

# **RTI Queuing Service**

**Release Notes**

**Version 6.1.2**



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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).

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# 1 Supported Platforms

*RTI® Queuing Service* is supported on the platforms in [Table 1 Supported Platforms](#). For details on these platforms, see the *RTI Connex DDS Core Libraries Platform Notes*.

**Table 1 Supported Platforms**

Platform	Operating System
Linux®	All platforms on Intel® x64 CPUs listed in the <i>RTI Connex® DDSCore Libraries Release Notes</i> for the same version number, except SUSE® Linux Enterprise Server 12.
macOS®	All platforms on Intel x64 CPUs listed in the <i>RTI Connex DDS Core Libraries Release Notes</i> for the same version number.
Windows®	

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

*Queuing Service* is an experimental product. It should not be used in production applications.

## 2 Compatibility

*Queuing Service* is built on top of, and intended for use with, *RTI Connext® DDS* with the same version number.

For backward compatibility information, if any, between 6.1.2 and previous releases, see the *Migration Guide* on the RTI Community Portal (<https://community.rti.com/documentation>).

## 3 What's New in 6.1.2

### 3.1 Experimental Product Status

*RTI® Queuing Service* is now considered an experimental product. As with all RTI experimental products, it should not be used in production applications. You can download *Queuing Service* from [RTI Labs](#).

In *RTI Launcher*, the Queuing Service button is now in the Labs tab.

### 3.2 New Platforms

This release adds support for these platforms:

OS	Version	CPU	RTI Architecture Abbreviation
Linux	Ubuntu 22.04	x64	x64Linux4gcc7.3.0
macOS	macOS 12	x64	x64Darwin17clang9.0
Windows	Windows 11	x64	x64Win64VS2017

### 3.3 Third-Party Software Upgrades

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

Third-Party Software	Previous Version	Current Version
libxml2	2.9.12	2.9.14
libxslt	1.1.34	1.1.35
SQLite®	3.37.2	3.39.4

For information on third-party software used by *Connex DDS* products, see the "3rdPartySoftware" documents in your installation: `<NDDSHOME>/doc/manuals/connex_dds_professional/release_notes_3rdparty`.

# 4 Previous Releases

## 4.1 What's New in 6.1.1

### 4.1.1 Third-Party Software Upgrades

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

Third-Party Software	Previous Version	Current Version
SQLite@ODBC	0.9996	0.9998
SQLite	3.29.0	3.37.2
libxslt	1.1.29	1.1.34
libxml2	2.9.4	2.9.12
Bison	2.3	3.7.6
Flex	2.5.35	2.6.4

Some of these upgrades may fix potential vulnerabilities. See [4.2.2 Fixes Related to Vulnerabilities on the next page](#).

For information on third-party software used by *Connex DDS* products, see the "3rdPartySoftware" documents in your installation: `<NDDSHOME>/doc/manuals/connex_dds_professional/release_notes_3rdparty`.

## 4.2 What's Fixed in 6.1.1

### 4.2.1 RTICdrTypeCodeUtils\_type\_has\_external\_members:!get member error when running Queuing Service

The following, harmless error may have occurred when using *Queuing Service*:



```
RTICdrTypeCodeUtils_type_has_external_members:!get member
```

This problem has been fixed.

[RTI Issue ID QUEUEING-720]

## 4.2.2 Fixes Related to Vulnerabilities

This release fixes some potential vulnerabilities, described below.

### 4.2.2.1 Potential crash, leak of sensitive information, or service corruption upon XML parsing in Queuing Service due to vulnerabilities in libxml2

The *Queuing Service* XML parser had a third-party dependency on libxml2 version 2.9.4. That version of libxml2 is known to be affected by a number of publicly disclosed vulnerabilities.

These vulnerabilities have been fixed by upgrading to the latest stable version of libxml2, 2.9.12. See [4.1.1 Third-Party Software Upgrades on the previous page](#).

The impact on *Queuing Service* of using the previous version varied depending on your *Queuing Service* configuration:

- With Connex Secure (enabling RTPS protection):
  - Exploitable through a compromised local file system containing a malicious XML file.
  - *Queuing Service* could crash or leak sensitive information. An attacker could compromise *Queuing Service* integrity.
  - CVSS v3.1 Score: 7.3 HIGH
  - CVSS v3.1 Vector: [AV:L/AC:L/PR:N/UI:N/S:U/C:L/I:L/A:H](#)
- Without Connex Secure (release mode):
  - Exploitable through a compromised local file system containing a malicious XML file.
  - Remotely exploitable through malicious RTPS messages.
  - *Queuing Service* could crash or leak sensitive information. An attacker could compromise *Queuing Service* integrity.
  - CVSS v3.1 Score: 8.6 HIGH
  - CVSS v3.1 Vector: [AV:N/AC:L/PR:N/UI:N/S:U/C:L/I:L/A:H](#)
- Without Connex Secure (debug mode):
  - Exploitable through a compromised local file system containing a malicious XML file.
  - Remotely exploitable through malicious RTPS messages.

- *Queuing Service* could crash or leak sensitive information. An attacker could compromise *Queuing Service* integrity.
- CVSS v3.1 Score: 9.8 CRITICAL
- CVSS v3.1 Vector: [AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:H/A:H](#)

[RTI Issue ID QUEUEING-734]

#### 4.2.2.2 Potential arbitrary code execution upon parsing of a Sample Selector in Queuing Service due to vulnerabilities in Flex

The *Queuing Service* filter parser had a third-party dependency on Flex version 2.5.35. That version of Flex is known to be affected by a number of publicly disclosed vulnerabilities.

