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U2080912

Write-Up

**SUMMARY**

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| **Message Size (bytes)** | **Number of Probes** | **Average Round Trip Time (ms)** |
| 1 | 10 | 0.0808 |
| 100 | 10 | 0.0717 |
| 200 | 10 | 0.0893 |
| 400 | 10 | 0.0722 |
| 800 | 10 | 0.1015 |
| 1K | 10 | 0.1139 |
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| **Message Size (bytes)** | **Number of Probes** | **Server Delay (secs)** | **Average Round Trip Time (ms)** |
| 1 | 10 | 1 | 1001.251685 |
| 100 | 10 | 1 | 1001.2662 |
| 200 | 10 | 1 | 1001.253027 |
| 400 | 10 | 1 | 1001.269092 |
| 800 | 10 | 1 | 1001.314233 |
| 1K | 10 | 1 | 1001.325195 |
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|  | **Message Size (bytes)** | **Number of Probes** | **Average Throughput (KB/s)** |  |  |  |  |  |  |  |  |
|  | 1K | 10 | 12,676 |  |  |  |  |  |  |  |  |
|  | 2K | 10 | 22,559 |  |  |  |  |  |  |  |  |
|  | 4K | 10 | 37,377.03 |  |  |  |  |  |  |  |  |
|  | 8K | 10 | 65,369.61 |  |  |  |  |  |  |  |  |
|  | 16K | 10 | 113,168.84 |  |  |  |  |  |  |  |  |
|  | 32K | 10 | 145,170.62 |  |  |  |  |  |  |  |  |
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| **Message Size (bytes)** | **Number of Probes** | **Server Delay (secs)** | **Average Throughput (KB/s)** |
| 1K | 10 | 1 | 0.979292713 |
| 2K | 10 | 1 | 1.954507735 |
| 4K | 10 | 1 | 3.905137572 |
| 8K | 10 | 1 | 7.806871306 |
| 16K | 10 | 1 | 15.60742028 |
| 32K | 10 | 1 | 31.20603198 |
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We can see that a delay of one second greatly increased our round trip times and decreased our throughput significantly. There are no particular values for which I found my server or client programs to not function properly. RTT and throughput trends are what was to be expected. Possible improvements for this experiment would be to test with varying increments of probes and more delays at different times of the day to see how these factors further effect RTT and tput.