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Speed of Light in Meters Per Second: 299,792,458
Distance between Purdue and * is found with Google Maps.

PING ucsd.edu (132.239.180.101) 56(84) bytes of data.
64 bytes from ucsd.edu (132.239.180.101): icmp_seq=1 ttl=51 time=69.4 ms
64 bytes from ucsd.edu (132.239.180.101): icmp_seq=2 ttl=51 time=68.7 ms
64 bytes from ucsd.edu (132.239.180.101): icmp_seq=3 ttl=51 time=68.7 ms
64 bytes from ucsd.edu (132.239.180.101): icmp_seq=4 ttl=51 time=68.4 ms
64 bytes from ucsd.edu (132.239.180.101): icmp_seq=5 ttl=51 time=68.6 ms
64 bytes from ucsd.edu (132.239.180.101): icmp_seq=6 ttl=51 time=68.5 ms
64 bytes from ucsd.edu (132.239.180.101): icmp_seq=7 ttl=51 time=68.8 ms
64 bytes from ucsd.edu (132.239.180.101): icmp_seq=8 ttl=51 time=68.4 ms
64 bytes from ucsd.edu (132.239.180.101): icmp_seq=9 ttl=51 time=68.5 ms
64 bytes from ucsd.edu (132.239.180.101): icmp_seq=10 ttl=51 time=70.0 ms

--- ucsd.edu ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9013ms
rtt min/avg/max/mdev = 68.400/68.846/70.095/0.539 ms

Distance: 3355 km
Distance Over SOL: 0.011191075 seconds || 11.191075394 milliseconds

The difference is due to redirection overhead, router/switch overhead and the fact that the path taken is not a straight line, and very likely the distance actually traveled is different than that of highways.

PING indiana.edu (129.79.78.192) 56(84) bytes of data.
64 bytes from www.indiana.edu (129.79.78.192): icmp_seq=1 ttl=56 time=3.51 ms
64 bytes from www.indiana.edu (129.79.78.192): icmp_seq=2 ttl=56 time=3.39 ms
64 bytes from www.indiana.edu (129.79.78.192): icmp_seq=3 ttl=56 time=3.32 ms
64 bytes from www.indiana.edu (129.79.78.192): icmp_seq=4 ttl=56 time=3.26 ms
64 bytes from www.indiana.edu (129.79.78.192): icmp_seq=5 ttl=56 time=3.26 ms
64 bytes from www.indiana.edu (129.79.78.192): icmp_seq=6 ttl=56 time=3.03 ms
64 bytes from www.indiana.edu (129.79.78.192): icmp_seq=7 ttl=56 time=3.42 ms
64 bytes from www.indiana.edu (129.79.78.192): icmp_seq=8 ttl=56 time=3.21 ms
64 bytes from www.indiana.edu (129.79.78.192): icmp_seq=9 ttl=56 time=3.10 ms
64 bytes from www.indiana.edu (129.79.78.192): icmp_seq=10 ttl=56 time=3.18 ms

--- indiana.edu ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9009ms
rtt min/avg/max/mdev = 3.035/3.272/3.510/0.143 ms

Distance: 175 km
Distance Over SOL: 0.000583737 seconds || 0.583737167 milliseconds

Similar issue as before: redirection overhead, router/switch overhead, and indirect routing paths.

