

RTI Real-Time WAN Transport

Release Notes

Version 6.1.2



© 2022 Real-Time Innovations, Inc.
All rights reserved.
Printed in U.S.A. First printing.
December 2022.

Trademarks

RTI, Real-Time Innovations, Connex, NDDS, 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 solely under and subject to RTI's standard terms and conditions available at <https://www.rti.com/terms> and in accordance with your License Acknowledgement Certificate (LAC) and Maintenance and Support Certificate (MSC), except to the extent otherwise accepted in writing by a corporate officer of RTI.

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/>). 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 or removals noted in this document serve as notice under the Real-Time Innovations, Inc. Maintenance Policy #4220 and/or any other agreements by and between RTI and customer regarding maintenance and support of RTI's software.

Deprecated means that the item is still supported in the release, but will be removed in a future release. *Removed* means that the item is discontinued or no longer supported. By specifying that an item is deprecated in a release, RTI hereby provides customer notice that RTI reserves the right after one year from the date of such release and, with or without further notice, to immediately terminate maintenance (including without limitation, providing updates and upgrades) for the item, and no longer support the item, in a future release.

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

Release Notes

1 Supported Platforms	1
2 Compatibility	1
3 What's New in 6.1.2	1
4 What's Fixed in 6.1.2	1
4.1 Real-Time WAN Transport did not work if accept_unknown_peers was set to FALSE	1
5 Previous Releases	2
5.1 What's New in 6.1.1	2
5.2 What's Fixed in 6.1.1	2
5.3 What's New in 6.1.0	2

Release Notes

1 Supported Platforms

RTI® Real-Time WAN Transport is supported on all platforms listed in the *RTI Connex DDS Core Libraries Release Notes*, including custom-supported platforms except AIX platforms and POSIX®-compliant architectures that end with "FACE_GP".

2 Compatibility

RTI Real-Time WAN Transport is an optional product for use with *Connex DDS* with the same version number.

3 What's New in 6.1.2

See "What's New in 6.1.2" in the [RTI Connex DDS Core Libraries What's New](#) document for a list of new platforms.

4 What's Fixed in 6.1.2

4.1 Real-Time WAN Transport did not work if `accept_unknown_peers` was set to FALSE

With *Real-Time WAN Transport*, an internal participant should be able to communicate with an external participant regardless of the `discovery.accept_unknown_peers` setting, as long as the internal participant sets its initial peer to the public IP address and port of the external participant. For example:

```
udpv4_wan://34.45.6.1:3456
```

But communication with `discovery.accept_unknown_peers` set to FALSE on the internal participant was not possible.

This problem has been resolved.

[RTI Issue ID COREPLG-628]

5 Previous Releases

5.1 What's New in 6.1.1

5.1.1 Ability to prioritize data flow using new support for differentiated services field (Linux platforms only)

This release allows you to set the differentiated services field value in the IP packets sent by the *Real-Time WAN Transport*.

To do so, use the `DataWriterQos.transport_priority` and `DataReaderQos.transport_priority` for user *Topics*, and the `DomainParticipantQos.discovery.metatraffic_transport_priority` for non-user *Topics* (e.g., discovery *Topics*).

This feature is only supported on Linux® platforms.

5.1.2 New platforms

This release adds support for the following new platforms.

Table 1 Added Platforms

Operating System	CPU	Compiler	RTI Architecture Abbreviation
AIX® 7.2 <i>Custom-supported target platform. Contact your RTI sales representative or sales@rti.com for more information.</i>	POWER9™	xlclang 16.1	64p9AIX7.2xlclang16.1
macOS® 11	Arm® v8	clang 12.0	arm64Darwin20clang12.0
QNX® Neutrino® 7.1	Arm v8	qcc 8.3.0	armv8QNX7.1qcc_gpp8.3.0

5.2 What's Fixed in 6.1.1

5.2.1 Source code bundle was missing critical piece of code related to UDP multicast support

In 6.1.0, the source code bundle was missing a critical piece of code related to UDP multicast. This issue has been resolved. The source code bundle is no longer missing code for UDP multicast support.

[RTI Issue ID CORE-11590]

5.3 What's New in 6.1.0

Real-Time WAN Transport is a new builtin *Connex DDS* transport plugin in this release that enables communication over wide area networks (WANs) using UDP as the underlying IP transport-layer protocol.

Real-Time WAN Transport is recommended for all new applications connecting over wide area networks. Legacy applications can continue to use the *RTI Secure WAN Transport* included in this release and/or upgrade to *Real-Time WAN Transport*. RTI is not committed to continuing support for the legacy *Secure WAN Transport* in future versions of *Connex DDS*.

Real-Time WAN Transport is not installed as part of a *Connex DDS* package; it must be downloaded and installed separately as described in the *Real-Time WAN Transport Installation Guide*.

See the "Real-Time WAN Transport" part of the *RTI Connex DDS Core Libraries User's Manual* for more information.