RTI Connext

Installation Guide

Version 7.0.0

rti

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Chapter 1 Installing RTI Connext

RTI® Connext® is delivered as static and dynamic libraries with development tools, examples, and documentation that will help you use the libraries.

If you are installing a purchased version of *Connext*, see 1.1 Installing a Regular Version below. If you are evaluating *Connext* or using it for research purposes, see 1.2 Installing a License-Managed (LM) Version on page 8. Note that all LM versions require a license key file to run. All use of both regular and LM versions is subject to RTI's Software License Agreement #4000.

1.1 Installing a Regular Version

Connext distributions are provided in two types of bundles: *hosts* and *targets*.

- A *host* bundle contains non-target-specific files, such as documentation, header files, tools, and infrastructure services executables. The host bundle is provided in a **.run**, **.exe**, or **.dmg** file that will run an installer.

  Host bundles are named:
    - **rti_connext_dds-<version>-<package_type>-host-<host-platform>.<extension>**

  The <package_type> is usually **pro**.

    Note: The legacy **core** package type does not include all functionality. Please contact your local RTI sales representative or email **sales@rti.com** for more information.

  The <host_platform> depends on your development platform: **x64Linux** for Linux® systems, **x64Win64** for Windows® systems, or **darwin** for macOS® systems.

  The <extension> is **run** for Linux systems, **exe** for Windows systems, or **dmg** for macOS systems.

- A *target* bundle contains libraries and any applications that have target-specific dependencies. A target bundle is an "RTI Package" (***.rtipkg**) file that must be installed on top

of your host bundle.

Target bundles are named:

- **rti_connext_dds-<version>-<package_type>-target-<target_architecture>.rtipkg**

The <target_architecture> depends on your target machine (where you will deploy your completed application). These strings are listed in the RTI Connext Core Libraries Platform Notes; examples are **x64Win64VS2017** and **x64Linux4gcc7.3.0**.

Note: You may have more than one target bundle if you are developing for multiple targets.

Note: If you are developing C# applications, you need to download NuGet packages as well. For detailed instructions, see Installing Connext in the RTI Connext Getting Started Guide for C#.

If you are installing a patch release (for example, a 7.0.0.x release), read Chapter 5 Special Backup of RTI Libraries on page 20.

There are two ways to install a *Connext* host bundle:

- using an installer, which will prompt you for information such as where to install, or
- using a script, which allows you to run in "unattended mode" so you will not be prompted for information while it is installing.

Both ways are described below.

Running from a Script (Unattended Mode)

When running in unattended mode, the installer will use default values for its parameters unless you specify them at the command line (see Table 1.1 Command-Line Options when Installing from a Script).

Table 1.1 Command-Line Options when Installing from a Script

Parameter	Values	Meaning	Default
--mode	win32 gtk xwindows osxqt text [not available on Windows] unattended [all platforms] [not available for "lm" package]	Should the installer display a graphical or a text-based UI? Should the installer ask for user feedback?	GUI available on your platform
--unattendedmodeui	none [not available on Windows] minimal [not available on Windows] minimalWithDialogs [required on Windows if using --mode unattended]	If you chose --mode unattended, how much graphical feedback should the installer display?	none
--prefix	directory to install into	The installation directory the product will be placed into. Note that the installer will always place the product in a directory named rti_connext_dds-7.0.0. See Chapter 2 Paths Mentioned in Documentation on page 13	Platform-dependent Windows Example: c:\program files\rti_connext_dds-7.0.0
--disable_copy_examples	true false	Should the installer disable the copying of examples into **rti_workspace** during installation (true) or not (false)?	false

1.1.1 Installing on a Linux System

In these instructions, we assume your host bundle is named **rti_connext_dds-7.0.0-pro-host-x64Linux.run** and your target bundle is named **rti_connext_dds-pro-target-7.0.0-x64Linux4gcc7.3.0.rtipkg**. Your filenames will be different depending on your package type and architecture.

