**Task 2:**

**140MB is my download speed.**

**Task 3b:**

**Without -R flag**

dakshamarutinagre@Dakshas-MacBook-Pro ~ % **iperf3 -p 5001 -P 1 -c iu-stor01.crest.iu.edu**

Connecting to host iu-stor01.crest.iu.edu, port 5001

[ 7] local 10.0.0.58 port 50612 connected to 156.56.5.143 port 5001

[ ID] Interval Transfer Bitrate

[ 7] 0.00-1.00 sec 701 KBytes 5.72 Mbits/sec

[ 7] 1.00-2.00 sec 394 KBytes 3.24 Mbits/sec

[ 7] 2.00-3.00 sec 713 KBytes 5.83 Mbits/sec

[ 7] 3.00-4.00 sec 710 KBytes 5.82 Mbits/sec

[ 7] 4.00-5.00 sec 758 KBytes 6.22 Mbits/sec

[ 7] 5.00-6.00 sec 717 KBytes 5.87 Mbits/sec

[ 7] 6.00-7.01 sec 677 KBytes 5.52 Mbits/sec

[ 7] 7.01-8.00 sec 672 KBytes 5.52 Mbits/sec

[ 7] 8.00-9.00 sec 720 KBytes 5.90 Mbits/sec

[ 7] 9.00-10.00 sec 699 KBytes 5.72 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ ID] Interval Transfer Bitrate

[ 7] 0.00-10.00 sec 6.60 MBytes 5.54 Mbits/sec sender

[ 7] 0.00-10.01 sec 6.48 MBytes 5.43 Mbits/sec receiver

iperf Done.

dakshamarutinagre@Dakshas-MacBook-Pro ~ %

dakshamarutinagre@Dakshas-MacBook-Pro ~ % **iperf3 -p 5001 -P 2 -c iu-stor01.crest.iu.edu**

Connecting to host iu-stor01.crest.iu.edu, port 5001

[ 7] local 10.0.0.58 port 50645 connected to 156.56.5.143 port 5001

[ 9] local 10.0.0.58 port 50646 connected to 156.56.5.143 port 5001

[ ID] Interval Transfer Bitrate

[ 7] 0.00-1.00 sec 458 KBytes 3.74 Mbits/sec

[ 9] 0.00-1.00 sec 513 KBytes 4.19 Mbits/sec

[SUM] 0.00-1.00 sec 971 KBytes 7.93 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 1.00-2.00 sec 349 KBytes 2.87 Mbits/sec

[ 9] 1.00-2.00 sec 81.2 KBytes 667 Kbits/sec

[SUM] 1.00-2.00 sec 430 KBytes 3.53 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 2.00-3.00 sec 472 KBytes 3.86 Mbits/sec

[ 9] 2.00-3.00 sec 262 KBytes 2.14 Mbits/sec

[SUM] 2.00-3.00 sec 734 KBytes 6.01 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 3.00-4.00 sec 406 KBytes 3.33 Mbits/sec

[ 9] 3.00-4.00 sec 267 KBytes 2.19 Mbits/sec

[SUM] 3.00-4.00 sec 673 KBytes 5.52 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 4.00-5.00 sec 403 KBytes 3.30 Mbits/sec

[ 9] 4.00-5.00 sec 300 KBytes 2.46 Mbits/sec

[SUM] 4.00-5.00 sec 703 KBytes 5.76 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 5.00-6.00 sec 313 KBytes 2.56 Mbits/sec

[ 9] 5.00-6.00 sec 433 KBytes 3.54 Mbits/sec

[SUM] 5.00-6.00 sec 745 KBytes 6.10 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 6.00-7.00 sec 345 KBytes 2.83 Mbits/sec

[ 9] 6.00-7.00 sec 380 KBytes 3.11 Mbits/sec

[SUM] 6.00-7.00 sec 725 KBytes 5.94 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 7.00-8.00 sec 424 KBytes 3.48 Mbits/sec

[ 9] 7.00-8.00 sec 277 KBytes 2.27 Mbits/sec

[SUM] 7.00-8.00 sec 701 KBytes 5.75 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 8.00-9.00 sec 212 KBytes 1.74 Mbits/sec

[ 9] 8.00-9.00 sec 512 KBytes 4.19 Mbits/sec

[SUM] 8.00-9.00 sec 724 KBytes 5.93 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 9.00-10.00 sec 368 KBytes 3.01 Mbits/sec

[ 9] 9.00-10.00 sec 342 KBytes 2.80 Mbits/sec

[SUM] 9.00-10.00 sec 710 KBytes 5.81 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ ID] Interval Transfer Bitrate

[ 7] 0.00-10.00 sec 3.66 MBytes 3.07 Mbits/sec sender

[ 7] 0.00-10.02 sec 3.54 MBytes 2.96 Mbits/sec receiver

[ 9] 0.00-10.00 sec 3.29 MBytes 2.76 Mbits/sec sender

[ 9] 0.00-10.02 sec 3.19 MBytes 2.67 Mbits/sec receiver

[SUM] 0.00-10.00 sec 6.95 MBytes 5.83 Mbits/sec sender

[SUM] 0.00-10.02 sec 6.73 MBytes 5.63 Mbits/sec receiver

iperf Done.

dakshamarutinagre@Dakshas-MacBook-Pro ~ %

dakshamarutinagre@Dakshas-MacBook-Pro ~ % **iperf3 -p 5001 -P 3 -c iu-stor01.crest.iu.edu**

Connecting to host iu-stor01.crest.iu.edu, port 5001

[ 7] local 10.0.0.58 port 50652 connected to 156.56.5.143 port 5001

[ 9] local 10.0.0.58 port 50653 connected to 156.56.5.143 port 5001

[ 11] local 10.0.0.58 port 50654 connected to 156.56.5.143 port 5001

[ ID] Interval Transfer Bitrate

[ 7] 0.00-1.00 sec 296 KBytes 2.43 Mbits/sec

[ 9] 0.00-1.00 sec 710 KBytes 5.82 Mbits/sec

[ 11] 0.00-1.00 sec 200 KBytes 1.64 Mbits/sec

[SUM] 0.00-1.00 sec 1.18 MBytes 9.88 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 1.00-2.00 sec 354 KBytes 2.90 Mbits/sec