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PING mit.edu (23.199.192.128) 56(84) bytes of data.
64 bytes from a23-199-192-128.deploy.static.akamaitechnologies.com (23.199.192.128): icmp_seq=1 ttl=57 time=7.75 ms
64 bytes from a23-199-192-128.deploy.static.akamaitechnologies.com (23.199.192.128): icmp_seq=2 ttl=57 time=7.66 ms
64 bytes from a23-199-192-128.deploy.static.akamaitechnologies.com (23.199.192.128): icmp_seq=3 ttl=57 time=7.84 ms
64 bytes from a23-199-192-128.deploy.static.akamaitechnologies.com (23.199.192.128): icmp_seq=4 ttl=57 time=7.69 ms
64 bytes from a23-199-192-128.deploy.static.akamaitechnologies.com (23.199.192.128): icmp_seq=5 ttl=57 time=12.1 ms
64 bytes from a23-199-192-128.deploy.static.akamaitechnologies.com (23.199.192.128): icmp_seq=6 ttl=57 time=7.59 ms
64 bytes from a23-199-192-128.deploy.static.akamaitechnologies.com (23.199.192.128): icmp_seq=7 ttl=57 time=7.71 ms
64 bytes from a23-199-192-128.deploy.static.akamaitechnologies.com (23.199.192.128): icmp_seq=8 ttl=57 time=7.71 ms
64 bytes from a23-199-192-128.deploy.static.akamaitechnologies.com (23.199.192.128): icmp_seq=9 ttl=57 time=7.61 ms
64 bytes from a23-199-192-128.deploy.static.akamaitechnologies.com (23.199.192.128): icmp_seq=10 ttl=57 time=7.75 ms

--- mit.edu ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9014ms
rtt min/avg/max/mdev = 7.596/8.151/12.170/1.345 ms

Distance: 1,537 km
Distance Over SOL: 0.00512688 seconds || 5.126880143 milliseconds

Here we can see that MIT and Purdue must have a fairly direct and powerful connection, as the average time is not very far off from the speed of light. While the routing overhead is still nontrivial compared to the estimated time, it is distinctly smaller than the previous ping tests.

PING brandeis.edu (129.64.99.200) 56(84) bytes of data.
64 bytes from websrv-prod.unet.brandeis.edu (129.64.99.200): icmp_seq=1 ttl=53 time=32.8 ms
64 bytes from websrv-prod.unet.brandeis.edu (129.64.99.200): icmp_seq=2 ttl=53 time=30.5 ms
64 bytes from websrv-prod.unet.brandeis.edu (129.64.99.200): icmp_seq=3 ttl=53 time=30.7 ms
64 bytes from websrv-prod.unet.brandeis.edu (129.64.99.200): icmp_seq=4 ttl=53 time=30.4 ms
64 bytes from websrv-prod.unet.brandeis.edu (129.64.99.200): icmp_seq=5 ttl=53 time=30.6 ms
64 bytes from websrv-prod.unet.brandeis.edu (129.64.99.200): icmp_seq=6 ttl=53 time=30.8 ms
64 bytes from websrv-prod.unet.brandeis.edu (129.64.99.200): icmp_seq=7 ttl=53 time=31.1 ms
64 bytes from websrv-prod.unet.brandeis.edu (129.64.99.200): icmp_seq=8 ttl=53 time=30.4 ms
64 bytes from websrv-prod.unet.brandeis.edu (129.64.99.200): icmp_seq=9 ttl=53 time=30.5 ms
64 bytes from websrv-prod.unet.brandeis.edu (129.64.99.200): icmp_seq=10 ttl=53 time=30.6 ms

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--- brandeis.edu ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9014ms
rtt min/avg/max/mdev = 30.416/30.876/32.802/0.680 ms

Distance: 1,527 km
Distance Over SOL: 0.005093524 seconds || 5.093523734 milliseconds

Here the time difference is significantly different from that of the pathing to MIT. Clearly, the routing
path must be significantly different and far longer than that of the path to MIT.

PING ufl.edu (128.227.9.48) 56(84) bytes of data.
64 bytes from virtual-webadmin-prod02.osg.ufl.edu (128.227.9.48): icmp_seq=1 ttl=240 time=37.7 ms
64 bytes from virtual-webadmin-prod02.osg.ufl.edu (128.227.9.48): icmp_seq=2 ttl=240 time=37.8 ms
64 bytes from virtual-webadmin-prod02.osg.ufl.edu (128.227.9.48): icmp_seq=3 ttl=240 time=37.3 ms
64 bytes from virtual-webadmin-prod02.osg.ufl.edu (128.227.9.48): icmp_seq=4 ttl=240 time=37.8 ms
64 bytes from virtual-webadmin-prod02.osg.ufl.edu (128.227.9.48): icmp_seq=5 ttl=240 time=37.4 ms
64 bytes from virtual-webadmin-prod02.osg.ufl.edu (128.227.9.48): icmp_seq=6 ttl=240 time=37.6 ms
64 bytes from virtual-webadmin-prod02.osg.ufl.edu (128.227.9.48): icmp_seq=7 ttl=240 time=37.7 ms
64 bytes from virtual-webadmin-prod02.osg.ufl.edu (128.227.9.48): icmp_seq=8 ttl=240 time=37.6 ms
64 bytes from virtual-webadmin-prod02.osg.ufl.edu (128.227.9.48): icmp_seq=9 ttl=240 time=37.5 ms
64 bytes from virtual-webadmin-prod02.osg.ufl.edu (128.227.9.48): icmp_seq=10 ttl=240 time=37.6
ms