1. Download the host and target bundles to a location of your choice; for example, **/home/<your user name>/Downloads**.

2. Install the host bundle. As described above, you can use an installer or a script:

   - Using the installer:

   Run the host bundle installer (the **.run** file). For example:

   ```
   /home/<your user name>/Downloads/rti_connext_7.0.0-dds-pro-host-x64Linux.run
   ```

   Follow the on-screen prompts. You will be asked if you want to use the default installation directory (**/home/<your user name**>) or specify a different path. We refer to the installation directory as <NDDSHOME>, see Chapter 2 Paths Mentioned in Documentation on page 13.

- Using a script:

  Run from a command prompt:

  ```
  rti_connext_dds-7.0.0-<package_type>-host-<host_platform>.run
  --mode unattended --prefix <installation path>
  ```

  The **--prefix** option allows you to specify the installation directory; if you omit this, the installer will install into a default location.

  For example (enter on one line):

  ```
  rti_connext_dds-7.0.0-pro-host-x64Linux.run
  --mode unattended --prefix /home/user/rti_connext_dds-7.0.0
  ```

3. Install the target bundle(s). There are two ways to do this:

   - From *RTI Launcher*:

     Start *RTI Launcher* (**<NDDSHOME>/bin/rtilauncher**), select the **Configuration** tab, and click on **Install RTI Packages**. Add the location of your target file. Click **Install**.
   - From the command line:

     Open a command prompt and change to the **rti_connext_dds-7.0.0/bin** directory. Use **<NDDSHOME>/bin/rtipkginstall** to install the target bundle. For example (enter on one line):

     ```
     rtipkginstall
       /home/<your user name>/Downloads/rti_connext_dds-7.0.0-pro-target-
     x64Linux4gcc7.3.0.rtipkg
     ```

4. Read .

After installation:

- From *Launcher*, right-click each icon to access documentation about that component. See the *RTI Launcher User's Manual* (in **<NDDSHOME>/doc/manuals/connext_dds_professional/tools/launcher**).

- See the *RTI Connext Getting Started Guide* (in **<NDDSHOME>/doc/manuals/connext_dds_professional/getting_started_guide**).

Note: In some Linux operating systems, executing the desktop shortcut for *Launcher* might report that the application has not been marked as trusted.

This is a harmful warning that will prevent you from executing *Launcher* using the desktop shortcut. To remove this warning, click "Trust and Launch." This will mark the desktop shortcut as a trusted application, allowing you to run the application.

If the warning doesn't appear and the desktop shortcut still doesn't run, right-click the shortcut and click "Allow Launching."

1.1.2 Installing on a Windows System

In these instructions, we assume your host bundle is named **rti_connext_dds-7.0.0-pro-host-x64Win64.exe** and your target bundle is named **rti_connext_dds-7.0.0-pro-target-x64Win64VS2017.rtipkg**. Your filenames will be different depending on your package type and architecture.

Depending on your version of Windows and where you want to install these files, your user account may or may not require administrator privileges.

1. Download the host and target bundles to a location of your choice; for example, **C:\Users\<your user name>\Downloads**.

2. Install the host bundle. As described above, you can use an installer or a script:

- Using the installer:

  From your file explorer, open (double-click) the host bundle installer (the **.exe** file).

  Follow the on-screen prompts. You will be asked if you want to use the default installation directory (**C:\Program Files**) or specify a different path.
- Using a script:

  Run from a command prompt:

  ```
  rti_connext_dds-<version>-<package_type>-host-<host_platform>.exe
  --mode unattended --unattendedmodeui minimalWithDialogs --prefix <installation
  path>
  ```

  The **--prefix** option allows you to specify the installation directory. If you do not specify a prefix, the installer will install into a default location.