[ 9] 1.00-2.00 sec 0.00 Bytes 0.00 bits/sec

[ 11] 1.00-2.00 sec 21.2 KBytes 174 Kbits/sec

[SUM] 1.00-2.00 sec 375 KBytes 3.07 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 2.00-3.00 sec 406 KBytes 3.32 Mbits/sec

[ 9] 2.00-3.00 sec 236 KBytes 1.94 Mbits/sec

[ 11] 2.00-3.00 sec 113 KBytes 926 Kbits/sec

[SUM] 2.00-3.00 sec 755 KBytes 6.19 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 3.00-4.00 sec 182 KBytes 1.49 Mbits/sec

[ 9] 3.00-4.00 sec 300 KBytes 2.46 Mbits/sec

[ 11] 3.00-4.00 sec 236 KBytes 1.93 Mbits/sec

[SUM] 3.00-4.00 sec 718 KBytes 5.88 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 4.00-5.00 sec 281 KBytes 2.31 Mbits/sec

[ 9] 4.00-5.00 sec 151 KBytes 1.24 Mbits/sec

[ 11] 4.00-5.00 sec 274 KBytes 2.25 Mbits/sec

[SUM] 4.00-5.00 sec 707 KBytes 5.80 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 5.00-6.00 sec 314 KBytes 2.57 Mbits/sec

[ 9] 5.00-6.00 sec 188 KBytes 1.54 Mbits/sec

[ 11] 5.00-6.00 sec 233 KBytes 1.91 Mbits/sec

[SUM] 5.00-6.00 sec 735 KBytes 6.02 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 6.00-7.00 sec 202 KBytes 1.66 Mbits/sec

[ 9] 6.00-7.00 sec 168 KBytes 1.38 Mbits/sec

[ 11] 6.00-7.00 sec 308 KBytes 2.53 Mbits/sec

[SUM] 6.00-7.00 sec 679 KBytes 5.56 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 7.00-8.00 sec 195 KBytes 1.60 Mbits/sec

[ 9] 7.00-8.00 sec 191 KBytes 1.56 Mbits/sec

[ 11] 7.00-8.00 sec 352 KBytes 2.88 Mbits/sec

[SUM] 7.00-8.00 sec 738 KBytes 6.04 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 8.00-9.00 sec 204 KBytes 1.67 Mbits/sec

[ 9] 8.00-9.00 sec 205 KBytes 1.68 Mbits/sec

[ 11] 8.00-9.00 sec 314 KBytes 2.58 Mbits/sec

[SUM] 8.00-9.00 sec 723 KBytes 5.93 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 9.00-10.00 sec 260 KBytes 2.13 Mbits/sec

[ 9] 9.00-10.00 sec 182 KBytes 1.49 Mbits/sec

[ 11] 9.00-10.00 sec 290 KBytes 2.37 Mbits/sec

[SUM] 9.00-10.00 sec 732 KBytes 6.00 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ ID] Interval Transfer Bitrate

[ 7] 0.00-10.00 sec 2.63 MBytes 2.21 Mbits/sec sender

[ 7] 0.00-10.01 sec 2.51 MBytes 2.10 Mbits/sec receiver

[ 9] 0.00-10.00 sec 2.28 MBytes 1.91 Mbits/sec sender

[ 9] 0.00-10.01 sec 2.15 MBytes 1.80 Mbits/sec receiver

[ 11] 0.00-10.00 sec 2.29 MBytes 1.92 Mbits/sec sender

[ 11] 0.00-10.01 sec 2.17 MBytes 1.82 Mbits/sec receiver

[SUM] 0.00-10.00 sec 7.20 MBytes 6.04 Mbits/sec sender

[SUM] 0.00-10.01 sec 6.83 MBytes 5.72 Mbits/sec receiver

iperf Done.

dakshamarutinagre@Dakshas-MacBook-Pro ~ %

dakshamarutinagre@Dakshas-MacBook-Pro ~ % **iperf3 -p 5001 -P 4 -c iu-stor01.crest.iu.edu**

Connecting to host iu-stor01.crest.iu.edu, port 5001

[ 7] local 10.0.0.58 port 50658 connected to 156.56.5.143 port 5001

[ 9] local 10.0.0.58 port 50659 connected to 156.56.5.143 port 5001

[ 11] local 10.0.0.58 port 50660 connected to 156.56.5.143 port 5001

[ 13] local 10.0.0.58 port 50661 connected to 156.56.5.143 port 5001

[ ID] Interval Transfer Bitrate

[ 7] 0.00-1.01 sec 449 KBytes 3.66 Mbits/sec

[ 9] 0.00-1.01 sec 250 KBytes 2.03 Mbits/sec

[ 11] 0.00-1.01 sec 207 KBytes 1.69 Mbits/sec

[ 13] 0.00-1.01 sec 168 KBytes 1.37 Mbits/sec

[SUM] 0.00-1.01 sec 1.05 MBytes 8.75 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 1.01-2.00 sec 81.6 KBytes 672 Kbits/sec

[ 9] 1.01-2.00 sec 62.2 KBytes 512 Kbits/sec

[ 11] 1.01-2.00 sec 110 KBytes 908 Kbits/sec

[ 13] 1.01-2.00 sec 239 KBytes 1.97 Mbits/sec

[SUM] 1.01-2.00 sec 493 KBytes 4.06 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 2.00-3.00 sec 100 KBytes 822 Kbits/sec

[ 9] 2.00-3.00 sec 164 KBytes 1.34 Mbits/sec

[ 11] 2.00-3.00 sec 201 KBytes 1.64 Mbits/sec

[ 13] 2.00-3.00 sec 255 KBytes 2.08 Mbits/sec

[SUM] 2.00-3.00 sec 720 KBytes 5.89 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 3.00-4.00 sec 237 KBytes 1.94 Mbits/sec

[ 9] 3.00-4.00 sec 123 KBytes 1.01 Mbits/sec

[ 11] 3.00-4.00 sec 189 KBytes 1.55 Mbits/sec

[ 13] 3.00-4.00 sec 205 KBytes 1.68 Mbits/sec

[SUM] 3.00-4.00 sec 755 KBytes 6.18 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 4.00-5.00 sec 203 KBytes 1.66 Mbits/sec