--- ufl.edu ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9014ms
rtt min/avg/max/mdev = 37.370/37.651/37.867/0.143 ms

Distance: 1,494 km
Distance Over SOL: 0.004983448 seconds || 4.983447582 milliseconds

Again, overhead from routing and pathing. Distance variations between nodes/routers/switches and
highways.

PING www.d.tsinghua.edu.cn (166.111.4.100) 56(84) bytes of data.
64 bytes from www.tsinghua.edu.cn (166.111.4.100): icmp_seq=1 ttl=232 time=213 ms
64 bytes from www.tsinghua.edu.cn (166.111.4.100): icmp_seq=2 ttl=232 time=212 ms
64 bytes from www.tsinghua.edu.cn (166.111.4.100): icmp_seq=3 ttl=232 time=213 ms
64 bytes from www.tsinghua.edu.cn (166.111.4.100): icmp_seq=4 ttl=232 time=233 ms
64 bytes from www.tsinghua.edu.cn (166.111.4.100): icmp_seq=5 ttl=232 time=213 ms
64 bytes from www.tsinghua.edu.cn (166.111.4.100): icmp_seq=6 ttl=232 time=213 ms
64 bytes from www.tsinghua.edu.cn (166.111.4.100): icmp_seq=7 ttl=232 time=212 ms
64 bytes from www.tsinghua.edu.cn (166.111.4.100): icmp_seq=8 ttl=232 time=222 ms
64 bytes from www.tsinghua.edu.cn (166.111.4.100): icmp_seq=9 ttl=232 time=230 ms
64 bytes from www.tsinghua.edu.cn (166.111.4.100): icmp_seq=10 ttl=232 time=228 ms

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--- www.d.tsinghua.edu.cn ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9002ms
rtt min/avg/max/mdev = 212.805/219.324/233.538/8.053 ms

Distance: 10795 km
Distance Over SOL: 0.036008244 seconds || 36.008244077 milliseconds
Here we can see that there is a distinct issue with routing and pathing to Tsinghua from Purdue, probably due to the crossing of the Pacific Ocean.

MIT vs Brandeis
traceroute to brandeis.edu (129.64.99.200), 30 hops max, 60 byte packets
 1 switch-lwsn2133-z1r11.cs.purdue.edu (128.10.25.250) 0.257 ms 0.250 ms 0.339 ms
 2 lwsn-b143-c6504e-01-po11-tcom.cs.purdue.edu (128.10.127.251) 0.957 ms 0.983 ms 0.979 ms
 3 itns-core-vss-01-vlan4094.tcom.purdue.edu (172.28.0.1) 19.436 ms 19.576 ms 19.626 ms
 4 tel-210-c9006-01-te0-0-0-2.tcom.purdue.edu (172.28.252.85) 1.261 ms 1.281 ms 1.227 ms
 5 indiana-gigapop-ctc-internet2-150.tcom.purdue.edu (192.5.40.86) 2.388 ms 2.386 ms 2.382 ms
 6 et-10-0-0.101.rtr.chic.net.internet2.edu (149.165.254.186) 19.741 ms 18.577 ms 18.570 ms
 7 et-10-0-0.107.rtr.clev.net.internet2.edu (198.71.45.9) 17.205 ms 16.998 ms 17.022 ms
 8 nox1sumgw1-vl-112-nox-i2.nox.org (192.5.89.17) 30.718 ms 30.680 ms 30.636 ms
 9 207.210.143.122 (207.210.143.122) 30.714 ms 30.771 ms 30.760 ms
10 * * *
11 * * *
12 websrv-prod.unet.brandeis.edu (129.64.99.200) 30.930 ms !X 30.989 ms !X 30.979 ms !X