  For example (enter on one line):

  ```
  rti_connext_dds-7.0.0-pro-host-x64Win64.exe --mode unattended
  --unattendedmodeui minimalWithDialogs --prefix c:\program files\rti_connext_dds-
  7.0.0
  ```

  > When running in unattended mode on a Windows system, you must specify **--unattendedmodeui minimalWithDialogs** or the installation will fail.

3. Install the target bundle(s). There are two ways to do this:
   - From *RTI Launcher*:

     Start *RTI Launcher* (**<NDDSHOME>\bin\rtilauncher** or from the Windows **Start** menu), select the **Configuration** tab, and click on **Install RTI Packages**. Add the location of your package file. Click **Install**.
   - From the command line:

     Open a command prompt and change to the **rti_connext_dds-7.0.0\bin** directory. Use the **rtipkginstall** batch file to install the target bundle. For example (enter on one line):

     ```
     rtipkginstall C:\Users\<your user name>\Downloads\rti_connext_dds-7.0.0-pro-
     target-x64Win64VS2017.rtipkg
     ```
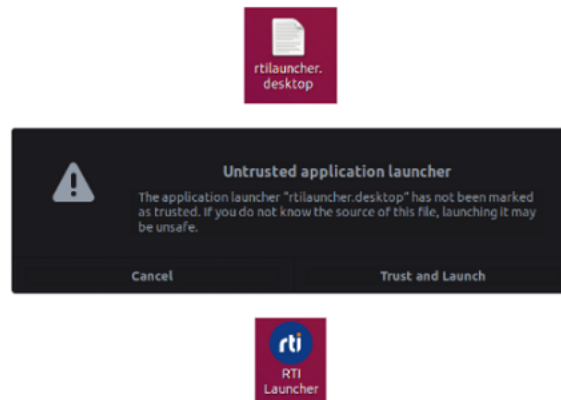
4. Read Chapter 3 License Management on page 15.

After installation:

- From *Launcher*, right-click each icon to access documentation about that component. See the *RTI Launcher User's Manual* (in **<NDDSHOME>\doc\manuals\connext_dds_pro-fessional\tools\launcher**).

- See the *RTI Connext Getting Started Guide* (in **<NDDSHOME>\doc\manuals\connext_dds_ professional/getting_started_guide**).

1.1.3 Installing on a macOS System

> **Note:** Before installing the host and target bundles on a macOS 11 (Big Sur) or macOS 12 (Mojave) system on an Arm v8 (M1) CPU, Rosetta® 2 must be installed and enabled. Rosetta 2 is an Apple tool for translating third-party software applications; without it, an error message will display when attempting to install *Connext*. Installation instructions for Rosetta 2 can be found at https://support.apple.com/en-us/HT211861. Rosetta 2 is only required during *installation* of the host and target bundles. It is not required at runtime.

In these instructions, we assume your host bundle is named **rti_connext_dds-7.0.0-pro-host-darwin.dmg** and your target bundle is named **rti_connext_dds-7.0.0-pro-target-x64Darwin17clang9.0.rtipkg**. Your filenames will be different depending on your package type and architecture.

1. Download the host and target bundles to a location of your choice; for example, **/Users/<your user name>/Downloads**.

2. Double-click on the host bundle **.dmg** file. You should see a screen appear.

3. Double-click on the icon in the screen to run the installer application.

4. Follow the on-screen prompts. You will be asked if you want to use the default installation directory (**/Applications/rti_connext_dds-7.0.0**) or specify a different path. Note that the installer will always place the product inside a folder named **rti_connext_dds-7.0.0**. We refer to the installation directory as <NDDSHOME>, see Chapter 2 Paths Mentioned in Documentation on page 13.