[ 9] 4.00-5.00 sec 124 KBytes 1.02 Mbits/sec

[ 11] 4.00-5.00 sec 105 KBytes 857 Kbits/sec

[ 13] 4.00-5.00 sec 281 KBytes 2.31 Mbits/sec

[SUM] 4.00-5.00 sec 714 KBytes 5.85 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 5.00-6.00 sec 205 KBytes 1.68 Mbits/sec

[ 9] 5.00-6.00 sec 144 KBytes 1.18 Mbits/sec

[ 11] 5.00-6.00 sec 195 KBytes 1.60 Mbits/sec

[ 13] 5.00-6.00 sec 163 KBytes 1.33 Mbits/sec

[SUM] 5.00-6.00 sec 707 KBytes 5.80 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 6.00-7.00 sec 138 KBytes 1.13 Mbits/sec

[ 9] 6.00-7.00 sec 232 KBytes 1.90 Mbits/sec

[ 11] 6.00-7.00 sec 127 KBytes 1.04 Mbits/sec

[ 13] 6.00-7.00 sec 225 KBytes 1.84 Mbits/sec

[SUM] 6.00-7.00 sec 722 KBytes 5.90 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 7.00-8.00 sec 101 KBytes 828 Kbits/sec

[ 9] 7.00-8.00 sec 124 KBytes 1.02 Mbits/sec

[ 11] 7.00-8.00 sec 197 KBytes 1.61 Mbits/sec

[ 13] 7.00-8.00 sec 297 KBytes 2.44 Mbits/sec

[SUM] 7.00-8.00 sec 719 KBytes 5.90 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 8.00-9.00 sec 201 KBytes 1.64 Mbits/sec

[ 9] 8.00-9.00 sec 59.4 KBytes 486 Kbits/sec

[ 11] 8.00-9.00 sec 130 KBytes 1.06 Mbits/sec

[ 13] 8.00-9.00 sec 334 KBytes 2.73 Mbits/sec

[SUM] 8.00-9.00 sec 724 KBytes 5.92 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 9.00-10.00 sec 245 KBytes 2.01 Mbits/sec

[ 9] 9.00-10.00 sec 102 KBytes 834 Kbits/sec

[ 11] 9.00-10.00 sec 160 KBytes 1.31 Mbits/sec

[ 13] 9.00-10.00 sec 161 KBytes 1.32 Mbits/sec

[SUM] 9.00-10.00 sec 668 KBytes 5.47 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ ID] Interval Transfer Bitrate

[ 7] 0.00-10.00 sec 1.92 MBytes 1.61 Mbits/sec sender

[ 7] 0.00-10.01 sec 1.80 MBytes 1.51 Mbits/sec receiver

[ 9] 0.00-10.00 sec 1.35 MBytes 1.13 Mbits/sec sender

[ 9] 0.00-10.01 sec 1.23 MBytes 1.03 Mbits/sec receiver

[ 11] 0.00-10.00 sec 1.58 MBytes 1.33 Mbits/sec sender

[ 11] 0.00-10.01 sec 1.46 MBytes 1.22 Mbits/sec receiver

[ 13] 0.00-10.00 sec 2.27 MBytes 1.91 Mbits/sec sender

[ 13] 0.00-10.01 sec 2.15 MBytes 1.80 Mbits/sec receiver

[SUM] 0.00-10.00 sec 7.12 MBytes 5.97 Mbits/sec sender

[SUM] 0.00-10.01 sec 6.64 MBytes 5.56 Mbits/sec receiver

iperf Done.

dakshamarutinagre@Dakshas-MacBook-Pro ~ %

dakshamarutinagre@Dakshas-MacBook-Pro ~ % **iperf3 -p 5001 -P 5 -c iu-stor01.crest.iu.edu**

Connecting to host iu-stor01.crest.iu.edu, port 5001

[ 7] local 10.0.0.58 port 50664 connected to 156.56.5.143 port 5001

[ 9] local 10.0.0.58 port 50665 connected to 156.56.5.143 port 5001

[ 11] local 10.0.0.58 port 50666 connected to 156.56.5.143 port 5001

[ 13] local 10.0.0.58 port 50667 connected to 156.56.5.143 port 5001

[ 15] local 10.0.0.58 port 50668 connected to 156.56.5.143 port 5001

[ ID] Interval Transfer Bitrate

[ 7] 0.00-1.00 sec 261 KBytes 2.14 Mbits/sec

[ 9] 0.00-1.00 sec 304 KBytes 2.49 Mbits/sec

[ 11] 0.00-1.00 sec 186 KBytes 1.52 Mbits/sec

[ 13] 0.00-1.00 sec 178 KBytes 1.46 Mbits/sec

[ 15] 0.00-1.00 sec 194 KBytes 1.59 Mbits/sec

[SUM] 0.00-1.00 sec 1.10 MBytes 9.20 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 1.00-2.00 sec 383 KBytes 3.14 Mbits/sec

[ 9] 1.00-2.00 sec 104 KBytes 848 Kbits/sec

[ 11] 1.00-2.00 sec 90.5 KBytes 741 Kbits/sec

[ 13] 1.00-2.00 sec 118 KBytes 967 Kbits/sec

[ 15] 1.00-2.00 sec 90.5 KBytes 741 Kbits/sec

[SUM] 1.00-2.00 sec 786 KBytes 6.43 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 2.00-3.00 sec 264 KBytes 2.17 Mbits/sec

[ 9] 2.00-3.00 sec 45.2 KBytes 371 Kbits/sec

[ 11] 2.00-3.00 sec 214 KBytes 1.75 Mbits/sec

[ 13] 2.00-3.00 sec 151 KBytes 1.24 Mbits/sec

[ 15] 2.00-3.00 sec 90.5 KBytes 742 Kbits/sec

[SUM] 2.00-3.00 sec 765 KBytes 6.27 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 3.00-4.00 sec 112 KBytes 915 Kbits/sec

