

Routing from UNIMAS to Malaysia

For the anotated traceroutes see here [Routing from UNIMAS to S. E. Asia](#)

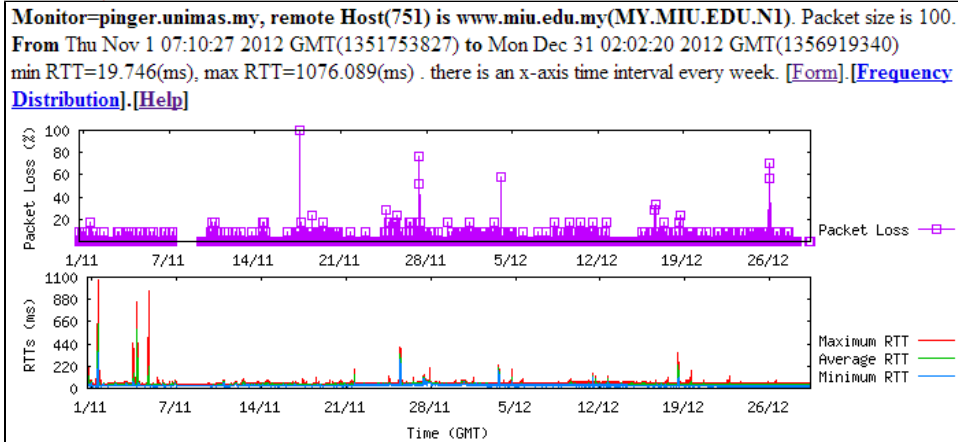
Target	Address	Malaysian State	Hops	Min RTT at end (ms)	ASNs	6th hop	Anomalies
www.myren.net.my	203.80.16.120	Kuala Lumpur	11	24	MYREN	MYREN	
www.um.edu.my	202.185.111.194	Kuala Lumpur*	14	43	MYREN, Jaring	Jaring	
www.umat.edu.my	58.26.189.68	Terenggaru	12	48	MYREN	MYREN	
www.upsi.edu.my	202.190.201.62	Perak*	13	24	TM, Jaring	Jaring	
www.upnm.edu.my	1.9.21.6		11	33	MYREN, Jaring	MYREN	
www.usim.edu.my	58.26.99.98	Negari Sembilan*	12	30	MYREN, Jaring	MYREN	
www.unisza.edu.my	161.142.148.23	Terenggaru*	12	42	MYREN, Jaring	MYREN	
www.utem.edu.my	210.48.157.23	Melaka*	19	92	MYREN, Jaring, TM	MYREN	
www.utm.my	161.139.193.85	Kuala Lumpur*	> 12	31	Jaring, MYREN	Jaring	
www.universitycollegeshahputra.edu.my	199.27.134.51		10	29	Jaring, TM, C&W, PACNET	Jaring, TM	Singapore
www.utp.edu.m	203.135.191.100	Perak*	11	33	MYREN, Jaring	MYREN	
www.qiup.edu.my	103.6.196.75		10	21	TM, Jaring	TM	mschosting
www.allianzeunicollege.edu.my	110.4.41.15	Penang*	10	33	TM, Jaring	TM	mschosting
www.newinti.edu.my	124.150.142.118		10	25	TM, Jaring	TM	hop 8 webserver.myix.gov.my
www.mmu.edu.my	203.106.61.79	Selangor*	14	42	MYREN	MYREN	
www.unikl.edu.my	113.23.141.10		15	33	TM, Jaring	TM	
www.utar.edu.my	58.27.19.137		9	33	TM, Jaring, Extreme Broadband	TM	
www.mahsa.edu.my	175.139.189.25		9	38	TM, Jaring	TM	
www.miu.edu.my	220.226.189.71	Selangor*	13	362	TM, Tinet , flag , Reliance	TM	Route via London, Ireland, India
www.aiu.edu.my	110.4.45.135	Kedah*	10	37	TM, Jaring, mschosting	TM	mschosting
www.btu.upm.edu.my	119.40.116.240	Serawak*	26	71	MYREN, Jaring	MYREN	Lot of hops for not a long way
www.maxis.com.my	202.75.129.146		12	25	TM, Jaring, maxis.myix.gov.my	TM	maxis.myix.gov.my
www.celcom.com.my	203.82.70.227		14	40	TM, Jaring, celcom.myix.gov.my	TM	celcom.myix.gov.my
shinjiru.com.my	111.90.143.33		11	21	TM, globaltransit-my.myix.gov.my (218.100.44.67), Jaring	TM	globaltransit-my.myix.gov.my (218.100.44.67)
datakl.com	210.48.148.222		10	43	TM, Jaring	TM	
emerge.com.my	210.48.155.230		17	58	TM, Jaring	TM	

