launcher). This issue has been resolved.

[RTI Issue ID LAUNCHER-249]

4.21 Launcher copied and renamed file before checking if it was valid license file

If you selected one of the two copy options given by *Launcher* after choosing a license file, *Launcher* would copy that file to your chosen location and rename it to rti_license.dat before checking if it was a valid license file. This problem has been resolved.

[RTI Issue ID LAUNCHER-258]

4.22 Launcher failed to show user configurations in Prototyper dialog when using old <participant_library> tag

The name of the *Prototyper* top-level configuration tag was changed in release 5.3 to **domain_participant_library**, to be compliant with the DDS-WEB OMG standard. *Prototyper* 5.3 still allowed the old **participant_library** tag to be specified; however, the Prototyper dialog in *Launcher* could only load configurations containing the new tag. This problem has been resolved. The Prototyper dialog in *Launcher* will now accept either the old or new tag.

[RTI Issue ID LAUNCHER-267]

4.23 Launcher failed to start any application from command line in KDE

Starting any application from *Launcher* did not work if the only terminal on your operating system was konsole. This problem has been resolved; *Launcher* now supports the following terminals: gnome-terminal, xterm, and konsole.

[RTI Issue ID LAUNCHER-282]

4.24 Crash after closing Launcher while RTI Package Installer dialog open

Closing *Launcher* while the RTI Package Installer dialog was still open triggered *Launcher* to install a package. Since *Launcher* had already been closed, this caused a crash. This problem has been resolved.

[RTI Issue ID LAUNCHER-285]

4.25 Cloud Discovery Service did not start after opening Advanced dialog

Cloud Discovery Service did not start from Launcher after opening the Advanced dialog because of a syntax error. This problem has been resolved.

[RTI Issue ID LAUNCHER-286]

4.26 Error in Cloud Discovery Service if transport field empty

Starting *Cloud Discovery Service* from *Launcher* caused a required argument error if you set the Transport field to empty. This problem has been resolved.

[RTI Issue ID LAUNCHER-287]

4.27 Queuing Service Debug wasn't shown as one of the Installed Products

Queuing Service Debug wasn't shown as one of the Installed Products in the Installation tab (now the Configuration tab). The following error was displayed in the Log: "Product(s) not found for XML tag: queuing service debug". This problem has been resolved.

[RTI Issue ID LAUNCHER-289]

4.28 Incorrect input values for Deadline and Time-based Filter fields in Ping and Spy Advanced Options

Deadline and Time-based Filter fields in DDS Ping's and DDS Spy's Advanced Options accepted only integer values. Now they also accept floating values.

[RTI Issue IDs LAUNCHER-290 and LAUNCHER-291]

4.29 Finder window opened by Launcher did not have complete navigability—Mac OS X systems only

On Mac OS X systems, the Finder window opened by *Launcher* did not behave as expected. Some of the elements, such as Favorites, or selecting any folder, had no effect. This problem has been resolved.

[RTI Issue ID LAUNCHER-304]

4.30 Spreadsheet Add-in for Microsoft® Excel® wasn't shown as one of the Installed Products

Spreadsheet Add-in for Microsoft Excel wasn't shown as one of the Installed Products in the Installation tab (now the Configuration tab). The following error was displayed in the Log view: "Product(s) not found for XML tag: spreadsheet addin". This problem has been resolved.

[RTI Issue ID LAUNCHER-305]

4.31 Spy advanced options were active even when not valid

Several fields inside DDS Spy's advanced options were always active, even though they are valid options only when DDS Spy is configured in Subscribe mode. These fields were Deadline, Time-based Filter, Timeout, Subscribe using multicast, and Multicast address. This issue has been resolved.

[RTI Issue ID LAUNCHER-306]

4.32 Advanced dialog remained open after closing the Code Generator, DDS Ping, DDS Spy, Web Integration Service, and Cloud Discovery Service dialogs

The advanced options dialog remained open after closing the Code Generator, DDS Ping, DDS Spy, Web Integration Service, or Cloud Discovery Service dialogs. This problem has been resolved.

[RTI Issue ID LAUNCHER-309]

4.33 No error message when choosing expired or invalid license

Launcher did not show an error message when choosing an expired or invalid license in the Installation tab (now the Configuration tab). This problem has been resolved.

[RTI Issue ID LAUNCHER-322]

4.34 Missing required option to specify pre-processor options in the Code Generator dialog

The Code Generator dialog's Advanced Options now include a "Pre-processor options" field for specifying multiple pre-processor options, to match the **-ppOption** command-line argument. This option is required by *Code Generator* when specifying a pre-processor.