[ 9] 3.00-4.00 sec 249 KBytes 2.04 Mbits/sec

[ 11] 3.00-4.00 sec 109 KBytes 892 Kbits/sec

[ 13] 3.00-4.00 sec 133 KBytes 1.09 Mbits/sec

[ 15] 3.00-4.00 sec 113 KBytes 927 Kbits/sec

[SUM] 3.00-4.00 sec 716 KBytes 5.86 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 4.00-5.00 sec 280 KBytes 2.29 Mbits/sec

[ 9] 4.00-5.00 sec 170 KBytes 1.39 Mbits/sec

[ 11] 4.00-5.00 sec 89.1 KBytes 730 Kbits/sec

[ 13] 4.00-5.00 sec 89.1 KBytes 730 Kbits/sec

[ 15] 4.00-5.00 sec 87.7 KBytes 719 Kbits/sec

[SUM] 4.00-5.00 sec 716 KBytes 5.86 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 5.00-6.00 sec 260 KBytes 2.13 Mbits/sec

[ 9] 5.00-6.00 sec 144 KBytes 1.18 Mbits/sec

[ 11] 5.00-6.00 sec 103 KBytes 845 Kbits/sec

[ 13] 5.00-6.00 sec 150 KBytes 1.23 Mbits/sec

[ 15] 5.00-6.00 sec 48.1 KBytes 394 Kbits/sec

[SUM] 5.00-6.00 sec 706 KBytes 5.78 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 6.00-7.00 sec 130 KBytes 1.06 Mbits/sec

[ 9] 6.00-7.00 sec 103 KBytes 844 Kbits/sec

[ 11] 6.00-7.00 sec 143 KBytes 1.17 Mbits/sec

[ 13] 6.00-7.00 sec 165 KBytes 1.35 Mbits/sec

[ 15] 6.00-7.00 sec 187 KBytes 1.53 Mbits/sec

[SUM] 6.00-7.00 sec 728 KBytes 5.96 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 7.00-8.00 sec 144 KBytes 1.18 Mbits/sec

[ 9] 7.00-8.00 sec 147 KBytes 1.20 Mbits/sec

[ 11] 7.00-8.00 sec 96.2 KBytes 788 Kbits/sec

[ 13] 7.00-8.00 sec 178 KBytes 1.46 Mbits/sec

[ 15] 7.00-8.00 sec 157 KBytes 1.29 Mbits/sec

[SUM] 7.00-8.00 sec 723 KBytes 5.92 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 8.00-9.00 sec 140 KBytes 1.15 Mbits/sec

[ 9] 8.00-9.00 sec 182 KBytes 1.50 Mbits/sec

[ 11] 8.00-9.00 sec 119 KBytes 974 Kbits/sec

[ 13] 8.00-9.00 sec 134 KBytes 1.10 Mbits/sec

[ 15] 8.00-9.00 sec 137 KBytes 1.13 Mbits/sec

[SUM] 8.00-9.00 sec 713 KBytes 5.85 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 9.00-10.00 sec 136 KBytes 1.11 Mbits/sec

[ 9] 9.00-10.00 sec 69.3 KBytes 568 Kbits/sec

[ 11] 9.00-10.00 sec 164 KBytes 1.34 Mbits/sec

[ 13] 9.00-10.00 sec 69.3 KBytes 568 Kbits/sec

[ 15] 9.00-10.00 sec 307 KBytes 2.51 Mbits/sec

[SUM] 9.00-10.00 sec 745 KBytes 6.11 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ ID] Interval Transfer Bitrate

[ 7] 0.00-10.00 sec 2.06 MBytes 1.73 Mbits/sec sender

[ 7] 0.00-10.01 sec 1.94 MBytes 1.62 Mbits/sec receiver

[ 9] 0.00-10.00 sec 1.48 MBytes 1.24 Mbits/sec sender

[ 9] 0.00-10.01 sec 1.36 MBytes 1.14 Mbits/sec receiver

[ 11] 0.00-10.00 sec 1.28 MBytes 1.08 Mbits/sec sender

[ 11] 0.00-10.01 sec 1.16 MBytes 971 Kbits/sec receiver

[ 13] 0.00-10.00 sec 1.33 MBytes 1.12 Mbits/sec sender

[ 13] 0.00-10.01 sec 1.22 MBytes 1.02 Mbits/sec receiver

[ 15] 0.00-10.00 sec 1.38 MBytes 1.16 Mbits/sec sender

[ 15] 0.00-10.01 sec 1.25 MBytes 1.05 Mbits/sec receiver

[SUM] 0.00-10.00 sec 7.54 MBytes 6.32 Mbits/sec sender

[SUM] 0.00-10.01 sec 6.92 MBytes 5.80 Mbits/sec receiver

iperf Done.

dakshamarutinagre@Dakshas-MacBook-Pro ~ %

**P for best test value without R:**

For P = 1, 5.54 Mbits/sec

For P = 2, 5.83 Mbits/sec

For P = 3, 6.04 Mbits/sec

For P = 4, 5.97 Mbits/sec

For P = 5, 6.32 Mbits/sec

**With R flag:**

dakshamarutinagre@Dakshas-MacBook-Pro ~ % **iperf3 -p 5001 -R -P 1 -c iu-stor01.crest.iu.edu**

Connecting to host iu-stor01.crest.iu.edu, port 5001

Reverse mode, remote host iu-stor01.crest.iu.edu is sending

[ 7] local 10.0.0.58 port 51221 connected to 156.56.5.143 port 5001

[ ID] Interval Transfer Bitrate

[ 7] 0.00-1.00 sec 13.4 MBytes 112 Mbits/sec

[ 7] 1.00-2.00 sec 14.4 MBytes 121 Mbits/sec

[ 7] 2.00-3.00 sec 12.5 MBytes 105 Mbits/sec

[ 7] 3.00-4.00 sec 14.2 MBytes 119 Mbits/sec

[ 7] 4.00-5.00 sec 13.5 MBytes 113 Mbits/sec

[ 7] 5.00-6.00 sec 13.4 MBytes 112 Mbits/sec

[ 7] 6.00-7.00 sec 14.2 MBytes 119 Mbits/sec

[ 7] 7.00-8.00 sec 14.2 MBytes 119 Mbits/sec

[ 7] 8.00-9.00 sec 14.2 MBytes 119 Mbits/sec

[ 7] 9.00-10.00 sec 12.1 MBytes 102 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ ID] Interval Transfer Bitrate Retr

