

# Bangladesh NREN BDREN case study March 2016

There was a Bangladesh Research and Education Network (BDREN) conference (MEETBDREN) in Dhaka on April 17-18, 2016 that Les was invited to give a talk presenting the results of network monitoring by PingER especially as related to Bangladesh. Unfortunately I was unable to attend, however we put together a case study and set of slides that I could either present remotely or an attendee could present.

## Long term performance of Bangladesh seen from SLAC

See the [spreadsheet](#) and the [Map of Average RTT from Dhaka](#) to the world.

## Comparison of universities connected by BDREN with those not so connected

Another attendee (Md. Nadir Bin Ali, Deputy Director, IT, LMC, Cisco Networking Academy, Daffodil International University, 102 Shukrabad, Mirpur Road, Dhanmondi, Dhaka, Bangladesh) requested assistance to compare the network performance for universities connected to BDREN with those connected to non BDREN ISPs.

Ideally to compare one would need multiple PingER Measurement Agents (MAs) in Bangladesh (BD). Some on BDREN some on other ISPs and a selection of targets in BD some on BDREN some on other ISPs. Then you would compare the performance BDREN to BDREN, BDREN to ISP, ISP to BDREN, ISP to ISP. Currently there is only one BDREN MA in BD (Daffodil) and it is not monitoring many (If any) targets in BD.

Getting another non BDREN MA in BD will require some site setting up a PingER MA, and making measurements. By the time the site and MA has been identified and the [pinger2.pl](#) installed I doubt there will be many measurements by the time of the conference with enough time to analyze the results and draw conclusions. On the other hand setting up the Daffodil MA to measure multiple sites in BD is much simpler and quick, so some measurements could be available for analysis before the conference. They may not be as complete as those from multiple MAs but they may provide useful information. [To add extra hosts see here.](#)

SLAC can also add BD sites on both BDREN and on other ISP, and see if there is a noticeable difference.

I ran a script to get potential Bangladeshi web servers that have been seen by Google and pinged each in turn to see if it responds and the Round Trip Time (RTT) if it does respond, The result is seen [here](#) for .edu and .ac hosts (presumably Universities)

We also need to determine if the hosts are on BDREN or another ISP. I looked at <http://www.bdren.net.bd/member.php> to see which sites are on BDREN, and created a spread sheet of BDREN hosts in Bangladesh that I can ping that are www servers, and whether the host responding to pings has a RTT of >250ms seen from SLAC (i.e. likely to be in Bangladesh).

There is a [spreadsheet](#) with Bangladesh University web site host names, the IP addresses, their RTTs seen from SLAC, whether their ISP is BDREN, and whether they are monitored from SLAC.

## Traceroutes

To try and verify whether a site is connected by BDREN or not we ran traceroutes from SLAC to the site www hosts. This can be done for example by using <http://www.slac.stanford.edu/cgi-bin/traceroute.pl?target=http://www.daffodilvarsity.edu.bd/>. [The results for the traceroutes are available.](#)