# Jammu Kashmir 2019

On August 5th 2019 India revoked the special status of Jammu Kashmir (see here) which led to unrest.

It would be interesting to see if there is any impact on the Internet connectivity to Universities in Jammu Kashmir that is correlated with the recent or future changes/responses.

To do this we need targets that are located in Jammu Kashmir. We can find universities that are located in JK using Wikipedia.
From Wikipedia Les obtained the following universities in Jammu Kashmir

- The URL is https://en.wikipedia.org/wiki/List_of_institutions_of_higher_education_in_Jammu_and_Kashmir
- If the host does not respond to a ping then the host is not useful to PingER
- If the RTT is <200ms then I posit the host is not in Jammu Kashmir and is not of interest to PingER
- The Lat/long is found using Google maps, searching for the University, moving the mouse over it and right clicking (ctrl click on Mac).
- The AS of the last traceroute hop is found using e.g. https://www.slac.stanford.edu/cgi-bin/traceroute.pl?target=www.skuast.org&function=traceroute
- The owner of the AS is found using http://asn.cymru.com/cgi-bin/whois.cgi

    - http://www.uok.edu.in/, unknown, web no response,
    - http://www.skuastkashmir.ac.in/, web site responds, ping 16ms
    - http://www.jammuuniversity.in/, 116.193.161.3, web responds, no pings
    - http://skimsmc.edu.in/, ,suspended
    - http://www.skimsmc.edu.in(166.62.10.226): icmp_seq=1 ttl=48 time=181 ms
    - https://www.skuast.org/(103.35.120.78): icmp_seq=1 ttl=43 time=285 ms,  web responds, traceroute last (14th) hop 14.140.113.58.static-Delhi-vsnl.net.in (14.140.113.58) [AS4755=TATACOMM-AS TATA Communications formerly VSNL is Leading ISP, IN]  292.209 ms A later traceroute gave hop(20) vps21.pugmarks.in (103.35.120.24) [AS134255[PUGMARKS-AS Pugmarks InterWeb Pvt. Ltd., IN] /AS38546]  283.701 ms
    - http://www.cujammu.ac.in//(205.144.171.55): icmp_seq=1 ttl=112 time=14.3 ms, web responds
    - http://www.cukashmir.ac.in/(132.148.80.84): icmp_seq=1 ttl=114 time=19.5 ms
    - https://www.smvdu.ac.in/(166.62.27.186): icmp_seq=1 ttl=48 time=191 ms
    - http://www.iustlive.com/(202.66.174.254): icmp_seq=1 ttl=107 time=268 ms, traceroute last AS17439 is NETMAGIC-AP Netmagic Datacenter Mumbai, IN
    - https://www.bgsbuniversity.org/(104.27.187.69): icmp_seq=1 ttl=55 time=1.72 ms

This yields 2 Universities

- www.skuast.org
- www.iustlive.com

However, we are by no means sure the target hosts are really in Jammu Kashmir (e.g. they may be proxies in say Delhi, or Mumbai).

So I am wondering what the ping times and traceroutes look like from say Amity or NUST. Maybe that can provide more assurance or otherwise that the targets are in JK. Or are there other ideas for finding targets in JK.

Right now I cannot access:

- http://202.12.103.71/cgi-bin/traceroute.pl?function=traceroute&target=www.skuast.org&options=-i%200.2 to run a traceroute from Amity.
    - the link http://maggie2.seecs.edu.pk/cgi-bin/traceroute.pl?function=ping&target=www.slac.stanford.edu&options=-i%200.2 does not appear to get any pings back.
    - In fact, the Amity PingER MA is seldom accessible from SLAC and even when accessible there are few recorded ping measurements. I sent email to Amity requesting someone to take a look at this.
- Pings from pinger.vu.edu.pk to www.skuast.org:
  appear as:

  ```
  Executing exec(traceroute -m 30 -q 3 202.66.174.254 140)
  traceroute to 202.66.174.254 (202.66.174.254), 30 hops max, 140 byte packets
   1  111.68.103.46 (111.68.103.46)  2.516 ms  2.596 ms  2.941 ms
   2  pern2-dgw.vu.edu.pk (111.68.103.49)  2.686 ms  2.733 ms  3.026 ms
   3  172.31.252.237 (172.31.252.237)  3.760 ms  4.027 ms  4.068 ms
   4  172.31.240.37 (172.31.240.37)  2.724 ms  3.009 ms  3.052 ms
   5  tw21-static61.tw1.com (117.20.21.61)  3.486 ms  3.550 ms  3.599 ms
   6  110.93.253.226 (110.93.253.226)  19.598 ms 110.93.254.142 (110.93.254.142)  19.219 ms 110.93.253.226
  (110.93.253.226)  17.790 ms
   7  110.93.253.166 (110.93.253.166)  21.519 ms 110.93.252.172 (110.93.252.172)  18.901 ms  25.667 ms
   8  9498.sgw.equinix.com (27.111.228.40)  103.922 ms  104.838 ms  102.564 ms
   9  182.79.190.73 (182.79.190.73)  235.072 ms 182.79.149.252 (182.79.149.252)  237.938 ms 182.79.135.26
  (182.79.135.26)  242.661 ms
  10  dsl-ncr-static-114.67.16.125.airtelbroadband.in (125.16.67.114)  282.086 ms  287.454 ms  287.204 ms
  11  180.179.197.66 (180.179.197.66)  299.453 ms 180.179.197.58 (180.179.197.58)  295.586 ms  294.574 ms
  12  180.179.195.181 (180.179.195.181)  294.956 ms  306.754 ms  304.171 ms
  13  * * *
  ```