[ 7] 0.00-10.02 sec 153 MBytes 128 Mbits/sec 112 sender

[ 7] 0.00-10.00 sec 136 MBytes 114 Mbits/sec receiver

iperf Done.

dakshamarutinagre@Dakshas-MacBook-Pro ~ %

dakshamarutinagre@Dakshas-MacBook-Pro ~ % **iperf3 -p 5001 -R -P 2 -c iu-stor01.crest.iu.edu**

Connecting to host iu-stor01.crest.iu.edu, port 5001

Reverse mode, remote host iu-stor01.crest.iu.edu is sending

[ 7] local 10.0.0.58 port 51227 connected to 156.56.5.143 port 5001

[ 9] local 10.0.0.58 port 51228 connected to 156.56.5.143 port 5001

[ ID] Interval Transfer Bitrate

[ 7] 0.00-1.00 sec 7.33 MBytes 61.5 Mbits/sec

[ 9] 0.00-1.00 sec 6.37 MBytes 53.5 Mbits/sec

[SUM] 0.00-1.00 sec 13.7 MBytes 115 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 1.00-2.00 sec 7.79 MBytes 65.4 Mbits/sec

[ 9] 1.00-2.00 sec 6.41 MBytes 53.8 Mbits/sec

[SUM] 1.00-2.00 sec 14.2 MBytes 119 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 2.00-3.00 sec 6.66 MBytes 55.8 Mbits/sec

[ 9] 2.00-3.00 sec 7.57 MBytes 63.5 Mbits/sec

[SUM] 2.00-3.00 sec 14.2 MBytes 119 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 3.00-4.00 sec 6.39 MBytes 53.6 Mbits/sec

[ 9] 3.00-4.00 sec 5.96 MBytes 50.0 Mbits/sec

[SUM] 3.00-4.00 sec 12.4 MBytes 104 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 4.00-5.00 sec 6.89 MBytes 57.8 Mbits/sec

[ 9] 4.00-5.00 sec 6.81 MBytes 57.1 Mbits/sec

[SUM] 4.00-5.00 sec 13.7 MBytes 115 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 5.00-6.00 sec 7.07 MBytes 59.3 Mbits/sec

[ 9] 5.00-6.00 sec 7.14 MBytes 59.9 Mbits/sec

[SUM] 5.00-6.00 sec 14.2 MBytes 119 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 6.00-7.00 sec 5.07 MBytes 42.5 Mbits/sec

[ 9] 6.00-7.00 sec 4.25 MBytes 35.7 Mbits/sec

[SUM] 6.00-7.00 sec 9.32 MBytes 78.2 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 7.00-8.00 sec 8.78 MBytes 73.6 Mbits/sec

[ 9] 7.00-8.00 sec 8.49 MBytes 71.2 Mbits/sec

[SUM] 7.00-8.00 sec 17.3 MBytes 145 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 8.00-9.00 sec 6.97 MBytes 58.4 Mbits/sec

[ 9] 8.00-9.00 sec 7.09 MBytes 59.5 Mbits/sec

[SUM] 8.00-9.00 sec 14.1 MBytes 118 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 9.00-10.00 sec 7.01 MBytes 58.8 Mbits/sec

[ 9] 9.00-10.00 sec 7.04 MBytes 59.0 Mbits/sec

[SUM] 9.00-10.00 sec 14.0 MBytes 118 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ ID] Interval Transfer Bitrate Retr

[ 7] 0.00-10.02 sec 86.6 MBytes 72.5 Mbits/sec 39 sender

[ 7] 0.00-10.00 sec 69.9 MBytes 58.7 Mbits/sec receiver

[ 9] 0.00-10.02 sec 83.5 MBytes 69.9 Mbits/sec 53 sender

[ 9] 0.00-10.00 sec 67.1 MBytes 56.3 Mbits/sec receiver

[SUM] 0.00-10.02 sec 170 MBytes 142 Mbits/sec 92 sender

[SUM] 0.00-10.00 sec 137 MBytes 115 Mbits/sec receiver

iperf Done.

dakshamarutinagre@Dakshas-MacBook-Pro ~ %

dakshamarutinagre@Dakshas-MacBook-Pro ~ % **iperf3 -p 5001 -R -P 3 -c iu-stor01.crest.iu.edu**

Connecting to host iu-stor01.crest.iu.edu, port 5001

Reverse mode, remote host iu-stor01.crest.iu.edu is sending

[ 7] local 10.0.0.58 port 51231 connected to 156.56.5.143 port 5001

[ 9] local 10.0.0.58 port 51232 connected to 156.56.5.143 port 5001

[ 11] local 10.0.0.58 port 51233 connected to 156.56.5.143 port 5001

[ ID] Interval Transfer Bitrate

[ 7] 0.00-1.00 sec 3.51 MBytes 29.5 Mbits/sec

[ 9] 0.00-1.00 sec 4.73 MBytes 39.7 Mbits/sec

[ 11] 0.00-1.00 sec 3.28 MBytes 27.5 Mbits/sec

[SUM] 0.00-1.00 sec 11.5 MBytes 96.7 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 1.00-2.00 sec 5.09 MBytes 42.7 Mbits/sec

[ 9] 1.00-2.00 sec 4.02 MBytes 33.7 Mbits/sec

[ 11] 1.00-2.00 sec 4.63 MBytes 38.8 Mbits/sec

[SUM] 1.00-2.00 sec 13.7 MBytes 115 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 2.00-3.00 sec 3.00 MBytes 25.2 Mbits/sec

[ 9] 2.00-3.00 sec 5.42 MBytes 45.4 Mbits/sec

[ 11] 2.00-3.00 sec 4.64 MBytes 38.9 Mbits/sec

[SUM] 2.00-3.00 sec 13.1 MBytes 109 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 3.00-4.00 sec 5.99 MBytes 50.3 Mbits/sec

[ 9] 3.00-4.00 sec 4.36 MBytes 36.6 Mbits/sec

[ 11] 3.00-4.00 sec 4.80 MBytes 40.3 Mbits/sec

[SUM] 3.00-4.00 sec 15.1 MBytes 127 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 4.00-5.00 sec 2.87 MBytes 24.1 Mbits/sec