5. Install the target bundle(s). There are two ways to do this:

   - From *RTI Launcher*:

     Start *RTI Launcher* (**<NDDSHOME>/RTI Launcher**), select the Configuration tab, and click on **Install RTI Packages**. Add the location of your target file. Click **Install**.
   - From the command line:

     Open a command prompt and change to the **rti_connext_dds-7.0.0/bin** directory. Use **<NDDSHOME>/bin/rtipkginstall** to install the target bundle. For example (enter on one line):

     ```
     rtipkginstall /Users/<your user name>/Downloads/rti_connext_dds-7.0.0-pro-target-
     x64Darwin17clang9.0.rtipkg
     ```

6. Read Chapter 3 License Management on page 15.

After installation:

- From *Launcher*, right-click each icon to access documentation about that component. See the *RTI Launcher User's Manual* (in **<NDDSHOME>/doc/manuals/connext_dds_pro-fessional/tools/launcher**).

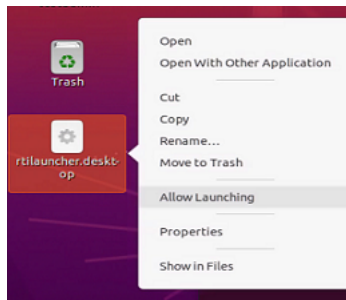- See the *RTI Connext Getting Started Guide* (in **<NDDSHOME>/doc/manuals/connext_dds_professional/getting_started_guide**).

1.2 Installing a License-Managed (LM) Version

In addition to *Connext* Professional, the LM package includes *RTI Real-Time WAN Transport*, *RTI Cloud Discovery Service*, *RTI Security Plugins*, and OpenSSL® version 1.1.1n. (The installer provides a prebuilt version of OpenSSL 1.1.1n. If you wish to build your own version of OpenSSL 1.1.1n, you can find the source code here: https://www.openssl.org/source/.)

LM distributions usually combine the *host* and *target* in a single bundle, named after the *target*. For example, **rti_connext_dds-7.0.0-lm-x64Win64VS2017.exe** combines the **x64Win64** *host* with the **x64Win64VS2017** *target* in a single **lm** bundle. The target architecture depends on your target machine where you will deploy your completed application. These strings are listed in the RTI Connext Core Libraries Platform Notes; examples are **x64Win64VS2017** and **x64Linux4gcc7.3.0**.

Some LM distributions require you to install two bundles:

- A combined host/target bundle (**.run**, **.exe**, or **.dmg**), such as **rti_connext_dds-7.0.0-lm-x64Linux4gcc7.3.0.run**.

- A separate LM target package (**.rtipkg**) for the specific target architecture.

  For example, suppose your target machine uses Ubuntu 18.04 LTS on an Arm v8 CPU. RTI does not currently provide a combined LM host/target bundle for this architecture. So first you would install an LM bundle for any Linux architecture, then install the LM target package for your Ubuntu 18.04 LTS target on an Arm v8 CPU. The instructions below explain how.

1.2.1 Installing on a Linux System

1. Download the LM bundle (for example: **rti_connext_dds-7.0.0-lm-x64Linux4gcc7.3.0.run**) to a location of your choice; for example, **/home/<your user name>/Downloads**.

2. Run the LM bundle installer (the **.run** file). For example:

   ```
   /home/<your user name>/Downloads/rti_connext_dds-7.0.0-lm-x64Linux4gcc7.3.0.run
   ```

   Follow the on-screen prompts. You will be asked if you want to use the default installation directory (**/home/<your user name>**) or specify a different path. We refer to the installation directory as <NDDSHOME>, see Chapter 2 Paths Mentioned in Documentation on page 13.

3. If your target architecture does not have an Arm CPU, skip this step.

For Linux targets with an Arm CPU, you also need to install an LM target package. This package will have "**lm-target-arm**" in the filename and the architecture will start with "**arm**". You can install it on top of any LM bundle for a Linux architecture. That is, the **.run** file and the **.rtipkg** file do not have to use the same Linux architecture string. For example, you can install **rti_connext_dds-7.0.0-lm-target-armv8Linux4gcc7.3.0.rtipkg** on top of **rti_connext_dds-7.0.0-lm-x64Linux4gcc7.3.0.run**.

