RTI Launcher

Release Notes

Version 6.1.1 for Connext Drive
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The security features of this product include software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/). This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

Notice
Any deprecations noted in this document serve as notice under the Real-Time Innovations, Inc. Maintenance Policy #4220.

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Chapter 1 Supported Platforms

*RTI® Launcher* is supported on the platforms listed in Table 1.1 Supported Platforms. For more information, see the *RTI Connext DDS Core Libraries Platform Notes*.

**Note:** POSIX®-compliant architectures that end with "FACE_GP" are not supported. Custom target platforms are not supported.

### Table 1.1 Supported Platforms

<table>
<thead>
<tr>
<th>Platforms</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linux®</td>
<td>All Linux platforms on Intel x64 CPUs listed in the <em>RTI Connext DDS Core Libraries Release Notes</em> for the same version number, except Red Hat® Enterprise Linux 6.x and CentOS™ 6.x.</td>
</tr>
<tr>
<td>macOS®</td>
<td>All macOS platforms on Intel x64 CPUs listed in the <em>RTI Connext DDS Core Libraries Release Notes</em> for the same version number.</td>
</tr>
<tr>
<td>Windows®</td>
<td>All Windows platforms listed in the <em>RTI Connext DDS Core Libraries Release Notes</em> for the same version number.</td>
</tr>
</tbody>
</table>
Chapter 2 Compatibility

For backward compatibility information between 6.1.1 and previous releases, see the Migration Guide on the RTI Community Portal (https://community.rti.com/documentation).

Launcher has been tested with OpenJDK JDK 11, which is included in the installation package.

To run Launcher on a Linux platform: Launcher requires at least GTK™ 3 version 3.20.0 and its dependencies.
Chapter 3 What's New in 6.1.1

3.1 Improved Dialogs for Services and Utilities

The following Advanced Options dialogs have been updated to add several options that were missing:

- **Cloud Discovery Service**
  - Application name (-appName)
  - Log format (-logFormat)
  - Remote Administration Domain ID (-remoteAdministrationDomainID)
  - Remote Monitoring Domain ID (-remoteMonitoringDomainId)

- **Code Generator**
  - Constructor (-constructor)
  - Strict XType specification compliant checks (-strict)
  - Virtual destructor (-virtualDestructor)

- **Persistence Service**
  - Identify execution appending the host name and process ID to the application name (-identifyExecution)
  - Restore its state from the persistence storage (-restore)
  - Disable the service at startup (-noAutoStart)
  - The info directory of the running persistence service (-infoDir)
  - Service thread stack size (-serviceThreadStackSize)
  - Enable database locking (-enableDatabaseLocking)
  - Refresh database lock period (-databaseLockRefreshPeriod)
• *Queueing Service*
  • The directory for persistence storage (-persistenceStoragePath)
  • The file prefix for persistent storage (-persistenceFilePrefix)
  • Define a user variable (-D)

• *Recording Service*
  • Define a user variable (-D)

• *Record Database Converter*
  • Verbosity (-verbosity)

• *Replay Service*
  • Define a user variable (-D)
  • Enable debug mode (-debugMode)

• *Routing Service*
  • Define a user variable (-D)
  • Identify execution appending the host name and process ID to the application name (-identifyExecution)
  • Redirect logging to a specific file (-logFile)
  • Disable the service at startup (-noAutoEnable)
  • Specify a directory where plugin libraries are located (-pluginSearchPath)

• *Web Integration Service*
  • Verbosity (-verbosity)

### 3.2 Third-Party Software Upgrades

The following third-party software used by *Launcher* has been upgraded:

<table>
<thead>
<tr>
<th>Third-Party Software</th>
<th>Previous Version</th>
<th>Current Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>AdoptOpenJDK® JRE</td>
<td>11.0.7</td>
<td>11.0.13</td>
</tr>
<tr>
<td>Apache® Commons IO™</td>
<td>2.4</td>
<td>2.11</td>
</tr>
</tbody>
</table>
For information on third-party software used by Connext DDS products, see the "3rdPartySoftware" documents in your installation: `<NDDSHOME>/doc/manuals/connext_dds_professional/release_notes_3rdparty`.

### 3.3 Enhancements for Connext Drive

#### 3.3.1 Launcher will automatically update to reflect changes from installed RTI Packages

Previously, if an "RTI Package" (*.rtipkg) introduced or removed a Button or Tab in Launcher, Launcher needed to be restarted in order to visualize the change. Starting from this release, Launcher will automatically update its content if a change is detected at runtime.