[ 9] 4.00-5.00 sec 5.04 MBytes 42.3 Mbits/sec

[ 11] 4.00-5.00 sec 4.77 MBytes 40.0 Mbits/sec

[SUM] 4.00-5.00 sec 12.7 MBytes 106 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 5.00-6.00 sec 3.13 MBytes 26.2 Mbits/sec

[ 9] 5.00-6.00 sec 5.68 MBytes 47.6 Mbits/sec

[ 11] 5.00-6.00 sec 4.90 MBytes 41.1 Mbits/sec

[SUM] 5.00-6.00 sec 13.7 MBytes 115 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 6.00-7.00 sec 2.48 MBytes 20.8 Mbits/sec

[ 9] 6.00-7.00 sec 4.94 MBytes 41.4 Mbits/sec

[ 11] 6.00-7.00 sec 4.93 MBytes 41.4 Mbits/sec

[SUM] 6.00-7.00 sec 12.4 MBytes 104 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 7.00-8.00 sec 2.48 MBytes 20.8 Mbits/sec

[ 9] 7.00-8.00 sec 4.90 MBytes 41.1 Mbits/sec

[ 11] 7.00-8.00 sec 4.93 MBytes 41.3 Mbits/sec

[SUM] 7.00-8.00 sec 12.3 MBytes 103 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 8.00-9.00 sec 2.97 MBytes 24.9 Mbits/sec

[ 9] 8.00-9.00 sec 5.56 MBytes 46.6 Mbits/sec

[ 11] 8.00-9.00 sec 5.59 MBytes 46.9 Mbits/sec

[SUM] 8.00-9.00 sec 14.1 MBytes 118 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 9.00-10.00 sec 2.98 MBytes 25.0 Mbits/sec

[ 9] 9.00-10.00 sec 5.63 MBytes 47.3 Mbits/sec

[ 11] 9.00-10.00 sec 5.62 MBytes 47.1 Mbits/sec

[SUM] 9.00-10.00 sec 14.2 MBytes 119 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ ID] Interval Transfer Bitrate Retr

[ 7] 0.00-10.01 sec 50.2 MBytes 42.0 Mbits/sec 74 sender

[ 7] 0.00-10.00 sec 34.5 MBytes 29.0 Mbits/sec receiver

[ 9] 0.00-10.01 sec 66.2 MBytes 55.5 Mbits/sec 55 sender

[ 9] 0.00-10.00 sec 50.3 MBytes 42.2 Mbits/sec receiver

[ 11] 0.00-10.01 sec 64.7 MBytes 54.2 Mbits/sec 119 sender

[ 11] 0.00-10.00 sec 48.1 MBytes 40.3 Mbits/sec receiver

[SUM] 0.00-10.01 sec 181 MBytes 152 Mbits/sec 248 sender

[SUM] 0.00-10.00 sec 133 MBytes 111 Mbits/sec receiver

iperf Done.

dakshamarutinagre@Dakshas-MacBook-Pro ~ %

dakshamarutinagre@Dakshas-MacBook-Pro ~ % **iperf3 -p 5001 -R -P 4 -c iu-stor01.crest.iu.edu**

Connecting to host iu-stor01.crest.iu.edu, port 5001

Reverse mode, remote host iu-stor01.crest.iu.edu is sending

[ 7] local 10.0.0.58 port 51237 connected to 156.56.5.143 port 5001

[ 9] local 10.0.0.58 port 51238 connected to 156.56.5.143 port 5001

[ 11] local 10.0.0.58 port 51239 connected to 156.56.5.143 port 5001

[ 13] local 10.0.0.58 port 51240 connected to 156.56.5.143 port 5001

[ ID] Interval Transfer Bitrate

[ 7] 0.00-1.00 sec 3.63 MBytes 30.5 Mbits/sec

[ 9] 0.00-1.00 sec 3.22 MBytes 27.0 Mbits/sec

[ 11] 0.00-1.00 sec 3.97 MBytes 33.3 Mbits/sec

[ 13] 0.00-1.00 sec 3.01 MBytes 25.2 Mbits/sec

[SUM] 0.00-1.00 sec 13.8 MBytes 116 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 1.00-2.00 sec 3.62 MBytes 30.4 Mbits/sec

[ 9] 1.00-2.00 sec 3.68 MBytes 30.9 Mbits/sec

[ 11] 1.00-2.00 sec 3.44 MBytes 28.8 Mbits/sec

[ 13] 1.00-2.00 sec 3.42 MBytes 28.7 Mbits/sec

[SUM] 1.00-2.00 sec 14.2 MBytes 119 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 2.00-3.00 sec 3.98 MBytes 33.4 Mbits/sec

[ 9] 2.00-3.00 sec 3.50 MBytes 29.3 Mbits/sec

[ 11] 2.00-3.00 sec 3.87 MBytes 32.4 Mbits/sec

[ 13] 2.00-3.00 sec 2.85 MBytes 23.9 Mbits/sec

[SUM] 2.00-3.00 sec 14.2 MBytes 119 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 3.00-4.00 sec 3.89 MBytes 32.6 Mbits/sec

[ 9] 3.00-4.00 sec 3.91 MBytes 32.8 Mbits/sec

[ 11] 3.00-4.00 sec 2.18 MBytes 18.3 Mbits/sec

[ 13] 3.00-4.00 sec 3.24 MBytes 27.2 Mbits/sec

[SUM] 3.00-4.00 sec 13.2 MBytes 111 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 4.00-5.00 sec 2.11 MBytes 17.7 Mbits/sec

[ 9] 4.00-5.00 sec 3.44 MBytes 28.9 Mbits/sec

[ 11] 4.00-5.00 sec 3.92 MBytes 32.9 Mbits/sec

[ 13] 4.00-5.00 sec 3.87 MBytes 32.5 Mbits/sec

[SUM] 4.00-5.00 sec 13.3 MBytes 112 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 5.00-6.00 sec 4.28 MBytes 35.9 Mbits/sec