traceroute to mit.edu (23.199.192.128), 30 hops max, 60 byte packets
 1 switch-lwsn2133-z1r11.cs.purdue.edu (128.10.25.250) 0.256 ms 0.249 ms 0.245 ms
 2 lwsn-b143-c6504e-01-po11-tcom.cs.purdue.edu (128.10.127.251) 0.687 ms 0.719 ms 0.867 ms
 3 itns-core-vss-01-vlan4094.tcom.purdue.edu (172.28.0.1) 2.252 ms 2.358 ms 2.188 ms
 4 tel-210-c9006-01-te0-0-0-2.tcom.purdue.edu (172.28.252.85) 1.102 ms 1.295 ms 1.293 ms
 5 indiana-gigapop-ctc-internet-151.tcom.purdue.edu (192.5.40.82) 2.211 ms 2.209 ms 2.206 ms
 6 149.165.183.78 (149.165.183.78) 7.100 ms 6.879 ms 6.866 ms
 7 equinix-ord.netarch.akamai.com (206.223.119.102) 7.347 ms 7.693 ms 7.712 ms
 8 a23-199-192-128.deploy.static.akamaitechnologies.com (23.199.192.128) 7.557 ms 7.477 ms 7.570 ms

Here we can see that there are 8 hops to MIT and 12 to Brandeis. There is also only 3 hops from Purdue to MIT, versus 7 to Brandeis, showing that the routing path from Purdue to Brandeis is significantly longer than that of Purdue to MIT.

PING indiana.edu (129.79.78.192) 500(528) bytes of data.
508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=1 ttl=56 time=3.90 ms
508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=2 ttl=56 time=3.65 ms
508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=3 ttl=56 time=3.44 ms
508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=4 ttl=56 time=3.54 ms
508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=5 ttl=56 time=3.22 ms
508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=6 ttl=56 time=3.35 ms

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508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=7 ttl=56 time=3.32 ms
508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=8 ttl=56 time=3.18 ms
508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=9 ttl=56 time=3.38 ms
508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=10 ttl=56 time=3.30 ms

--- indiana.edu ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9013ms
rtt min/avg/max/mdev = 3.181/3.433/3.909/0.219 ms

PING indiana.edu (129.79.78.192) 1000(1028) bytes of data.
1008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=1 ttl=56 time=3.45 ms
1008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=2 ttl=56 time=3.66 ms
1008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=3 ttl=56 time=3.67 ms
1008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=4 ttl=56 time=3.52 ms
1008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=5 ttl=56 time=3.20 ms
1008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=6 ttl=56 time=3.28 ms
1008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=7 ttl=56 time=3.25 ms
1008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=8 ttl=56 time=3.39 ms
1008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=9 ttl=56 time=3.53 ms
1008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=10 ttl=56 time=3.24 ms

--- indiana.edu ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9013ms
rtt min/avg/max/mdev = 3.204/3.422/3.679/0.178 ms

PING indiana.edu (129.79.78.192) 1500(1528) bytes of data.
1508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=1 ttl=56 time=3.77 ms
1508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=2 ttl=56 time=3.67 ms
1508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=3 ttl=56 time=3.71 ms
1508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=4 ttl=56 time=3.90 ms
1508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=5 ttl=56 time=3.96 ms
1508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=6 ttl=56 time=3.61 ms
1508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=7 ttl=56 time=3.78 ms
1508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=8 ttl=56 time=3.98 ms
1508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=9 ttl=56 time=4.02 ms
1508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=10 ttl=56 time=3.96 ms

--- indiana.edu ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9014ms
rtt min/avg/max/mdev = 3.612/3.840/4.027/0.151 ms

