

NREN update

NREN: IDREN/INHERENT

Country: Indonesia

Presenter: Basuki Suhardiman

The 3rd Asi@Connect Project Meeting/ March 26 2018
Matrix Building, Biopolis, Singapore



Organization



- ❖ **NREN :**

- ❖ **IDREN/Inherent**

- ❖ Initiated by several Universities members 2015 , as continues program of INHERENT

- ❖ ITB (as TEIN representative in Indonesia

- ❖ University of Indonesia (Jakarta)

- ❖ University of Gajahmada (Jogjakarta)

- ❖ University of Brawijaya (Malang)

- ❖ Suraya Institute of Technology (Surabaya)

- ❖ Approved by Ministry of Science Technology

- ❖ Directorate General of Learning and Student Affairs (Higher Education)

- ❖ Funding for the Link via ITB

- ❖ **Number of member institutions(connected to your REN) :**

- ❖ **50 – 70 Institution**

Backbone :



- ❖ **International Backbone from Bandung to Singapore , 622 Mbps**

- ❖ **Domestic Backbone 1 Gbps – 2 Gbps**

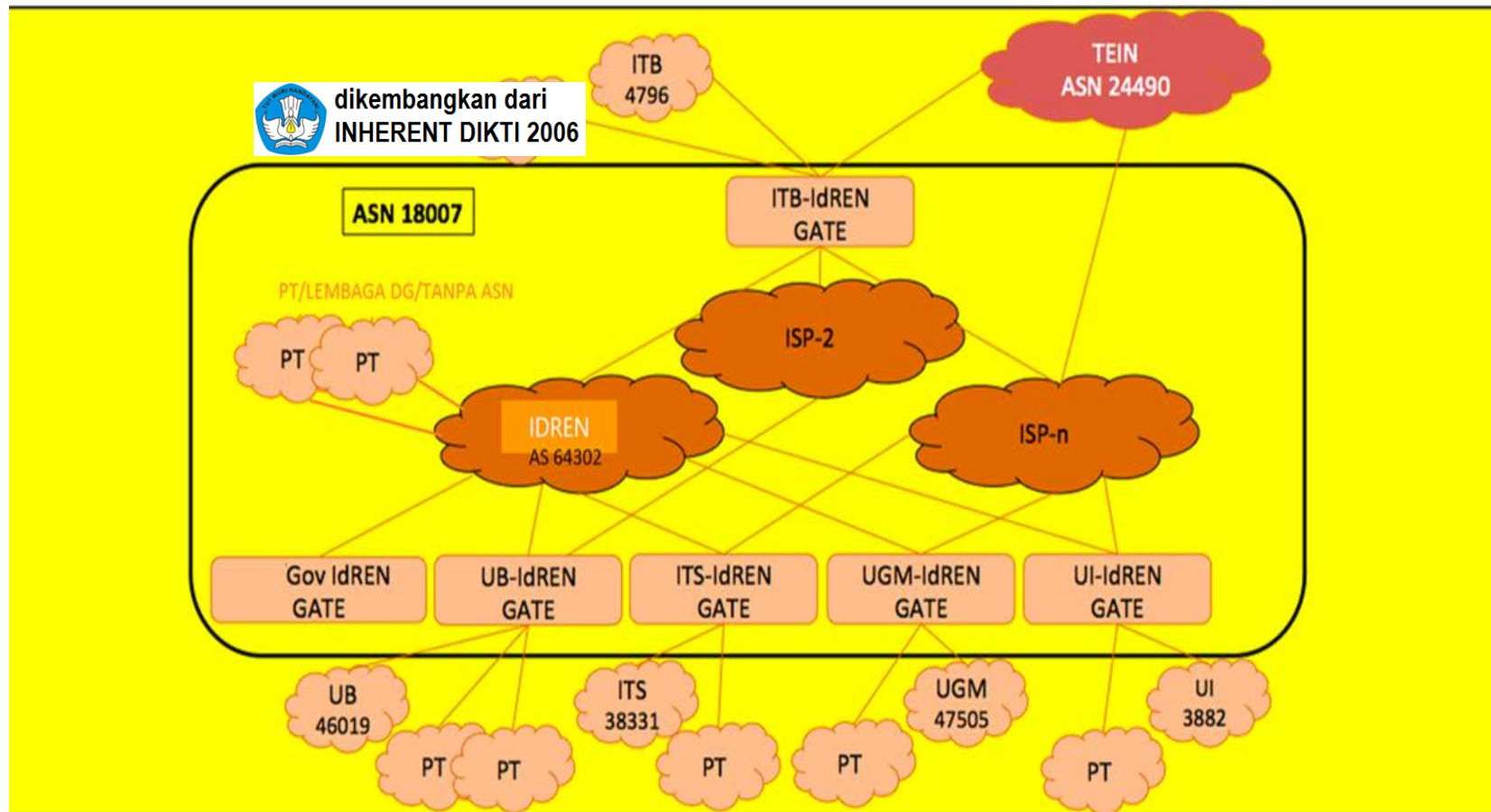


Network update

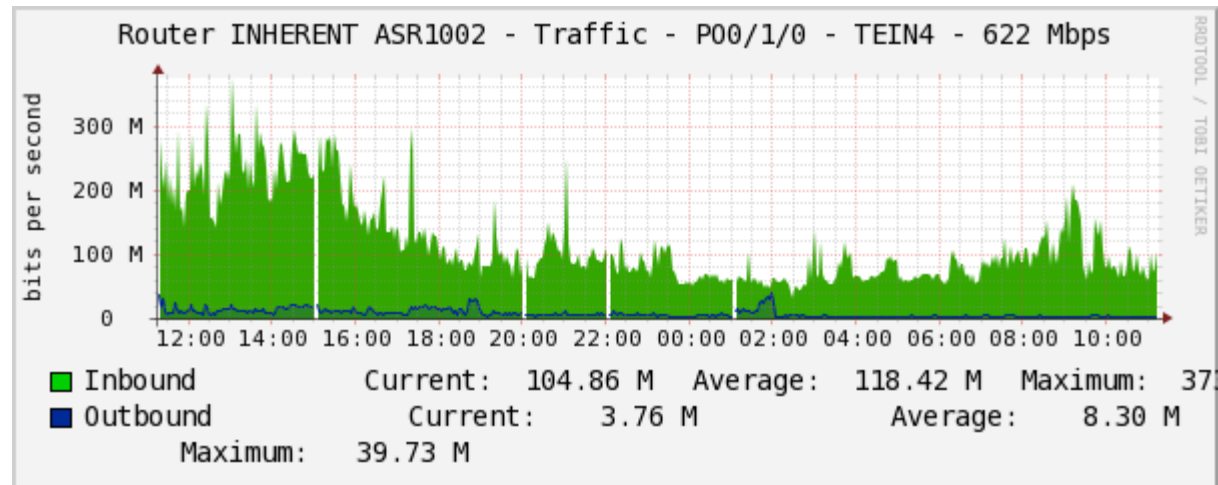
- ❖ **Network connection (National) :**
- ❖ **Network connection (International) :**