[RTI Issue ID LAUNCHER-329]

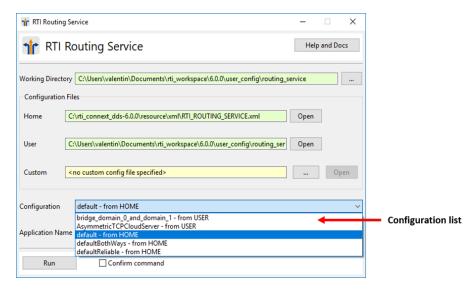
4.35 Launcher froze if Code Generator dialog failed to get list of available platforms

Launcher froze and had to be forcefully terminated when the Code Generator dialog failed to get the list of available platforms. This problem has been resolved.

[RTI Issue ID LAUNCHER-338]

4.36 Configuration list in service dialog not updated when reloading configuration file

The Configuration list in any service dialog was not properly updated when loading the same configuration file, if this file contained any change (that is, if you changed the configuration name in the file without exiting the GUI and attempted to load it again). This problem has been resolved.



[RTI Issue ID LAUNCHER-357]

4.37 Launcher didn't update version of installed products until Launcher restarted

Launcher didn't update the version of an installed product until Launcher was restarted. This problem has been resolved. Now Launcher updates the correct version of a product if it has been updated.

[RTI Issue ID LAUNCHER-365]

4.38 Launcher failed to open any online link on certain Linux platforms

On certain Linux platforms, *Launcher* failed to open any online link. For example, online documentation produced the following error:

The BROWSE action is not supported on the current platform

This issue has been resolved.

[RTI Issue ID LAUNCHER-370]

Chapter 5 Known Issues

5.1 Error when Updating GTK2 Libraries on Linux Platforms

If you update the GTK2 libraries on a Linux system and click on the textbox, *Launcher* will crash and show this error:

```
java: cairo-misc.c:380: _cairo_operator_bounded_by_source: Assertion `NOT_REACHED'
failed.
./rti_connext_dds-5.2.0/bin/rtilauncher: line 48: 17317 Aborted (core dumped)
"$JREHOME/bin/java" -jar "$rti_launcher.jar"
```

To resolve this problem, modify the *Launcher* script (<**NDDSHOME**>/bin/rtilauncher). Add the following to the java call in the rtilauncher script:

```
-Dorg.eclipse.swt.internal.gtk.cairoGraphics=false
```

When you are done, it should look like this:

```
"$JREHOME/bin/java" -Dorg.eclipse.swt.internal.gtk.cairoGraphics=false -jar "$rti_ launcher_jar"
```

[RTI Issue ID LAUNCHER-151]

5.2 Command History Window cannot be Resized on Red Hat Enterprise Linux 7.0 Platforms

The command history window cannot be resized on Red Hat Enterprise Linux 7.0 platforms.

[RTI Issue ID LAUNCHER-162]

5.3 GLib warnings when opening dialogs

On certain Linux platforms, you may see the following warning when opening a dialog:

```
(RTI Launcher:2680): GLib-CRITICAL **: .... Source ID 1968 was not found when attempting to remove it
```

This warning is harmless. It happens because **g_source_remove()** is called to disconnect a source that was already disconnected. (*Launcher* doesn't call that function, but does call some of its dependent libraries.)

[RTI Issue ID LAUNCHER-382]

5.4 Launcher not Scaled Properly for Intermediate Factors on High-DPI Displays in Windows

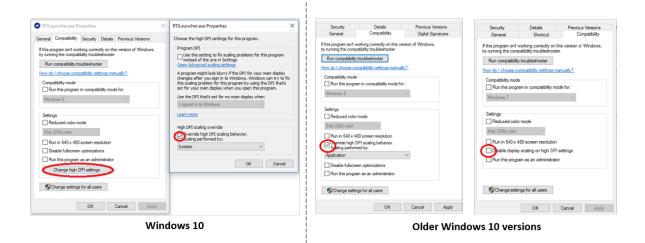
SWT (the library used to build *Launcher*) automatically scales images on high-DPI monitors based on the resolution of the monitor; however, this scaling works only with integer scaling factors (100%, 200%, etc.) by default. Therefore, *Launcher* is not scaled properly when using intermediate scaling factors (125%, 150%, etc.) on high-DPI displays in Windows.

The workaround is to change the scaling behavior from **Application** to **System**. In Windows 10:

- 1. Right click the RTILauncher.exe executable and select Properties.
- 2. Navigate to the Compatibility tab and choose the "Change high DPI settings" button.
- 3. Select the "Override high DPI scaling behavior" check box and change **Application** to **System** in the drop-down menu.

Note: The "Override high DPI scaling behavior" is located in different places in older Windows 10 versions:

- The "Override high DPI scaling behavior" check box may be located in the Compatibility tab.
- The check box may be called "Disable display scaling on high DPI settings" located in the Compatibility tab.



[RTI Issue ID LAUNCHER-387]