[ 9] 5.00-6.00 sec 4.58 MBytes 38.4 Mbits/sec

[ 11] 5.00-6.00 sec 2.64 MBytes 22.1 Mbits/sec

[ 13] 5.00-6.00 sec 2.55 MBytes 21.4 Mbits/sec

[SUM] 5.00-6.00 sec 14.0 MBytes 118 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 6.00-7.00 sec 3.48 MBytes 29.2 Mbits/sec

[ 9] 6.00-7.00 sec 3.39 MBytes 28.5 Mbits/sec

[ 11] 6.00-7.00 sec 3.36 MBytes 28.2 Mbits/sec

[ 13] 6.00-7.00 sec 4.00 MBytes 33.5 Mbits/sec

[SUM] 6.00-7.00 sec 14.2 MBytes 119 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 7.00-8.00 sec 3.94 MBytes 33.0 Mbits/sec

[ 9] 7.00-8.00 sec 2.99 MBytes 25.1 Mbits/sec

[ 11] 7.00-8.00 sec 3.99 MBytes 33.5 Mbits/sec

[ 13] 7.00-8.00 sec 3.29 MBytes 27.6 Mbits/sec

[SUM] 7.00-8.00 sec 14.2 MBytes 119 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 8.00-9.00 sec 3.45 MBytes 28.9 Mbits/sec

[ 9] 8.00-9.00 sec 3.82 MBytes 32.0 Mbits/sec

[ 11] 8.00-9.00 sec 3.55 MBytes 29.7 Mbits/sec

[ 13] 8.00-9.00 sec 3.34 MBytes 28.0 Mbits/sec

[SUM] 8.00-9.00 sec 14.2 MBytes 119 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 9.00-10.00 sec 3.55 MBytes 29.8 Mbits/sec

[ 9] 9.00-10.00 sec 3.71 MBytes 31.2 Mbits/sec

[ 11] 9.00-10.00 sec 3.50 MBytes 29.3 Mbits/sec

[ 13] 9.00-10.00 sec 3.39 MBytes 28.4 Mbits/sec

[SUM] 9.00-10.00 sec 14.2 MBytes 119 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ ID] Interval Transfer Bitrate Retr

[ 7] 0.00-10.02 sec 52.5 MBytes 44.0 Mbits/sec 19 sender

[ 7] 0.00-10.00 sec 35.9 MBytes 30.1 Mbits/sec receiver

[ 9] 0.00-10.02 sec 52.4 MBytes 43.9 Mbits/sec 0 sender

[ 9] 0.00-10.00 sec 36.3 MBytes 30.4 Mbits/sec receiver

[ 11] 0.00-10.02 sec 50.3 MBytes 42.1 Mbits/sec 28 sender

[ 11] 0.00-10.00 sec 34.4 MBytes 28.9 Mbits/sec receiver

[ 13] 0.00-10.02 sec 49.6 MBytes 41.5 Mbits/sec 50 sender

[ 13] 0.00-10.00 sec 32.9 MBytes 27.6 Mbits/sec receiver

[SUM] 0.00-10.02 sec 205 MBytes 172 Mbits/sec 97 sender

[SUM] 0.00-10.00 sec 140 MBytes 117 Mbits/sec receiver

iperf Done.

dakshamarutinagre@Dakshas-MacBook-Pro ~ %

dakshamarutinagre@Dakshas-MacBook-Pro ~ % **iperf3 -p 5001 -R -P 5 -c iu-stor01.crest.iu.edu**

Connecting to host iu-stor01.crest.iu.edu, port 5001

Reverse mode, remote host iu-stor01.crest.iu.edu is sending

[ 7] local 10.0.0.58 port 51246 connected to 156.56.5.143 port 5001

[ 9] local 10.0.0.58 port 51247 connected to 156.56.5.143 port 5001

[ 11] local 10.0.0.58 port 51248 connected to 156.56.5.143 port 5001

[ 13] local 10.0.0.58 port 51249 connected to 156.56.5.143 port 5001

[ 15] local 10.0.0.58 port 51250 connected to 156.56.5.143 port 5001

[ ID] Interval Transfer Bitrate

[ 7] 0.00-1.00 sec 3.92 MBytes 32.9 Mbits/sec

[ 9] 0.00-1.00 sec 2.97 MBytes 24.9 Mbits/sec

[ 11] 0.00-1.00 sec 2.51 MBytes 21.0 Mbits/sec

[ 13] 0.00-1.00 sec 2.10 MBytes 17.6 Mbits/sec

[ 15] 0.00-1.00 sec 2.36 MBytes 19.8 Mbits/sec

[SUM] 0.00-1.00 sec 13.9 MBytes 116 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 1.00-2.00 sec 3.39 MBytes 28.4 Mbits/sec

[ 9] 1.00-2.00 sec 3.42 MBytes 28.7 Mbits/sec

[ 11] 1.00-2.00 sec 2.50 MBytes 21.0 Mbits/sec

[ 13] 1.00-2.00 sec 2.23 MBytes 18.7 Mbits/sec

[ 15] 1.00-2.00 sec 2.65 MBytes 22.2 Mbits/sec

[SUM] 1.00-2.00 sec 14.2 MBytes 119 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 2.00-3.00 sec 2.06 MBytes 17.2 Mbits/sec

[ 9] 2.00-3.00 sec 3.51 MBytes 29.4 Mbits/sec

[ 11] 2.00-3.00 sec 1.93 MBytes 16.2 Mbits/sec

[ 13] 2.00-3.00 sec 2.02 MBytes 16.9 Mbits/sec

[ 15] 2.00-3.00 sec 1.07 MBytes 8.98 Mbits/sec

[SUM] 2.00-3.00 sec 10.6 MBytes 88.8 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 3.00-4.00 sec 3.95 MBytes 33.1 Mbits/sec

[ 9] 3.00-4.00 sec 2.04 MBytes 17.1 Mbits/sec

[ 11] 3.00-4.00 sec 3.36 MBytes 28.2 Mbits/sec

[ 13] 3.00-4.00 sec 4.72 MBytes 39.6 Mbits/sec

[ 15] 3.00-4.00 sec 3.54 MBytes 29.6 Mbits/sec

[SUM] 3.00-4.00 sec 17.6 MBytes 148 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 4.00-5.00 sec 2.05 MBytes 17.2 Mbits/sec