* See the measurement of loss, jitter and average RTT from SLAC below:

SLAC to Malaysian Hosts Nov. 2012	UNIMAS to Malaysian Hosts Dec, 2012
<p>Avg-RTT, jitter & loss by Malay State</p> <ul style="list-style-type: none"> Need low values of all 3 metrics RTTs similar, big differences in jitter & loss Alliance Uni Coll looks bad UTP next worst loss <p>Seen from SLAC, Nov 2012</p>	<p>Average RTT (ms)</p> <p>0 20 40 60 80</p> <p>Terenggaru: www.unisza.edu.my Selangor: www.mmu.edu.my Selangor: www.miu.edu.my Perak: www.utp.edu.my Perak: www.upsi.edu.my Penang: www.allianzeunicollege.edu.my Negari Sembilan: www.usim.edu.my Melaka: www.utem.edu.my KL: www.utm.my KL: www.um.edu.my KL: www.myren.net.my Kedah: www.aiu.edu.my</p> <p>loss jitter Avg RTT</p> <p>0 2 4 6 8</p> <p>% Loss</p>
Spreadsheet	Spreadsheet

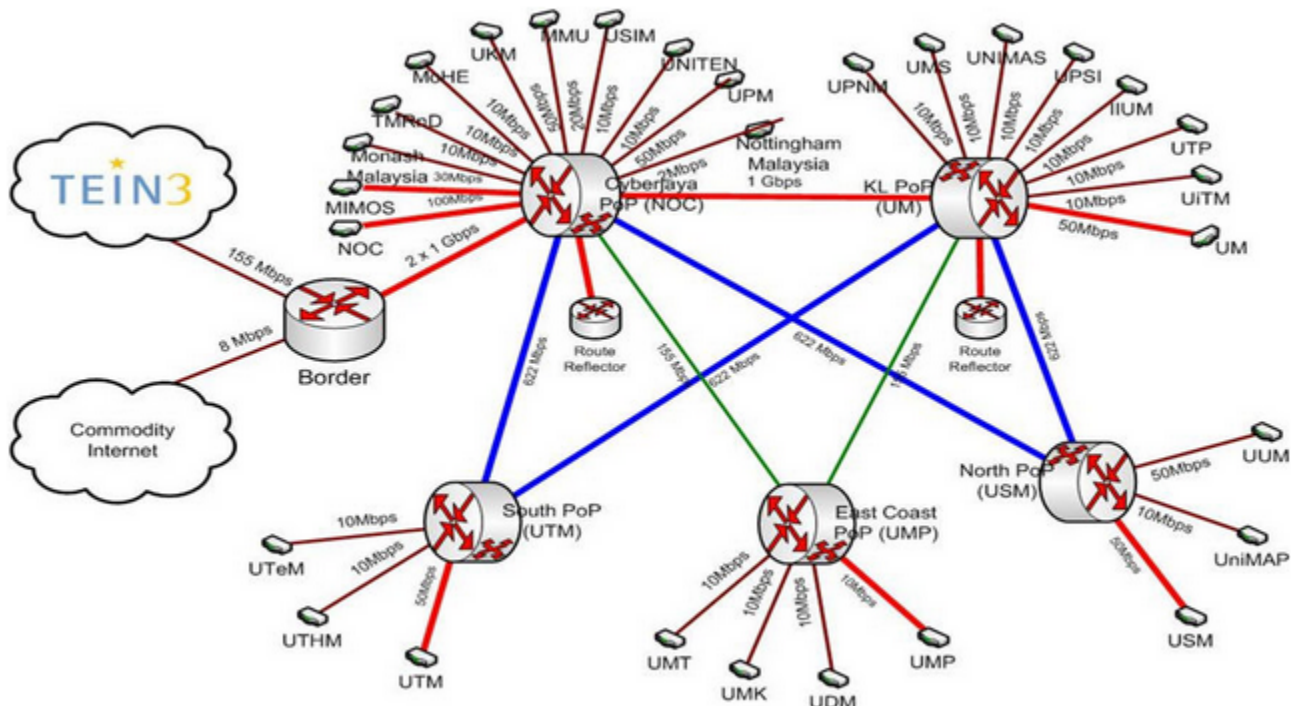
Notes

- ASN = [Autonomous System Number](#)
- TM = [Telekom Malaysia Berhad](#)
- myix.gov.my is the [Malaysia Internet eXchange](#)
- The 6th hop is where the traffic is handed over to the ISP.
- >n means the target host never responded, n is the last hop recorded
- The min RTT is the minimum of the 3 RTTs measured at each hop.
- mschosting AKA ExaBytes cloud, looks like the end host may be at cloud service provider rather than the University site. It also appears that mschosting.com name is up or sale.
- The routing is very strange for www.miu.edu.my. This leads to long RTTs. I believe the traceroutes were made in mid to late December 2012. If so, they are not reflected in the UNIMAS to MIU pingtable.pl results (see below). Maybe the routes between www.miu.edu.my and pinger.unimas.my and the host used to make the traceroute measurements are different. This bears further investigation.