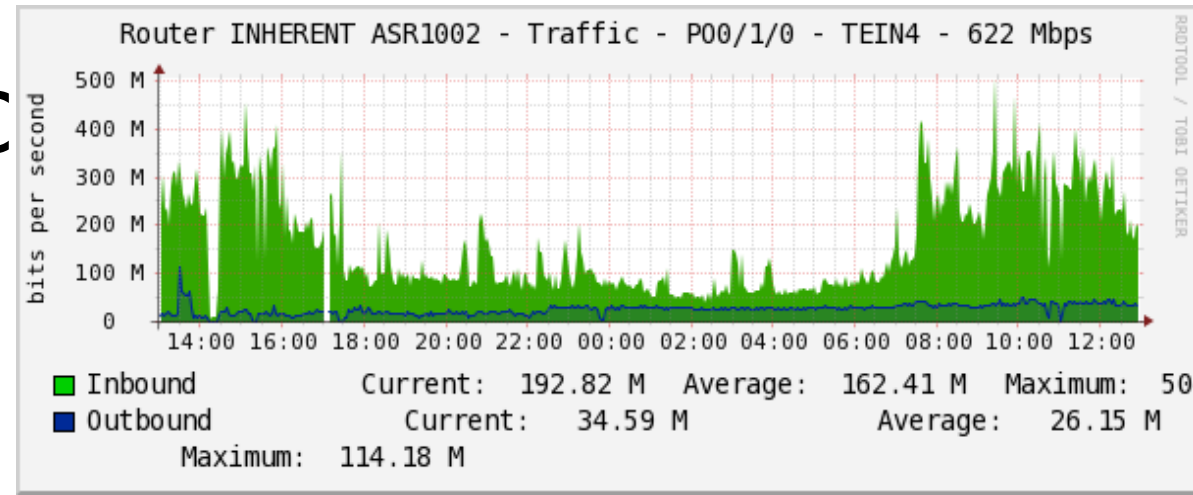
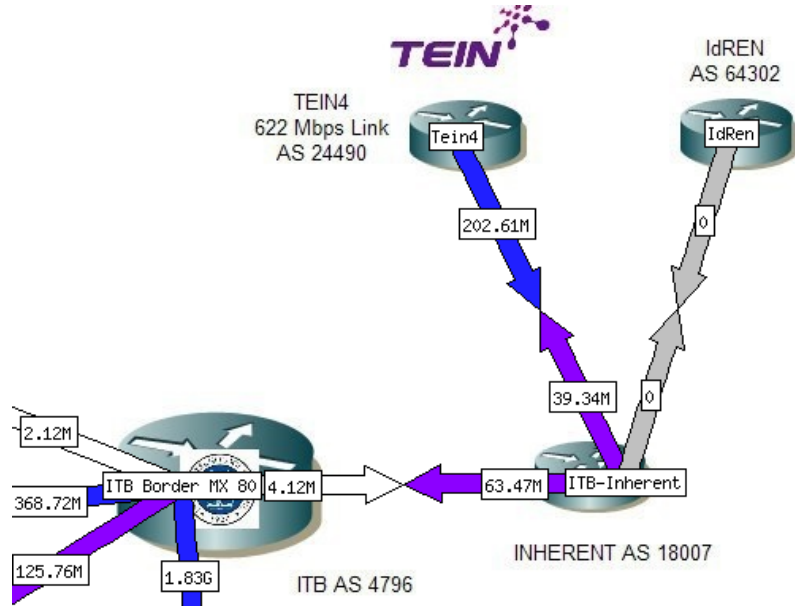
IDREN Topology



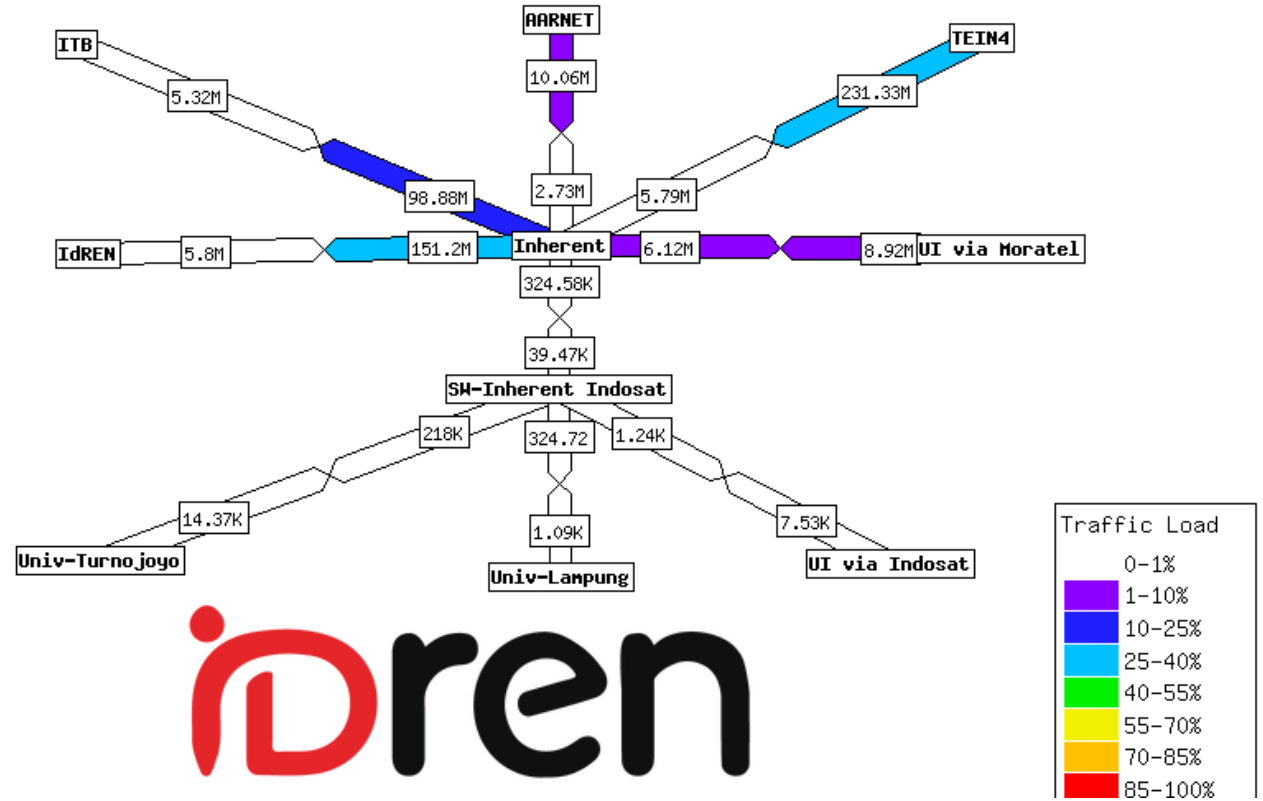
Traffic Between Indonesia (bdg) – Singapore (TEIN) NOC



