

Debugging Report

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Debugging Summary

The debugging tests consists of 3 steps:

1. Step 1: Run 1 pub, 1 sub on single machine on all machines
2. Step 2: Run 1 pub, 1 sub on separate machines in different pairs/combinations
3. Step 3: Run step 1 simultaneously

The following key words are of the same:

Machine 1 = nsq905ap = VM 1

Machine 2 = nsq906ap = VM 2

Machine 3 = nsq907ap = VM 3

Machine 4 = nsq908ap = VM 4

If a test has **Ended** then on the console it is shown that the test is complete by displaying the cursor for the console input.

If a test has **Continued** then within the console the same view has been shown as the beginning of the test. The tests will start and continue to look like the following:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
```

In all cases the publisher ends the tests as shown below:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

All data files are stored in the zip file named "Debugging Tests.zip".

Step 1 Summary

Machine	Publisher Status	Subscriber Status
1 (nsq905ap)	Ended	Continued
2 (nsq906ap)	Ended	Ended
3 (nsq907ap)	Ended	Ended
4 (nsq908ap)	Ended	Continued

As seen from the table above it seems that machines 2 and 3 can run the tests fine and in both cases the tests end. However, from initial inspection the first and last machines seem to have a common case of the tests continuing.

Step 2 Summary

Combination 1.1

	Machine 1 (Publisher)	Machine 2 (Subscriber)
Status	Ended	Continued

Combination 1.2

	Machine 2 (Publisher)	Machine 1 (Subscriber)
Status	Ended	Continued

Combination 2.1

	Machine 1 (Publisher)	Machine 3 (Subscriber)
Status	Ended	Continued

Combination 2.2

	Machine 3 (Publisher)	Machine 1 (Subscriber)
Status	Ended	Continued

Combination 3.1

	Machine 1 (Publisher)	Machine 4 (Subscriber)
Status	Ended	Continued

Combination 3.2

	Machine 4 (Publisher)	Machine 1 (Subscriber)
Status	Ended	Continued

Combination 4.1

	Machine 2 (Publisher)	Machine 3 (Subscriber)
Status	Ended	Continued

Combination 4.2

	Machine 3 (Publisher)	Machine 2 (Subscriber)
Status	Ended	Continued

Combination 5.1

	Machine 2 (Publisher)	Machine 4 (Subscriber)
Status	Ended	Ended

Combination 5.2

	Machine 4 (Publisher)	Machine 2 (Subscriber)
Status	Ended	Continued

Combination 6.1

	Machine 3 (Publisher)	Machine 4 (Subscriber)
Status	Ended	Continued

Combination 6.2

	Machine 3 (Publisher)	Machine 4 (Subscriber)
Status	Ended	Continued

Step 3 Summary

Combination 1

	Publisher	Subscriber
Machine 1	Ended	Ended
Machine 2	Ended	Continued

Combination 2

	Publisher	Subscriber
Machine 1	Ended	Ended
Machine 3	Ended	Continued

Combination 3

	Publisher	Subscriber
Machine 1	Ended	Ended
Machine 4	Ended	Ended

Combination 4

	Publisher	Subscriber
Machine 2	Ended	Ended
Machine 3	Ended	Ended

Combination 5

	Publisher	Subscriber
Machine 2	Ended	Ended
Machine 4	Ended	Ended

Combination 6

	Publisher	Subscriber
Machine 3	Ended	Continued
Machine 4	Ended	Ended

For more details about the tests read further.

Step 1: Run 1 pub, 1 sub on single machine on all machines

Here is the script I used for all the tests in step 1:

```
start cmd /k perfctest_java.bat -pub -dataLen 4096 -domain 2 -latencyCount  
10000 -numIter 10000000 -bestEffort -multicast
```

```
start cmd /k perfctest_java.bat -sub -dataLen 4096 -domain 2 -latencyCount  
10000 -numIter 10000000 -bestEffort -multicast -fileName sub1
```

Windows Machine 1 (nsq905ap):

Publisher Ended:

```
Using unkeyed Data.  
Transport Information:  
    Kind: Default (UDPv4) / Custom (Taken from QoS profile)  
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U  
P) ... For non-production use only.  
Expires on 10-jan-2020 See www.rti.com for more information.  
Waiting to discover 1 subscriber(s)...  
Waiting for subscribers announcement ...  
Publishing data...  
C:\real-rtiperftest\rtiperftest>
```

Subscriber Continued:

```
Using unkeyed Data.  
Transport Information:  
    Kind: Default (UDPv4) / Custom (Taken from QoS profile)  
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U  
P) ... For non-production use only.  
Expires on 10-jan-2020 See www.rti.com for more information.  
Waiting to discover 1 publishers ...  
Waiting for data...  
  