#### 3.3.2 New configuration options for Launcher Tabs

The configuration file has been updated to allow you to:

- Specify the position of a Tab in Launcher;
- Specify which Tab is selected by default by Launcher (if the License File has been set);
- Split a tab into two sub-panels.

For more information about these new configurations, see Section 3.1.1 Configuration file of the RTI Launcher User's Manual.
Chapter 4 What's Fixed in 6.1.1

4.1 Cursor Continued to Spin after Installing any RTI Package

The cursor continued to spin after installing any RTI package (.rtipkg file). This problem has been resolved, now the cursor stops spinning after installing an RTI package.

[RTI Issue ID LAUNCHER-506]

4.2 Invalid Arguments after Removing Custom Configuration File from a Services Dialog

In any of the Service dialogs, if you selected a Custom configuration file and later removed it from that text field, this caused Launcher to create an invalid argument in the command to start the Service.

Launcher didn't update the Configuration drop-down menu when the Custom configuration file was removed. So it was possible to select configurations from the removed Custom configuration file. Then the Service failed because the startup command created by Launcher was not correct. For example:

```
-cfgName custom_bridge_domain_0_and_domain_1 -cfgFile "<no custom config file specified>"
```

This problem has been resolved.

[RTI Issue ID LAUNCHER-521]

4.3 Possible Crash in Launcher when Running on macOS Systems

Due to a missing dependency, Launcher may have crashed when running on a macOS system. This issue has been resolved.

[RTI Issue ID LAUNCHER-551]
4.4 Advanced Options Dialogs Stayed Open after Main Dialog Closed

The Advanced Options dialog remained open after closing the main dialog on Linux and macOS systems. This problem has been resolved.

[RTI Issue ID LAUNCHER-537]

4.5 Fields in Advanced Options Dialogs for Services Allowed '-1'

Several fields in the Advanced Options dialog for Services mistakenly allowed -1 as a valid value, such as:

- Number of Threads, in Routing Service, Recording Service, and Replay Service
- Keep Alive, in Web Integration Service
- Stop after, in Cloud Discovery Service

This problem has been resolved. The value -1 is no longer allowed in these fields.

[RTI Issue ID LAUNCHER-542]

4.6 Issues in Cloud Discovery Service Dialog

The following issues have been fixed in the Cloud Discovery Service dialog:

- Typing `<default>` in the Transport field disabled the Run and Check buttons.
- The Allow domain(s) and Deny domain(s) fields in the Advanced Options menu didn't check whether or not the value exceeded the maximum domain ID range.

[RTI Issue ID LAUNCHER-523]

4.7 Issues in Code Generator Dialog

The following issues have been fixed in the Code Generator dialog's Advanced Options:

- The Run and Check buttons were disabled if any of the Unbounded size fields were set to an invalid value, even if Unbounded support was enabled.
- The Include directories field was not checked to make sure the entry was a valid directory.
- Typing `<system default>` in the Pre-processor executable field enabled the Pre-processor options fields, which should only be enabled when not using `<system default>`.

[RTI Issue ID LAUNCHER-532]
4.8 Data Type Convert Dialog Allowed Input and Output Files to have Same Format

The Data Type Convert dialog did not make sure you entered different formats for the input and output files. Converting to the same format is not supported. This problem has been resolved. Now Launcher will disable the Run and Check buttons if the two formats are the same.

[RTI Issue ID LAUNCHER-529]

4.9 Data Type Convert Dialog was Missing Advanced Options

The Data Type Convert dialog was missing the ability to select Advanced Options. This issue has been resolved. Now you can set the following advanced options:

- Include directories to the list of directories to be searched for header files (-I)
- Define directives (-D)
- Undefine directives (-U)
- Path to the preprocessor (-ppPath)
- Preprocessor options (-ppOption)

[RTI Issue ID LAUNCHER-251]

4.10 SQL Server not Removed from Database Integration Service Dialog

The SQL Server database should have been removed from the Database Integration Service dialog, since it's no longer supported, starting with release 6.1.0. Launcher reported the following warning on Windows systems because SQL Server was still in the Database Integration Service dialog:

The XML configuration file 'DatabaseIntegration.xml' has been modified, using the backup

This problem has been resolved.

[RTI Issue ID LAUNCHER-533]

4.11 Validation did not work in Database Integration Service Dialog

Validation didn't work in the Database Integration Service dialog. This problem has been resolved. Now setting an invalid value to any of the fields in the Database Integration Service dialog will disable the Run and Check buttons.