There are two ways to install the LM target package:

- From *RTI Launcher*:

  Start *RTI Launcher* (**<NDDSHOME>/bin/rtilauncher**), select the **Configuration** tab, and click on **Install RTI Packages**. Add the location of your target file. Click **Install**.
- From the command line:

  Open a command prompt and change to the **rti_connext_dds-7.0.0/bin** directory. Use **<NDDSHOME>/bin/rtipkginstall** to install the target bundle. For example (enter on one line):
  ```
  rtipkginstall
    /home/<your user name>/Downloads/rti_connext_dds-7.0.0-lm-target-
  armv8Linux4gcc7.3.0.rtipkg
  ```

4. Read Chapter 3 License Management on page 15.

After installation:

- From *Launcher*, right-click each icon to access documentation about that component. See the *RTI Launcher User's Manual* (in **<NDDSHOME>/doc/manuals/connext_dds_professional/tools/launcher**).
- See the *RTI Connext Getting Started Guide* (in **<NDDSHOME>/doc/manuals/connext_dds_professional/getting_started_guide**).

Note: In some Linux operating systems, executing the desktop shortcut for *Launcher* might report that the application has not been marked as trusted.

This is a harmful warning that will prevent you from executing *Launcher* using the desktop shortcut. To remove this warning, click "Trust and Launch." This will mark the desktop shortcut as a trusted application, allowing you to run the application.

If the warning doesn't appear and the desktop shortcut still doesn't run, right-click the shortcut and click "Allow Launching."

1.2.2 Installing on a Windows System

Depending on your version of Windows and where you want to install these files, your user account may or may not require administrator privileges.

1. Download the LM bundle (for example: **rti_connext_dds-7.0.0-lm-x64Win64VS2017.exe**) to a location of your choice; for example, **C:\Users\<your user name>\Downloads**.

2. Install the LM bundle:

   From your file explorer, open (double-click) the LM bundle installer (the **.exe** file).

   Follow the on-screen prompts. You will be asked if you want to use the default installation directory (**C:\Program Files**) or specify a different path.

3. Read .

After installation:

- From *Launcher*, right-click each icon to access documentation about that component. See the *RTI Launcher User's Manual* (in **<NDDSHOME>\doc\manuals\connext_dds_professional\tools\launcher**).

- See the *RTI Connext Getting Started Guide* (in **<NDDSHOME>\doc\manuals\connext_dds_professional/getting_started_guide**).

1.2.3 Installing on a macOS System

> **Note:** Before installing an LM bundle on a macOS 11 (Big Sur) system on an Arm v8 CPU, Rosetta® 2 must be installed and enabled. Rosetta 2 is an Apple tool for translating third-party software applications; without it, an error message will display when attempting to install *Connext*. Installation instructions for Rosetta 2 can be found at https://support.apple.com/en-us/HT211861. Rosetta 2 is only required during *installation* of the host and target bundles. It is not required at runtime.

1. Download the LM bundle (for example: **rti_connext_dds-7.0.0-lm-x64Darwin17clang9.0.run**) to a location of your choice; for example, **/Users/<your user name>/Downloads**.

2. Double-click on the host bundle **.dmg** file. You should see a screen appear.

3. Double-click on the icon in the screen to run the installer application.

4. Follow the on-screen prompts. You will be asked if you want to use the default installation directory (**/Applications/rti_connext_dds-7.0.0** or specify a different path. Note that the installer will always place the product inside a folder named **rti_connext_dds-7.0.0**. We refer to the installation directory as <NDDSHOME>, see Chapter 2 Paths Mentioned in Documentation on page 13.

5. If your target architecture does not have an Arm CPU, skip this step.

   For macOS targets with an Arm CPU, you also need to install an LM target package. This package will have "**lm-target**" in the filename and the architecture will start with "**arm**". You can install it on top of any LM bundle for a macOS architecture. That is, the **.dmg** file and the **.rtipkg** file do not have to use the same macOS architecture string. For example, you can install **rti_connext_dds-7.0.0-lm-target-arm64Darwin20clang12.0.rtipkg** on top of **rti_connext_dds-7.0.0-lm-x64Darwin17clang9.0.dmg**.

