

# IxChariot

## Summary - C:\Users\Brian Dipert\Documents\My Dropbox\AnandTech\Powerline networking\IxChariot\NETGEAR1901\UDP\1 to 2 (Quad)\1to2UDPQuad.tst

|                             |   |
|-----------------------------|---|
| <b>Console version</b>      | 7.10 SP4  |
| <b>Console build level</b>  | 207   |
| <b>Console product type</b> | IxChariot Eval  |
| <b>Filename</b>             | C:\Users\Brian Dipert\Documents\My Dropbox\AnandTech\Powerline networking\IxChariot\NETGEAR1901\UDP\1 to 2 (Quad)\1to2UDPQuad.tst |
| <b>Run start time</b>       | Monday, August 08, 2011, 7:54:56 AM   |
| <b>Run end time</b>         | Monday, August 08, 2011, 7:54:58 AM   |
| <b>Elapsed time</b>         | 00:00:02  |
| <b>How the test ended</b>   | Ran to completion   |
| <b>Number of pairs</b>      | 4   |

# Run Options

|   |                            |
|---|----------------------------|
| End type  | Run until any pair ends    |
| Reporting type  | Real-time                  |
| Automatically poll endpoints                          | Yes                        |
| Polling interval (minutes)                            | 1                          |
| Stop run upon initialization failure                  | Yes                        |
| Connect timeout during test (minutes)                 | 0                          |
| Stop test after this many running pairs fail          | 1                          |
| Collect endpoint CPU utilization                      | No                         |
| Collect TCP statistics                                | No                         |
| Allow pair reinitialization for setup                 | No                         |
| Maximum number of setup reinitializations             | 3                          |
| Setup reinitialization wait interval (milliseconds)   | 10                         |
| Allow pair reinitialization at runtime                | No                         |
| Maximum number of runtime reinitializations           | 3                          |
| Runtime reinitialization wait interval (milliseconds) | 10                         |
| Validate data upon receipt                            | No                         |
| Use a new seed for random variables on every run      | Yes                        |
| Datagram window size (bytes)                          | 1500                       |
| Datagram retransmission timeout (milliseconds)        | 200                        |
| Datagram number of retransmits before aborting        | 50                         |
| Receive Timeout (milliseconds)                        | 10000                      |
| Time To Live (Hops)                                   | 32                         |
| Low sender jitter                                     | No                         |
| Use RTP extended headers                              | No                         |
| Enable Ixia hardware timestamps                       | Yes                        |
| Clock synchronization                                 | 'Endpoint synchronization' |
| Console Service Quality                               |                            |
| Endpoint Service Quality                              |                            |
| Number of Overlapped Sends                            | 4                          |