[ 9] 4.00-5.00 sec 3.31 MBytes 27.8 Mbits/sec

[ 11] 4.00-5.00 sec 2.65 MBytes 22.2 Mbits/sec

[ 13] 4.00-5.00 sec 3.23 MBytes 27.1 Mbits/sec

[ 15] 4.00-5.00 sec 2.96 MBytes 24.9 Mbits/sec

[SUM] 4.00-5.00 sec 14.2 MBytes 119 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 5.00-6.00 sec 2.18 MBytes 18.3 Mbits/sec

[ 9] 5.00-6.00 sec 2.68 MBytes 22.5 Mbits/sec

[ 11] 5.00-6.00 sec 2.15 MBytes 18.0 Mbits/sec

[ 13] 5.00-6.00 sec 2.24 MBytes 18.8 Mbits/sec

[ 15] 5.00-6.00 sec 2.53 MBytes 21.2 Mbits/sec

[SUM] 5.00-6.00 sec 11.8 MBytes 98.8 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 6.00-7.00 sec 2.82 MBytes 23.7 Mbits/sec

[ 9] 6.00-7.00 sec 4.11 MBytes 34.5 Mbits/sec

[ 11] 6.00-7.00 sec 2.81 MBytes 23.6 Mbits/sec

[ 13] 6.00-7.00 sec 2.78 MBytes 23.3 Mbits/sec

[ 15] 6.00-7.00 sec 3.99 MBytes 33.4 Mbits/sec

[SUM] 6.00-7.00 sec 16.5 MBytes 139 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 7.00-8.00 sec 1.30 MBytes 10.9 Mbits/sec

[ 9] 7.00-8.00 sec 3.89 MBytes 32.7 Mbits/sec

[ 11] 7.00-8.00 sec 1.30 MBytes 10.9 Mbits/sec

[ 13] 7.00-8.00 sec 3.28 MBytes 27.5 Mbits/sec

[ 15] 7.00-8.00 sec 3.40 MBytes 28.5 Mbits/sec

[SUM] 7.00-8.00 sec 13.2 MBytes 111 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 8.00-9.00 sec 1.92 MBytes 16.1 Mbits/sec

[ 9] 8.00-9.00 sec 2.72 MBytes 22.8 Mbits/sec

[ 11] 8.00-9.00 sec 1.89 MBytes 15.9 Mbits/sec

[ 13] 8.00-9.00 sec 3.93 MBytes 33.0 Mbits/sec

[ 15] 8.00-9.00 sec 2.82 MBytes 23.7 Mbits/sec

[SUM] 8.00-9.00 sec 13.3 MBytes 111 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ 7] 9.00-10.00 sec 2.03 MBytes 17.0 Mbits/sec

[ 9] 9.00-10.00 sec 3.53 MBytes 29.6 Mbits/sec

[ 11] 9.00-10.00 sec 2.01 MBytes 16.9 Mbits/sec

[ 13] 9.00-10.00 sec 3.28 MBytes 27.5 Mbits/sec

[ 15] 9.00-10.00 sec 3.34 MBytes 28.0 Mbits/sec

[SUM] 9.00-10.00 sec 14.2 MBytes 119 Mbits/sec

- - - - - - - - - - - - - - - - - - - - - - - - -

[ ID] Interval Transfer Bitrate Retr

[ 7] 0.00-10.01 sec 41.5 MBytes 34.8 Mbits/sec 71 sender

[ 7] 0.00-10.00 sec 25.6 MBytes 21.5 Mbits/sec receiver

[ 9] 0.00-10.01 sec 48.3 MBytes 40.5 Mbits/sec 23 sender

[ 9] 0.00-10.00 sec 32.2 MBytes 27.0 Mbits/sec receiver

[ 11] 0.00-10.01 sec 39.6 MBytes 33.2 Mbits/sec 34 sender

[ 11] 0.00-10.00 sec 23.1 MBytes 19.4 Mbits/sec receiver

[ 13] 0.00-10.01 sec 46.1 MBytes 38.6 Mbits/sec 15 sender

[ 13] 0.00-10.00 sec 29.8 MBytes 25.0 Mbits/sec receiver

[ 15] 0.00-10.01 sec 43.3 MBytes 36.3 Mbits/sec 43 sender

[ 15] 0.00-10.00 sec 28.7 MBytes 24.0 Mbits/sec receiver

[SUM] 0.00-10.01 sec 219 MBytes 183 Mbits/sec 186 sender

[SUM] 0.00-10.00 sec 139 MBytes 117 Mbits/sec receiver

iperf Done.

dakshamarutinagre@Dakshas-MacBook-Pro ~ %

**P value with R**

For P = 1, 114 Mbits/sec

For P = 2, 115 Mbits/sec

For P = 3, 111 Mbits/sec

For P = 4, 117 Mbits/sec

For P = 5, 117 Mbits/sec

**The maximum value is 117 Mbits/sec, and it is constant for P = 4 and P = 5.**

**Task 4**

Traceroute to iu-stor01.crest.iu.edu

dakshamarutinagre@Dakshas-MacBook-Pro ~ % **traceroute -I iu-stor01.crest.iu.edu**

traceroute to iu-stor01.crest.iu.edu (156.56.5.143), 64 hops max, 72 byte packets

1 10.0.0.1 (10.0.0.1) 4.637 ms 3.897 ms 3.826 ms

2 96.120.112.113 (96.120.112.113) 10.303 ms 11.460 ms 13.324 ms

3 96.110.168.9 (96.110.168.9) 11.689 ms 12.701 ms 14.563 ms

4 96.108.120.74 (96.108.120.74) 13.612 ms 11.962 ms 11.861 ms

5 50.226.227.250 (50.226.227.250) 14.519 ms 11.015 ms 12.158 ms

6 ae-10.0.cr3.bldc.net.uits.iu.edu (134.68.3.59) 21.545 ms 13.067 ms 12.547 ms

7 vlan-576.mgmt-sw.bldc.testlab.grnoc.iu.edu (156.56.249.74) 11.067 ms 14.307 ms 14.926 ms

8 iu-stor01.crest.iu.edu (156.56.5.143) 10.660 ms 11.271 ms 11.672 ms

dakshamarutinagre@Dakshas-MacBook-Pro ~ %