   There are two ways to install the LM target package:

   - From *RTI Launcher*:

     Start *RTI Launcher* (**<NDDSHOME>/RTI Launcher**), select the Configuration tab, and click on **Install RTI Packages**. Add the location of your target file. Click **Install**.

- From the command line:

  Open a command prompt and change to the **rti_connext_dds-7.0.0/bin** directory. Use **<NDDSHOME>/bin/rtipkginstall** to install the target bundle. For example (enter on one line):
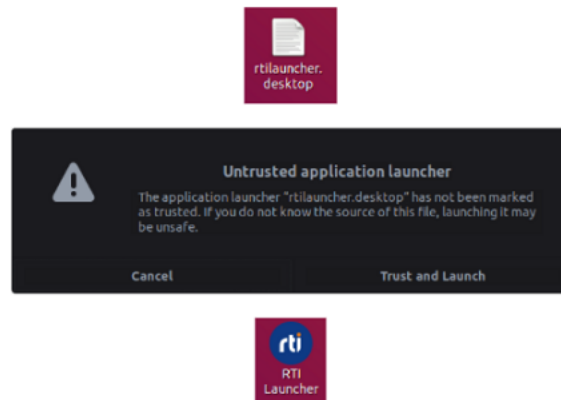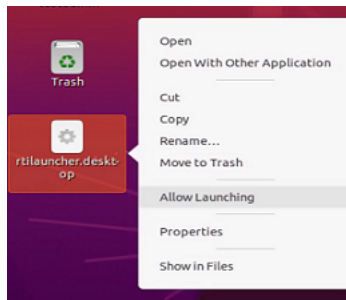 ```
  rtipkginstall /Users/<your user name>/Downloads/rti_connext_dds-7.0.0-lm-
  target-arm64Darwin20clang12.0.rtipkg
  ```
6. Read .


After installation:

- From *Launcher*, right-click each icon to access documentation about that component. See the *RTI Launcher User's Manual* (in **<NDDSHOME>/doc/manuals/connext_dds_professional/tools/launcher**).

- See the *RTI Connext Getting Started Guide* (in **<NDDSHOME>/doc/manuals/connext_dds_professional/getting_started_guide**).

# Chapter 2 Paths Mentioned in Documentation

The documentation refers to:

- **<NDDSHOME>**

  This refers to the installation directory for *RTI® Connext®*. The default installation paths are:

  - macOS® systems:
    **/Applications/rti_connext_dds-7.0.0**

  - Linux systems, non-*root* user:
    **/home/<*your user name*>/rti_connext_dds-7.0.0**

  - Linux systems, *root* user:
    **/opt/rti_connext_dds-7.0.0**

  - Windows® systems, user without Administrator privileges:
    **<*your home directory*>\rti_connext_dds-7.0.0**

  - Windows systems, user with Administrator privileges:
    **C:\Program Files\rti_connext_dds-7.0.0**

  You may also see **$NDDSHOME** or **%NDDSHOME%**, which refers to an environment variable set to the installation path.

  Wherever you see **<NDDSHOME>** used in a path, replace it with your installation path.

**Note for Windows Users:** When using a command prompt to enter a command that includes the path **C:\Program Files** (or any directory name that has a space), enclose the path in quotation marks. For example:

```
"C:\Program Files\rti_connext_dds-7.0.0\bin\rtiddsgen"
```

Or if you have defined the **NDDSHOME** environment variable:

```
"%NDDSHOME%\bin\rtiddsgen"
```

- **<path to examples>**

By default, examples are copied into your home directory the first time you run *RTI Launcher* or any script in **<NDDSHOME>/bin**. This document refers to the location of the copied examples as ***<path to examples>***.

Wherever you see ***<path to examples>***, replace it with the appropriate path.

Default path to the examples:
- macOS systems: **/Users/<*your user name*>/rti_workspace/7.0.0/examples**
- Linux systems: **/home/<*your user name*>/rti_workspace/7.0.0/examples**
- Windows systems: ***<your Windows documents folder>*\rti_workspace\7.0.0\examples**

  Where 'your Windows documents folder' depends on your version of Windows. For example, on Windows 10, the folder is **C:\Users\<*your user name*>\Documents**.

Note: You can specify a different location for **rti_workspace**. You can also specify that you do not want the examples copied to the workspace. For details, see .

Chapter 3 License Management

There's a distinction between a license *file* and a ***license***. When you buy an RTI product, like the Professional package, you are ***licensed*** to use it.

Tools like *RTI Admin Console*, which are included in the Professional package, additionally require a license *file* in order to run. A license *file* is never required to deploy your system in production. LM (license-managed) bundles are not for production and require a license *file*.

If your *Connext* distribution requires a license file, you will receive one from RTI via email.

This section describes how to manage a license *file*. If you have more than one license file from RTI, you can concatenate them into one file. A single license file can be used to run on any architecture and is not node-locked. You are not required to run a license server.

3.1 Installing the License File

Save the license file in any location of your choice; the locations checked by the middleware are listed below.

You can also specify the location of your license file in *RTI Launcher's* **Configuration** tab. Then *Launcher* can copy the license file to the installation directory or to the user workspace.

Each time your *Connext* application starts, it will look for the license file in the following locations until it finds a valid license:

1. In the PropertyQosPolicy of the *DomainParticipant*, there may be a property called **dds.license.license_string**. (Only if you have a license-managed, or "lm," version of *Connext* Professional.) The value for this property can be set to the content of a license file. (This may be necessary if a file system is not supported on your platform.) You can set the property either in source code or in an XML file. An XML file example is shown below:

```
<domain_participant_qos>
    <property>
        <value>
            <element>
                <name>dds.license.license_string</name>
                <value>contents of license file</value>
            </element>
        </value>
    </property>
</domain_participant_qos>
```

If the content of the license file is in XML, special characters for XML need to be escaped in the license string. Special characters include: quotation marks (") (replace with "), apostrophes (') (replace with **'**), greater-than (>) (replace with **>**), less-than (<) (replace with **<**), and ampersands (&) (replace with **&**).

2. In the PropertyQosPolicy of the *DomainParticipant*, there may be a property called **dds.license.license_file**. (Only if you have a license-managed, or "lm," version of *Connext* Professional.) The value for this property can be set to the location (full path and filename) of a license file. (This may be necessary if a default license location is not feasible and environment variables are not supported.) You can set the property either in source code or in an XML file.

    Example XML to set **dds.license.license_file**:

```
<domain_participant_qos>
    <property>
        <value>
            <element>
                <name>dds.license.license_file</name>
                <value>path to license file</value>
            </element>
        </value>
    </property>
</domain_participant_qos>
```

3. In the location specified in the environment variable **RTI_LICENSE_FILE**, which you may set to point to the full path of the license file, including the filename.

    Note: When you run any of the scripts in the **<NDDSHOME>/bin** directory, this automatically sets the RTI_LICENSE_FILE environment variable (if it isn't already set) prior to calling the executable. It looks for the license file in two places: your **rti_workspace** directory and the installation directory (NDDSHOME). (See Chapter 2 Paths Mentioned in Documentation on page 13.)

4. If you are running any of the tools/services as executables via **NDDSHOME/bin/<executable script>** or through *Launcher*:

- In your rti_workspace/<version> directory, in a file called **rti_license.dat**.

- In your rti_workspace directory, in a file called **rti_license.dat**.

- In <NDDSHOME> (the *Connext* installation directory), in a file called **rti_license.dat**.

5. If you are running your own application linked with *Connext* libraries:

- In your current working directory, in a file called **rti_license.dat**.

- In <NDDSHOME> (the *Connext* installation directory), in a file called **rti_license.dat**.

As *Connext* attempts to locate and read your license file, you may (depending on the terms of the license) see a printed message with details about your license.

If the license file cannot be found or the license has expired, your application may be unable to initialize *Connext*, depending on the terms of the license. If that is the case, your application's call to **DomainParticipantFactory.create_participant()** will return null, preventing communication.

If you have any problems with your license file, please email **support@rti.com**.

3.2 Adding or Removing License Management

If you are using a package type that requires a license file and your license file changes—for example, you receive a new license for a longer term than your original license—you do not need to reinstall *Connext*.

However, if you switch from a license-managed distribution of *Connext* to one of the same version that does not require license management, or vice versa, RTI recommends that you first uninstall your original distribution before installing your new distribution. Doing so will prevent you from inadvertently using a mixture of libraries from multiple installations.

Chapter 4 Controlling Location for RTI Workspace and Copying of Examples

By default, the **rti_workspace** directory is created here:

- Linux systems: **/home/<*your user name*>/rti_workspace**

- macOS systems: **/Users/<*your user name*>/rti_workspace**

- Windows systems: **<*your Windows documents folder*>\rti_workspace**

Here's how to specify a different location for **rti_workspace** and/or disable copying the examples into the workspace.

Linux and macOS systems:

- To configure the behavior for *all* users, edit **<NDDSHOME>/resource/scripts/rticommon_config.sh**.

- To configure the behavior for the *current* user (takes precedence), create **$HOME/.rti/rticommon_config.sh** as follows:

```
# Customize RTI Workspace Directory and Copy Behavior
####################################################
# copy_examples=false
# workspace_dir=$HOME/rti_workspace
```

Uncomment the line(s) that you want to use (remove the #).

Windows systems:

- To configure the behavior for *all* users, edit **<NDDSHOME>\resource\scripts\rticommon_config.bat**.

- To configure the behavior for the *current* user (takes precedence), create **<your home directory>\rti\rticommon_config.bat** as follows:

```
@REM Customize RTI Workspace Directory and Copy Behavior
@REM #################################################
@REM set copyExamples=false
@REM set "workspaceDir=C:\Users\%USERNAME%\Documents\rti_workspace"
```

Uncomment the line(s) that you want to use (delete "@REM" at the start of the line).

Chapter 5 Special Backup of RTI Libraries

When installing a new RTI package that overwrites the libraries in the **<NDDSHOME>/lib/<architecture>** directory, a backup will be created of all the previous libraries in the **<NDDSHOME>/lib/<architecture>** directory. That backup will be created in **<NDDSHOME>/lib/<architecture>/<current_installed_version>**.

For example, if you install a patch version 7.0.0.x to the RTI core libraries for x64Win64VS2017, your 7.0.0 libraries will be copied into the following directory before the 7.0.0.x libraries are installed: **<NDDSHOME>/lib/x64Win64VS2017/7.0.0**.

If you install another patch later, before the 7.0.0.x libraries are overwritten, they will be copied into **<NDDSHOME>/lib/x64Win64VS2017/7.0.0.x**.

Chapter 6 Uninstalling Connext

To uninstall *Connext*, run the uninstaller application.

- On Windows platforms:

  If available from the Start Menu, run the uninstaller by clicking on the **Uninstall RTI Connext DDS <package>** option. Note that this is not available from the menu on Windows 8 systems. Alternatively, use Add/Remove Programs from the Windows Control Panel to uninstall *Connext*, or run the application from the **<NDDSHOME>\uninstall** directory.

- On other platforms:

  Run the uninstaller from the **<NDDSHOME>/uninstall** directory.

Note: The uninstaller does not delete the **rti_workspace** directory. To delete all RTI files, delete the **rti_workspace** directory in your home directory. (See .)