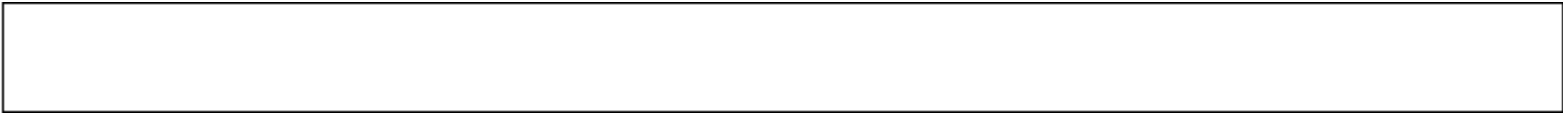
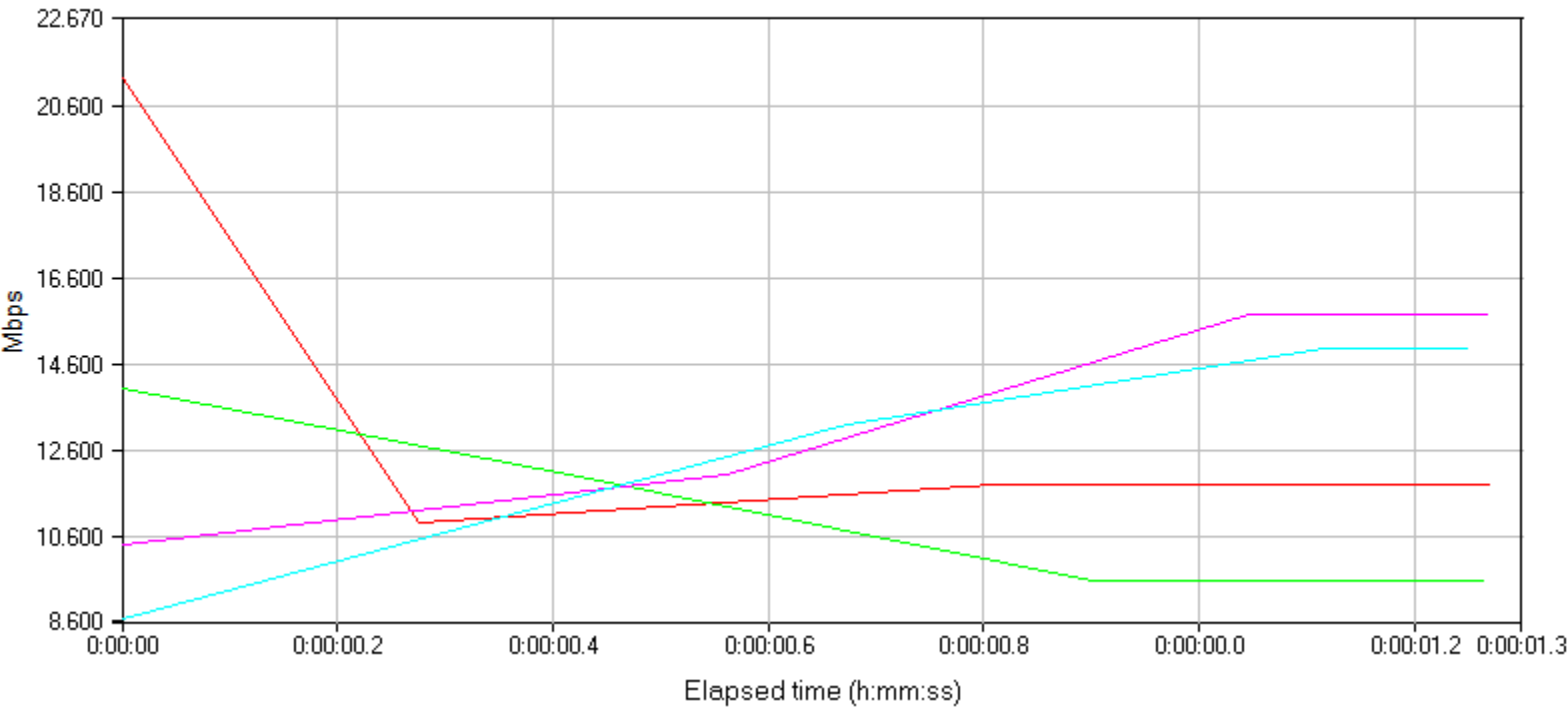
# Test Execution (Endpoint 1 to Endpoint 2)

| Group/<br>Pair | Endpoint<br>1 | Endpoint<br>2 | Network<br>Protocol | Endpoint 1 Service<br>Quality | Endpoint 2 Service<br>Quality | Script/Stream<br>Name |
|----------------|---------------|---------------|---------------------|-------------------------------|-------------------------------|-----------------------|
| All Pairs      |               |               |                     |                               |                               |                       |
| Pair 1         | 10.0.1.140    | 10.0.1.141    | UDP                 |                               |                               | UDP_Throughput.scr    |
| Pair 2         | 10.0.1.140    | 10.0.1.141    | UDP                 |                               |                               | UDP_Throughput.scr    |
| Pair 3         | 10.0.1.140    | 10.0.1.141    | UDP                 |                               |                               | UDP_Throughput.scr    |
| Pair 4         | 10.0.1.140    | 10.0.1.141    | UDP                 |                               |                               | UDP_Throughput.scr    |

## Throughput

| Group/<br>Pair | Average<br>(Mbps) | Minimum<br>(Mbps) | Maximum<br>(Mbps) | Throughput 95%<br>Confidence Interval | Measured Time<br>(secs) | Relative<br>Precision |
|----------------|-------------------|-------------------|-------------------|---------------------------------------|-------------------------|-----------------------|
| All Pairs      | 48.051            | 8.665             | 21.236            |                                       |                         |                       |
| Pair 1         | 13.471            | 10.916            | 21.236            | 10.584                                | 1.272                   | 78.573                |
| Pair 2         | 11.975            | 9.536             | 14.038            | 4.246                                 | 1.266                   | 35.455                |
| Pair 3         | 11.966            | 10.410            | 15.731            | 12.511                                | 1.268                   | 104.559               |
| Pair 4         | 10.932            | 8.665             | 14.954            | 17.742                                | 1.249                   | 162.297               |
| Totals:        | 48.051            | 8.665             | 21.236            |                                       |                         |                       |