PING indiana.edu (129.79.78.192) 2000(2028) bytes of data.
2008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=1 ttl=56 time=3.88 ms
2008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=2 ttl=56 time=3.78 ms
2008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=3 ttl=56 time=4.11 ms
2008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=4 ttl=56 time=3.88 ms

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2008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=5 ttl=56 time=3.95 ms
2008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=6 ttl=56 time=4.13 ms
2008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=7 ttl=56 time=4.25 ms
2008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=8 ttl=56 time=4.23 ms
2008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=9 ttl=56 time=3.77 ms
2008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=10 ttl=56 time=3.92 ms

--- indiana.edu ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9014ms
rtt min/avg/max/mdev = 3.774/3.995/4.255/0.169 ms

PING indiana.edu (129.79.78.192) 2500(2528) bytes of data.
2508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=1 ttl=56 time=3.97 ms
2508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=2 ttl=56 time=3.98 ms
2508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=3 ttl=56 time=4.01 ms
2508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=4 ttl=56 time=3.66 ms
2508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=5 ttl=56 time=4.27 ms
2508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=6 ttl=56 time=3.95 ms
2508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=7 ttl=56 time=4.23 ms
2508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=8 ttl=56 time=4.09 ms
2508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=9 ttl=56 time=3.85 ms
2508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=10 ttl=56 time=3.97 ms

--- indiana.edu ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9012ms
rtt min/avg/max/mdev = 3.663/4.001/4.274/0.175 ms

PING indiana.edu (129.79.78.192) 3000(3028) bytes of data.
3008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=1 ttl=56 time=4.18 ms
3008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=2 ttl=56 time=4.05 ms
3008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=3 ttl=56 time=4.07 ms
3008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=4 ttl=56 time=4.22 ms
3008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=5 ttl=56 time=3.88 ms
3008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=6 ttl=56 time=3.73 ms
3008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=7 ttl=56 time=4.18 ms
3008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=8 ttl=56 time=3.81 ms
3008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=9 ttl=56 time=4.01 ms
3008 bytes from www.indiana.edu (129.79.78.192): icmp_seq=10 ttl=56 time=3.99 ms

--- indiana.edu ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9012ms
rtt min/avg/max/mdev = 3.735/4.016/4.223/0.164 ms

PING indiana.edu (129.79.78.192) 3500(3528) bytes of data.
3508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=1 ttl=56 time=4.11 ms
3508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=2 ttl=56 time=4.16 ms

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3508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=3 ttl=56 time=4.05 ms
3508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=4 ttl=56 time=3.98 ms
3508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=5 ttl=56 time=4.04 ms
3508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=6 ttl=56 time=3.93 ms
3508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=7 ttl=56 time=3.69 ms
3508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=8 ttl=56 time=4.08 ms
3508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=9 ttl=56 time=4.25 ms
3508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=10 ttl=56 time=4.19 ms

--- indiana.edu ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9011ms
rtt min/avg/max/mdev = 3.691/4.051/4.256/0.168 ms

Here we can see that there is a small amount of time increase between the smallest packet size and the largest. This is probably due to the fact that the larger packets will take longer to be put on the wire and transmitted than the smaller ones, even if it is ever so slightly.

PING indiana.edu (129.79.78.192) 1500(1528) bytes of data.
1508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=1 ttl=52 time=37.0
ms
1508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=2 ttl=52 time=36.4
ms
1508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=3 ttl=52 time=426 ms
1508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=4 ttl=52 time=38.7
ms
1508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=5 ttl=52 time=472 ms
1508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=6 ttl=52 time=36.1
ms
1508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=7 ttl=52 time=416 ms
1508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=8 ttl=52 time=36.1
ms
1508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=9 ttl=52 time=53.3
ms
1508 bytes from www.indiana.edu (129.79.78.192): icmp_seq=10 ttl=52 time=52.0
ms

--- indiana.edu ping statistics ---
10 packets transmitted, 10 received, 0% packet loss, time 9008ms
rtt min/avg/max/mdev = 36.116/160.460/472.140/182.438 ms

Here we see a significant increase in time as compared to the other pings, with some spiking packets. This difference in time we see is due to a different routing path being taken, and the packet size having a small effect on the time taken.