***** New data length is 4096
```

Windows Machine 2 (nsq906ap):

Publisher Ended:

```
Using unkeyed Data.  
Transport Information:  
    Kind: Default (UDPv4) / Custom (Taken from QoS profile)  
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U  
P) ... For non-production use only.  
Expires on 10-jan-2020 See www.rti.com for more information.  
Waiting to discover 1 subscriber(s)...  
Waiting for subscribers announcement ...  
Publishing data...  
C:\real-rtiperftest\rtiperftest>
```

Subscriber Ended:

```
Transport Information:  
    Kind: Default (UDPv4) / Custom (Taken from QoS profile)  
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U  
P) ... For non-production use only.  
Expires on 10-jan-2020 See www.rti.com for more information.  
Waiting to discover 1 publishers ...  
Waiting for data...  
  
***** New data length is 4096  
Length: 4096 Packets: 9824161 Packets/s(ave): 3216 Mbps(ave): 105.4 Lost  
: 175839  
C:\real-rtiperftest\rtiperftest>
```

Windows Machine 3 (nsq907ap):

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
Length: 4096 Packets: 6772835 Packets/s(ave): 2860 Mbps(ave): 93.7 Lost
: 3227165
C:\real-rtiperftest\rtiperftest>
```

Windows Machine 4 (nsq908ap):

Publisher Ended:

```
Using unkeyed Data.  
Transport Information:  
    Kind: Default (UDPv4) / Custom (Taken from QoS profile)  
RTI Connext DDS Nonprofit License issued to City University of London (CULONDON01-U  
P) ... For non-production use only.  
Expires on 10-jan-2020 See www.rti.com for more information.  
Waiting to discover 1 subscriber(s)...  
Waiting for subscribers announcement ...  
Publishing data...  
C:\real-rtiperftest\rtiperftest>
```

Subscriber Continued:

```
Using unkeyed Data.  
Transport Information:  
    Kind: Default (UDPv4) / Custom (Taken from QoS profile)  
RTI Connext DDS Nonprofit License issued to City University of London (CULONDON01-U  
P) ... For non-production use only.  
Expires on 10-jan-2020 See www.rti.com for more information.  
Waiting to discover 1 publishers ...  
Waiting for data...  
  
***** New data length is 4096
```

Step 2: Run 1 pub, 1 sub on separate machines in different pairs/combinations

Here is the script for the subscriber used in all tests in step 2:

```
start cmd /k perfctest_java.bat -sub -dataLen 4096 -domain 2 -latencyCount  
10000 -numIter 10000000 -bestEffort -multicast -fileName sub1
```

Here is the script for the publisher used in all tests in step 2:

```
start cmd /k perfctest_java.bat -pub -dataLen 4096 -domain 2 -latencyCount  
10000 -numIter 10000000 -bestEffort -multicast -fileName sub1
```

Combination 1: VM 1 + VM 2 (nsq905ap + nsq906ap):

Combination 1.1

Publisher: VM 1

Subscriber: VM 2

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Continued:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
```

Combination 1.2

Publisher: VM 2

Subscriber: VM 1

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Continued:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
```

Combination 2: VM 1 + VM 3 (nsq905ap + nsq907ap):

Combination 2.1

Publisher: VM 1

Subscriber: VM 3

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connext DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Continued:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connext DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
```

Combination 2.2

Publisher: VM 3

Subscriber: VM 1

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connext DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Continued:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connext DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
```


Combination 3: VM 1 + VM 4 (nsq905ap + nsq908ap):

Combination 3.1

Publisher: VM 1

Subscriber: VM 4

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Continued:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
```

Combination 3.2

Publisher: VM 4

Subscriber: VM 1

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Continued:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
```

Combination 4: VM 2 + VM 3 (nsq906ap + nsq907ap):

Combination 4.1

Publisher: VM 2

Subscriber: VM 3

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Continued:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
```

Combination 4.2

Publisher: VM 3

Subscriber: VM 2

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Continued:

```
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
```

Combination 5: VM 2 + VM 4 (nsq906ap + nsq908ap):

Combination 5.1

Publisher: VM 2

Subscriber: VM 4

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connext DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Ended:

```
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connext DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
Length: 4096 Packets: 4704257 Packets/s(ave): 3374 Mbps(ave): 110.6 Lost
: 5295743
C:\real-rtiperftest\rtiperftest>
```

Combination 5.2

Publisher: VM 4

Subscriber: VM 2

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connext DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Continued:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connext DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
```

Combination 6: VM 3 + VM 4 (nsq907ap + nsq908ap):

Combination 6.1

Publisher: VM 3

Subscriber: VM 4

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Continued:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
```

Combination 6.2

Publisher: VM 4

Subscriber: VM 3

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Continued:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
```

Step 3: Run step 1 simultaneously

In this step 1 pub, 1 sub would be run on one machine while another machine is also running the same type of test just with a different domain.

Here is the script I used for all the tests in step 3:

```
start cmd /k perftest_java.bat -pub -dataLen 4096 -domain 2 -  
latencyCount 10000 -numIter 10000000 -bestEffort -multicast  
  
start cmd /k perftest_java.bat -sub -dataLen 4096 -domain 2 -  
latencyCount 10000 -numIter 10000000 -bestEffort -multicast -  
fileName sub1
```

Combination 1: VM 1 + VM 2 (nsq905ap + nsq906ap):

Machine 1

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Ended:

```
C:\Windows\system32\cmd.exe
Using unkeyed Data.
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
Length: 4096 Packets: 9764687 Packets/s(ave): 5134 Mbps(ave): 168.2 Lost
: 235313
C:\real-rtiperftest\rtiperftest>
```

Machine 2

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Continued:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
```

Combination 2: VM 1 + VM 3 (nsq905ap + nsq907ap):

Machine 1

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Ended:

```
Using unkeyed Data.
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
Length: 4096  Packets: 9929904  Packets/s(ave): 5790  Mbps(ave): 189.7  Lost
: 70096
C:\real-rtiperftest\rtiperftest>
```

Machine 3

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Continued:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
```


Combination 3: VM 1 + VM 4 (nsq905ap + nsq908ap):

Machine 1

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Ended:

```
Using unkeyed Data.
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
Length: 4096 Packets: 8741860 Packets/s(ave): 4270 Mbps(ave): 139.9 Lost
: 1258140
C:\real-rtiperftest\rtiperftest>
```

Machine 4

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
Length: 4096 Packets: 6052731 Packets/s(ave): 2936 Mbps(ave): 96.2 Lost
: 3947269
C:\real-rtiperftest\rtiperftest>
```


Combination 4: VM 2 + VM 3 (nsq906ap + nsq907ap):

Machine 2

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Ended:

```
Using unkeyed Data.
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
Length: 4096 Packets: 4575939 Packets/s(ave): 2376 Mbps(ave): 77.9 Lost
: 5424061
C:\real-rtiperftest\rtiperftest>_
```

Machine 3

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Ended:

```
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connex DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
Length: 4096 Packets: 5053561 Packets/s(ave): 2539 Mbps(ave): 83.2 Lost
: 4946439
C:\real-rtiperftest\rtiperftest>_
```

Combination 5: VM 2 + VM 4 (nsq906ap + nsq908ap):

Machine 2

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
Length: 4096 Packets: 6754391 Packets/s(ave): 3346 Mbps(ave): 109.7 Lost
: 3245609
C:\real-rtiperftest\rtiperftest>
```

Machine 4

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
Length: 4096 Packets: 8059782 Packets/s(ave): 3784 Mbps(ave): 124.0 Lost
: 1940218
C:\real-rtiperftest\rtiperftest>
```

Combination 6: VM 3 + VM 4 (nsq907ap + nsq908ap):

Machine 3

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Continued:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
```

Machine 4

Publisher Ended:

```
Transport Information:
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 subscriber(s)...
Waiting for subscribers announcement ...
Publishing data...
C:\real-rtiperftest\rtiperftest>
```

Subscriber Ended:

```
  Kind: Default (UDPv4) / Custom (Taken from QoS profile)
RTI Connexx DDS Nonprofit License issued to City University of London (CULONDON01-U
P) ... For non-production use only.
Expires on 10-jan-2020 See www.rti.com for more information.
Waiting to discover 1 publishers ...
Waiting for data...

***** New data length is 4096
Length: 4096  Packets: 9458647  Packets/s(ave): 4377  Mbps(ave): 143.4  Lost
: 541353
C:\real-rtiperftest\rtiperftest>
```