### Throughput



# Lost Data

| Group/<br>Pair | Bytes Sent<br>by E1 | Bytes<br>Received E2<br>(Streaming) | Bytes Lost<br>from E1 to<br>E2 | Percent<br>Bytes<br>Lost E1<br>to E2 | E1<br>Throughput<br>(Mbps) | Maximum<br>Consecutive<br>Lost<br>Datagrams | Measured<br>Time (secs) | Relative<br>Precision |
|----------------|---------------------|-------------------------------------|--------------------------------|--------------------------------------|----------------------------|---|-------------------------|-----------------------|
| All<br>Pairs   | 292,000,000         | 7,640,180                           | 284,359,820                    | 97.383                               |                            | n/a   |                         |                       |
| Pair 1         | 73,000,000          | 2,141,820                           | 70,858,180                     | 97.066                               | 459.119                    | n/a   | 1.272                   | 78.573                |
| Pair 2         | 73,000,000          | 1,895,080                           | 71,104,920                     | 97.404                               | 461.295                    | n/a   | 1.266                   | 35.455                |
| Pair 3         | 73,000,000          | 1,896,540                           | 71,103,460                     | 97.402                               | 460.568                    | n/a   | 1.268                   | 104.559               |
| Pair 4         | 73,000,000          | 1,706,740                           | 71,293,260                     | 97.662                               | 467.574                    | n/a   | 1.249                   | 162.297               |
| Totals:        | 292,000,000         | 7,640,180                           | 284,359,820                    | 97.383                               |                            | n/a   |                         |                       |

## Datagram (Endpoint 1)

| Group/<br>Pair | Total Datagrams<br>Sent by E1 | Duplicate<br>Datagrams Sent by<br>E1 | Total Datagrams<br>Received by E1 | Duplicate Datagrams<br>Received by E1 | Datagrams Lost,<br>E1 to E2 |
|----------------|-------------------------------|--------------------------------------|-----------------------------------|---------------------------------------|-----------------------------|
| All Pairs      | 200,000                       | n/a                                  | n/a                               | n/a                                   | 194,767                     |
| Pair 1         | 50,000                        | n/a                                  | n/a                               | n/a                                   | 48,533                      |
| Pair 2         | 50,000                        | n/a                                  | n/a                               | n/a                                   | 48,702                      |
| Pair 3         | 50,000                        | n/a                                  | n/a                               | n/a                                   | 48,701                      |
| Pair 4         | 50,000                        | n/a                                  | n/a                               | n/a                                   | 48,831                      |
| Totals:        | 200,000                       | n/a                                  | n/a                               | n/a                                   | 194,767                     |

## Datagram (Endpoint 2)

| Group/<br>Pair | Total<br>Datagrams Sent<br>by E2 | Duplicate<br>Datagrams Sent<br>by E2 | Total Datagrams<br>Received by E2 | Duplicate<br>Datagrams<br>Received by E2 | Datagrams<br>Lost, E2 to E1 | Datagrams<br>Out of Order |
|----------------|----------------------------------|--------------------------------------|-----------------------------------|--|-----------------------------|---------------------------|
| All<br>Pairs   | n/a                              | n/a                                  | 5,233                             | n/a                                      | n/a                         | n/a                       |
| Pair 1         | n/a                              | n/a                                  | 1,467                             | n/a                                      | n/a                         | n/a                       |
| Pair 2         | n/a                              | n/a                                  | 1,298                             | n/a                                      | n/a                         | n/a                       |
| Pair 3         | n/a                              | n/a                                  | 1,299                             | n/a                                      | n/a                         | n/a                       |
| Pair 4         | n/a                              | n/a                                  | 1,169                             | n/a                                      | n/a                         | n/a                       |
| Totals:        | n/a                              | n/a                                  | 5,233                             | n/a                                      | n/a                         | n/a                       |