[RTI Issue ID LAUNCHER-526]
4.12 Launcher Crashed if QoS File in DDS Spy Dialog was Removed

*Launcher* crashed if the QoS file specified in the DDS Spy dialog was removed. This problem has been resolved.

[RTI Issue ID LAUNCHER-530]

### 4.13 Issues in DDS Ping Dialog

The following issues have been fixed in the DDS Ping dialog:

- *Launcher* crashed if the QoS file specified in the DDS Ping dialog was removed.
- The *subscribe* radio button only enabled the subscriber-only fields in the Advanced Options dialog if that dialog was already open.
- If the *Multicast address* field in the Advanced Options dialog was left empty, *Launcher* treated this as an invalid value.
- Setting invalid values for the *Send period* and *Max. samples to send* fields disabled the *Run* and *Check* buttons when the *subscribe* radio button was selected. These two fields should only disable the *Run* and *Check* buttons when the *publish* radio button is selected.
- The *Send period* is passed to the utility when the *subscribe* radio button is selected. It should only be passed when the *publish* radio button is selected.
- In DDS Ping's Advanced Options dialog, the Durability QoS could only be set to the default value (VOLATILE). This problem has been resolved. Now you can configure Durability to be either VOLATILE or TRANSIENT_LOCAL.

[RTI Issue IDs LAUNCHER-531, LAUNCHER-511]

### 4.14 Issues in DDS Prototyper Dialog

The following issues have been fixed in the DDS Prototyper dialog:

- In the Advanced Options, the *Data Fill* check box should be labeled Disable and be unchecked. That is, the default is that Data Fill is enabled. Check the box to disable it.
- The *Lua Script* field did not make sure the selected file was a `.lua` script.

[RTI Issue ID LAUNCHER-522]

### 4.15 Issues in Web Integration Service Dialog

The following issues have been fixed in the Web Integration Service Advanced Options dialog:
4.16 Invalid Name for 'What's New' Tab if it was Previously Hidden

On a macOS system, if the What's New tab was hidden and then unhidden, the tab showed an invalid name. This problem has been resolved.

[RTI Issue ID LAUNCHER-504]

4.17 Running Launcher from Launchpad did not Open Latest Connext DDS Release if Multiple Versions Installed

Running Launcher from Apple® Launchpad® didn't open the latest release if multiple versions of Connext DDS were installed, instead it opened the oldest version. This problem has been resolved. Now running Launcher from Launchpad will open the latest release.

[RTI Issue ID LAUNCHER-528]

4.18 Broken Links Between Micro and Core Documentation after Copying Connext DDS Micro SDK

The Copy Connext DDS Micro SDK button copied the entire Connext DDS Micro installation directory. This could result in broken links between Connext DDS Micro and Connext DDS documentation. This issue has been resolved; the Copy Connext DDS Micro SDK button will now only copy the Connext DDS Micro source code and the examples, excluding the documentation, Code Generator, and Micro Application Generator. Documentation must be accessed via the RTI Launcher or from the Connext DDS Micro installation directory.

[RTI Issue ID LAUNCHER-410]

4.19 Some Tabs Were Not Visible on macOS

In previous releases, some tabs might not have been visible on macOS if there was not enough space in the Launcher window. This issue has been resolved. Now, if there are more tabs than space in Launcher, a dropdown menu will appear to allow you to navigate to the hidden tabs, as shown in the figure below.
4.19 Some Tabs Were Not Visible on macOS

[RTI Issue ID LAUNCHER-623]
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:

```
./rti_connexx_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 Launcher Fails to Copy License from Network Location into an Administrator Owner Directory

Launcher fails to copy the license from a network location into an administrator owner directory. This is because Launcher tries to copy the license using a command prompt with administration privileges, which cannot access the shared folder because it is running in a different user context.
5.4 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.)

5.5 Launcher not Scaled Properly for Intermediate Factors on High-DPI Displays on Windows Platforms

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 on Windows platforms.

The workaround is to change the scaling behavior from Application to System. For example, on Windows 10 platforms:

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 on 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.
5.6 Appearance Issues on macOS 10.15 Platforms (Catalina)

Launcher shows some appearance issues on macOS 10.15 platforms (Catalina):

- If the appearance mode is set to Auto, Launcher will mix the Light and Dark appearances.
- Changing the appearance mode from Light to Dark, or vice versa, will also mix the Light and Dark appearances of Launcher.
In both cases, changing the appearance mode to Light or Dark and reopening *Launcher* will fix the appearance issue.

[RTI Issue ID LAUNCHER-510]