Inherent/IDREN Traffic

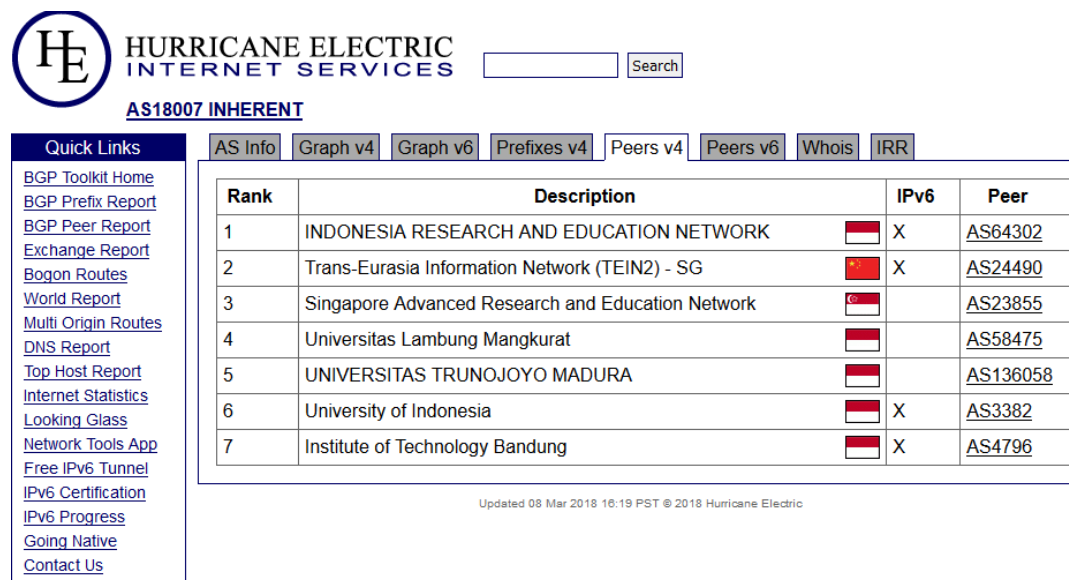


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ITB's gateway , AS18007

- http://bgp.he.net/AS18007#_peers
- More than 50 Universities has been connect ,
- 30 Universities have their own IP address and ASN, target 100 Universities have their own IP and ASN (next year)