  From monitor.seecs.edu.pk to www.skuast.org:

```
Executing exec(traceroute, -m 30 -q 3 -f 3, 103.35.120.78, 140)
traceroute to 103.35.120.78 (103.35.120.78), 30 hops max, 140 byte packets
 4  10.1.100.1 (10.1.100.1)  0.705 ms  0.428 ms  0.366 ms
 5  10.0.11.1 (10.0.11.1)  1.154 ms  1.102 ms  1.289 ms
 6  111.68.101.1.nust.edu.pk (111.68.101.1)  1.983 ms  2.174 ms  2.120 ms
 7  172.31.252.25 (172.31.252.25)  2.559 ms  2.449 ms  2.142 ms
 8  tw23-static237.tw1.com (117.20.23.237)  1.707 ms  2.296 ms  10.764 ms
 9  110.93.252.98 (110.93.252.98)  18.836 ms  18.776 ms  18.720 ms
10  110.93.253.166 (110.93.253.166)  21.470 ms  19.279 ms  21.353 ms
11  9498.sgw.equinix.com (27.111.228.40)  106.105 ms  107.032 ms  105.505 ms
12  182.79.149.20 (182.79.149.20)  259.644 ms 182.79.149.18 (182.79.149.18)  272.084 ms  276.134 ms
13  * * *
14  203.100.78.10 (203.100.78.10)  308.708 ms  306.042 ms  306.818 ms
15  vps21.pugmarks.in (103.35.120.24)  308.732 ms  309.289 ms  309.475 ms
16  * * *
```

- Pings from monitor.seecs.edu.pk to www.iustlive.com appear as:

```
Executing exec(traceroute -m 30 -q 3 202.66.174.254 140)
traceroute to 202.66.174.254 (202.66.174.254), 30 hops max, 140 byte packets
 1  10.3.20.1 (10.3.20.1)  0.584 ms  1.000 ms  1.237 ms
 2  10.1.2.254 (10.1.2.254)  0.789 ms  0.443 ms  0.586 ms
 3  10.1.1.22 (10.1.1.22)  10.725 ms  10.962 ms  11.100 ms
 4  10.1.100.1 (10.1.100.1)  0.605 ms  0.383 ms  0.663 ms
 5  10.0.11.1 (10.0.11.1)  1.064 ms  0.780 ms  1.009 ms
 6  111.68.101.1.nust.edu.pk (111.68.101.1)  1.989 ms  1.815 ms  1.746 ms
 7  172.31.252.25 (172.31.252.25)  2.188 ms  2.323 ms  2.073 ms
 8  tw23-static237.tw1.com (117.20.23.237)  2.604 ms  2.476 ms  2.521 ms
 9  110.93.252.98 (110.93.252.98)  23.663 ms  23.778 ms  23.716 ms
10  110.93.253.166 (110.93.253.166)  24.523 ms  24.585 ms  24.542 ms
11  9498.sgw.equinix.com (27.111.228.40)  104.193 ms  104.053 ms  104.431 ms
12  182.79.190.69 (182.79.190.69)  239.589 ms 182.79.149.252 (182.79.149.252)  247.328 ms 182.79.135.26
(182.79.135.26)  242.917 ms
13  dsl-ncr-static-114.67.16.125.airtelbroadband.in (125.16.67.114)  296.496 ms  302.597 ms  296.965 ms
14  180.179.197.58 (180.179.197.58)  286.933 ms 180.179.197.66 (180.179.197.66)  297.869 ms 180.179.197.58
(180.179.197.58)  291.975 ms
15  180.179.195.181 (180.179.195.181)  311.129 ms  305.208 ms  304.978 ms
16  * * *
```

or later:

```
Executing exec(traceroute -m 30 -q 3 103.35.120.78 140)
traceroute to 103.35.120.78 (103.35.120.78), 30 hops max, 140 byte packets
 1  10.3.20.1 (10.3.20.1)  0.486 ms  0.730 ms  0.891 ms
 2  10.1.2.254 (10.1.2.254)  0.633 ms  0.433 ms  0.798 ms
 3  10.1.1.54 (10.1.1.54)  0.822 ms  0.598 ms  1.050 ms
 4  10.1.100.1 (10.1.100.1)  0.375 ms  0.380 ms  0.376 ms
 5  10.0.11.1 (10.0.11.1)  0.841 ms  1.021 ms  0.824 ms
 6  111.68.101.1.nust.edu.pk (111.68.101.1)  1.991 ms  1.840 ms  1.585 ms
 7  172.31.252.25 (172.31.252.25)  2.822 ms  2.810 ms  2.808 ms
 8  tw23-static237.tw1.com (117.20.23.237)  1.447 ms  2.441 ms  2.437 ms
 9  110.93.254.140 (110.93.254.140)  23.575 ms  23.581 ms  23.815 ms
10  110.93.253.166 (110.93.253.166)  24.364 ms  24.347 ms  24.331 ms
11  9498.sgw.equinix.com (27.111.228.40)  104.280 ms  104.360 ms  111.019 ms
12  182.79.149.16 (182.79.149.16)  252.888 ms 182.79.149.18 (182.79.149.18)  256.297 ms 182.79.149.20
(182.79.149.20)  257.200 ms
13  aes-static-174.123.17.125.airtel.in (125.17.123.174)  306.220 ms  308.392 ms  306.657 ms
14  203.100.78.10 (203.100.78.10)  308.182 ms  308.236 ms  306.584 ms [AS24515/AS9430/AS4058]

15  vps21.pugmarks.in (103.35.120.24)  308.510 ms  308.721 ms  307.485 ms [AS134255/AS38546]
```

I tried using https://hackertarget.com/as-ip-lookup/ and https://www.ultratools.com/tools/asnInfo to find the AS of 9498.sgw.equinix.com (27.111.228.40) as well as 182.79.190.69 but without success.