RTI Limited Bandwidth Plugins

Release Notes

Version 6.1.1



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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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Release Notes

1 Supported Platforms

The RTI® Limited Bandwidth Plugins distribution includes:

- Limited Bandwidth Endpoint Discovery Plugin (LBED)
- Limited Bandwidth Participant Discovery Plugin (LBPD)
- Limited Bandwidth Real-Time Publish Subscribe Plugin (LBRTPS)
- Compression Real-Time Publish Subscribe Plugin (ZRTPS)

Table 2.1 Supported Platforms lists the platforms supported by these plugins. For details on these platforms, 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 2.1 Supported Platforms

| Operating System | | | | |
|--|---|--|--|--|
| Linux® | All platforms on Intel® x64 CPUs listed in the RTI Connext® DDSCore Libraries Release Notes for the same version number, except SUSE® Linux Enterprise Server 12. | | | |
| QNX® | QNX Neutrino® 6.4.1 (For LBED Plugin only) | | | |
| Windows® All Windows platforms listed in the RTI Connext DDS Core Libraries Release Notes. | | | | |

1.1 Requirements when Using Microsoft Visual Studio

You must have the appropriate Microsoft® Visual Studio® Redistributable Package installed on the machine where you are *running* an application linked with dynamic libraries. For details, see the *RTI Connext DDS Core Libraries Platform Notes*.

2 Compatibility

Limited Bandwidth Plugins is an optional product for use with Connext DDS with the same version number.

The plugins are known not to work with *rtiddsspy*, *RTI Recording Service*, *RTI Shapes Demo*, *RTI Persistence Service*, or *RTI Database Integration Service*.

When using the LBPD plugin with *RTI Routing Service*, either the 'key' or 'participant_name' property may be used. If the 'participant_name' property is used, it must match the participant name generated by *Routing Service*, which uses this format for naming participants: "RTI Routing Service: <service name>.<-domain_route name>#{1,2}".

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).

3 What's New in 6.1.1

3.1 Third-Party Software Upgrades

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

| Third-Party Software | Previous Version | Current Version |
|----------------------|------------------|-----------------|
| bzip2 | 1.0.6 | 1.0.8 |
| zlib | 1.2.6 | 1.2.11 |

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.

4 What's Fixed in 6.1.1

4.1 Log Messages did not Print According to Verbosity

When the verbosity property was set in the LBPD or LBED plugin, there was an inconsistency between the verbosity levels of the plugin and the log messages that should have been printed:

- Exceptions were not printed when the verbosity property was set to 0.
- Warnings were not printed when the verbosity property was set to 1.
- Debug messages were not printed when the verbosity property was set to 2.

This is now fixed:

- A negative verbosity value won't print any log message.
- Verbosity = 0 (default) will print exceptions and fatal errors.
- Verbosity = 1 will print exceptions, fatal errors, and warnings.
- Verbosity = 2 and up will print all available log messages.

[RTI Issue IDs COREPLG-549 and COREPLG-552]

4.2 Potential Crash if DomainParticipant Name has 255 Characters (or More) in LBED Static Configuration File

If the name of a *DomainParticipant* in the LBED static configuration XML file had 255 or more characters, it was stored internally as a non-null terminated string.

When the string was used internally, for example, to look up the *DomainParticipant's* configuration when it was discovered, the behavior was undefined and may have resulted in not finding the *DomainParticipant* or in a crash.

This issue is now fixed. Now, the null character is always appended to every string, independently of its size.

[RTI Issue ID COREPLG-576]

5 Previous Release

5.1 What's New in 6.1.0

This release adds support for these platforms:

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

6 Known Issues

6.1 Transport-Related Limitations for ZRTPS

The following are known transport-interaction limitations when using the ZRTPS transport plugin:

- Neither Shared Memory (SHMEM) nor UDPv6 may be used as sub-transports.
- The UDPv4 transport may not be used simultaneously as a transport and a ZRTPS sub-transport.

6.2 Some QoS not Supported by LBED Discovery Plugin

The following QoS (introduced in *Connext DDS* 5.0) are not currently supported in the LBED Plugin configuration file:

- AvailabilityQosPolicy
- TypeConsistencyEnforcementQosPolicy

6.3 Some Features not Supported

The following features are not currently supported by the LBPD Plugin:

- Security
- TopicQueries
- The locator reachability lease duration in the DiscoveryConfigQosPolicy
- Propagation of properties in the PropertyQosPolicy during discovery

[RTI Issue ID COREPLG-418]

The following features are not currently supported by the LBED Plugin:

- Custom content filters
- Writer-side content filtering

7 Available Documentation

The following documentation is provided with Limited Bandwidth Plug-ins:

- *Installation Guide*:
 - <NDDSHOME>/doc/manuals/addon_products/limited_bandwidth_plugins/ RTI_LimitedBandwidthPlugins_InstallationGuide.pdf
- User's Manual:
 - <NDDSHOME>/doc/manuals/addon_products/limited_bandwidth_plugins/ RTI_LimitedBandwidthPlugins_UsersManual.pdf
- Example code

For Linux systems:

/home/your user name/rti_workspace/version/examples/connext_dds/c/limited_bandwidth_ plugins For Windows systems:

 $C: \label{lem:connext_dds} C: \label{lem:connext_dds} \label{lem:connext_dds} C: \label{lem:connext_dds} \label{lem:connext_dds} C: \label{lem:connext_dds} \label{lem:connext_dds} C: \label{lem:connext_dds} \label{lem:connext_dds} \label{lem:connext_dds} \label{lem:connext_dds} C: \label{lem:connext_dds} \label{lem:connext_dds} \label{lem:connext_dds} \label{lem:connext_dds} C: \label{lem:connext_dds} \label{$