These vulnerabilities have been fixed by upgrading to the latest stable version of Flex, 2.6.4. See [4.1.1 Third-Party Software Upgrades on page 5](#).

The impact on *Queuing Service* of using the previous version varied depending on your *Queuing Service* configuration:

- With Connex Secure (enabling RTPS protection):
  - Exploitable through a compromised local file system containing an XML configuration file with a malicious filter.
  - *Queuing Service* could crash or leak sensitive information. An attacker could execute code with *Queuing Service* privileges.
  - CVSS v3.1 Score: 8.4 HIGH
  - CVSS v3.1 Vector: [AV:L/AC:L/PR:N/UI:N/S:U/C:H/I:H/A:H](#)
- Without Connex Secure:
  - Exploitable through a compromised local file system containing an XML configuration file with a malicious filter.
  - Remotely exploitable through malicious RTPS messages.
  - *Queuing Service* could crash or leak sensitive information. An attacker could execute code with *Queuing Service* privileges.
  - CVSS v3.1 Score: 9.8 CRITICAL
  - CVSS v3.1 Vector: [AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:H/A:H](#)

[RTI Issue ID QUEUEING-739]

### 4.2.2.3 Potential crash in Queuing Service due to multiple vulnerabilities in SQLite

*Queuing Service* had a third-party dependency on SQLite version 3.29.0. That version of SQLite is known to be affected by a number of publicly disclosed vulnerabilities.

These vulnerabilities have been fixed by upgrading to the latest stable version of SQLite, 3.37.2. See [4.1.1 Third-Party Software Upgrades on page 5](#).

The impact on *Queuing Service* of using the previous version varied depending on your *Queuing Service* configuration:

- With Connexxt Secure (enabling RTPS protection):
  - Exploitable through a compromised local file system containing malicious SQLite database files.
  - *Queuing Service* could crash.
  - CVSS v3.1 Score: 6.2 MEDIUM
  - CVSS v3.1 Vector: [AV:L/AC:L/PR:N/UI:N/S:U/C:N/I:N/A:H](#)
- Without Connexxt Secure:
  - Exploitable through a compromised local file system containing malicious SQLite database files.
  - Remotely exploitable through malicious RTPS messages.
  - *Queuing Service* could crash.
  - CVSS v3.1 Score: 7.5 HIGH
  - CVSS v3.1 Vector: [AV:N/AC:L/PR:N/UI:N/S:U/C:N/I:N/A:H](#)

[RTI Issue ID QUEUEING-741]

### 4.2.2.4 Potential crash, leak of sensitive information, or database corruption in Queuing Service due to multiple vulnerabilities in SQLite

*This issue was fixed in 6.1.0, but not documented at that time.*

In releases prior to 6.1.0, *Queuing Service* had a third-party dependency on SQLite version 3.7.2. That version of SQLite is known to be affected by a number of publicly disclosed vulnerabilities.

These vulnerabilities were fixed by upgrading to the latest stable version of SQLite, 3.29.0.

The impact on *Queuing Service* of using the previous version varied depending on your *Queuing Service* configuration:

- With Connex Secure (enabling RTPS protection):
  - Exploitable through a compromised local file system containing malicious SQLite database files.
  - *Queuing Service* could crash or leak sensitive information. An attacker could compromise Queuing Service integrity.
  - CVSS v3.1 Score: 5.9 MEDIUM
  - CVSS v3.1 Vector: [AV:L/AC:L/PR:N/UI:N/S:U/C:L/I:L/A:L](#)
- Without Connex Secure:
  - Exploitable through a compromised local file system containing malicious SQLite database files.
  - Remotely exploitable through malicious RTPS messages.
  - *Queuing Service* could crash or leak sensitive information. An attacker could compromise Queuing Service integrity.
  - CVSS v3.1 Score: 7.3 HIGH
  - CVSS v3.1 Vector: [AV:N/AC:L/PR:N/UI:N/S:U/C:L/I:L/A:L](#)

[RTI Issue ID QUEUEING-743]

## 4.3 What's New in 6.1.0

### 4.3.1 New platforms

This release adds support for the following platforms:

- macOS 10.15 (x64)
- Red Hat® Enterprise Linux 7.6 (x64)
- Ubuntu® 20.04 LTS (x64)

### 4.3.2 Removed platforms

These platforms are no longer supported:

- 32-bit Linux and Windows platforms
- macOS 10.12
- Ubuntu 12.04 LTS

## 4.4 What's Fixed in 6.1.0

### 4.4.1 Potential crash, leak of sensitive information, or database corruption in Queuing Service due to multiple vulnerabilities in SQLite

See [4.2.2.4 Potential crash, leak of sensitive information, or database corruption in Queuing Service due to multiple vulnerabilities in SQLite on page 8](#) for details.

[RTI Issue ID QUEUEING-743]

## 5 Current Limitations

The QueueProducer and QueueConsumer wrapper APIs are only supported for the Modern C++ and .NET APIs.

## 6 Available Documentation

*Queuing Service* documentation also includes:

- **Getting Started Guide** (RTI\_Queueing\_Service\_GettingStarted.pdf)—Provides installation and startup instructions.
- **User's Manual** (RTI\_Queueing\_Service\_UsersManual.pdf)—Describes how to configure and use *Queuing Service*.