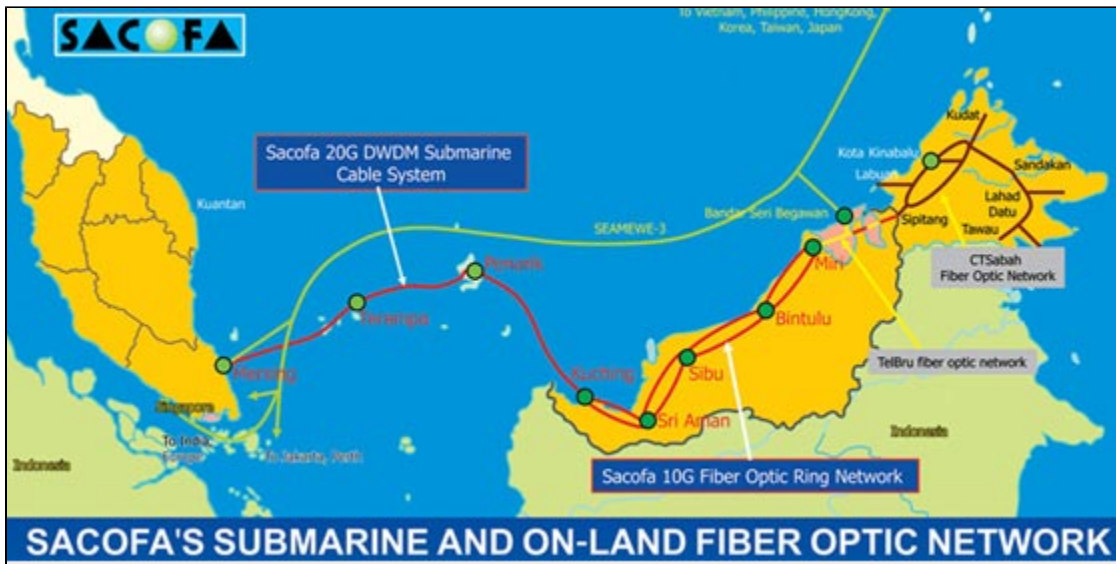
- Only 7 out of 25 Malaysian targets use MYREN as their initial ISP. how come? Is Jaring or TM part of MYREN or vice versa.
- What is the relationship between MYREN, TM and Jaring (in December 2006, the Ministry of Finance of Malaysia officially took over JARING from MIMOS Berhad)

The 2010 map of MYREN seen below may help in understanding the routing. However, the UNIMAS links is here reported at 10Mbps, whereas it is 100Mbps. Also Sabah, Bintulu, Sibul don't show up in the map.



Fibre Optic cables

Sacofa (Sarawak Common Communications Facilities) owns & operates an extensive on-land fibre network within Sarawak as well as an optical fibre submarine cable system connecting Sarawak and Peninsular Malaysia. They have five Operation & Maintenance Centres in Kuching, Sibul, Bintulu, Miri & Mersing. [More](#)



There is (2011) a proposed [link between Sarawak's capital Kuching and Indonesia's Pontianak](#). The Government Linked Company (GLC) of Sarcoba, which celebrates 10 years in 2011, enjoys fibre network connectivity with Brunei and an underwater cable system to Mersing, Johor on the west coast of peninsular Malaysia.

The submarine Fiber Optic Cable which provide backbone connectivity between Labuan to Sabah, Sarawak and Peninsular Malaysia has a total bandwidth of 110Gbps. Two ground satellites which facilitate as a restoration during submarine cable failure. Labuan is connected to 23 countries via an International Toll Free Services. [More](#).

There is also a [list of completed towers](#) available.