HURRICANE ELECTRIC
INTERNET SERVICES

AS18007 INHERENT

AS Info Graph v4 Graph v6 Prefixes v4 Peers v4 Peers v6 Whois IRR

Rank	Description	IPv6	Peer
1	INDONESIA RESEARCH AND EDUCATION NETWORK	X	AS64302
2	Trans-Eurasia Information Network (TEIN2) - SG	X	AS24490
3	Singapore Advanced Research and Education Network		AS23855
4	Universitas Lambung Mangkurat		AS58475
5	UNIVERSITAS TRUNOJOYO MADURA		AS136058
6	University of Indonesia	X	AS3382
7	Institute of Technology Bandung	X	AS4796

Updated 08 Mar 2018 16:19 PST © 2018 Hurricane Electric

IDREN's Gateway

- Dibawah Network
- AS 64302
- <https://bgp.he.net/AS64302>



HURRICANE ELECTRIC
INTERNET SERVICES

 Search

AS64302 INDONESIA RESEARCH AND EDUCATION NETWORK

Quick Links

- [BGP Toolkit Home](#)
- [BGP Prefix Report](#)
- [BGP Peer Report](#)
- [Exchange Report](#)
- [Bogon Routes](#)
- [World Report](#)
- [Multi Origin Routes](#)
- [DNS Report](#)
- [Top Host Report](#)
- [Internet Statistics](#)
- [Looking Glass](#)
- [Network Tools App](#)
- [Free IPv6 Tunnel](#)
- [IPv6 Certification](#)
- [IPv6 Progress](#)
- [Going Native](#)
- [Contact Us](#)









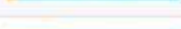






AS Info Graph v4 Graph v6 Prefixes v4 Prefixes v6 Peers v4 Peers v6 Whois IRR

Rank	Description	IPv6	Peer
1	INHERENT	X	AS18007
2	Universitas Negeri Yogyakarta	X	AS55674
3	Bogor Agricultural University		AS17553
4	Universitas Muhammadiyah Malang		AS46057
5	UNIVERSITAS RIAU		AS56254
6	Universitas Islam Negeri Maulana Malik Ibrahim (UIN Maliki)		AS131781
7	Universitas Ahmad Dahlan		AS132642
8	Universitas Islam Negeri Suska Riau		AS133844
9	Universitas Hasanuddin		AS134614
10	Politeknik Negeri Sriwijaya	X	AS46047
11	Institut Teknologi Sumatera		AS45318

IDREN/INHERENT traffic

20 ▾

AS number	Chart	Hosts	Alerts	Name	Seen Since	Breakdown	Throughput	Traffic ▾
4796		2322		Institute of Technology Bandung ↗	4 days, 46 min, 13 sec	 Rcvd	1.33 Mbit/s	2.15 TB
3382		85		University of Indonesia ↗	4 days, 45 min, 59 sec	 Sent	5.63 Mbit/s	242.54 GB
45705		119		UNIVERSITAS GADJAH MADA ↗	4 days, 45 min, 55 sec	 Rcvd	5.8 Mbit/s	216.37 GB
46047		233		Politeknik Negeri Sriwijaya ↗	4 days, 45 min, 39 sec	 Rcvd	41.63 Mbit/s	203.17 GB
17553		115		Bogor Agricultural University ↗	4 days, 45 min, 47 sec	 Rcvd	5.8 Mbit/s	139.8 GB
46019		110		Universitas Brawijaya ↗	4 days, 45 min, 39 sec	 Rcvd	315.88 kbit/s	125.45 GB
55674		142		Universitas Negeri Yogyakarta ↗	4 days, 45 min, 43 sec	 Rcvd	1.85 Mbit/s	116.19 GB
63500		20		Lembaga Pengembangan Teknologi Informasi dan Komunikasi ↗	4 days, 45 min, 51 sec	 Rcvd	28.62 Mbit/s	110.68 GB
133357		33		TELKOM UNIVERSITY ↗	4 days, 45 min, 39 sec	 Rcvd	16.3 kbit/s	61.94 GB
38142		139		Universitas Airlangga ↗	4 days, 45 min, 57 sec	 Sent	466.18 kbit/s	55.81 GB
38331		29		Institut Teknologi Sepuluh Nopember ↗	4 days, 45 min, 39 sec	 Rcvd	1.47 Mbit/s	55.35 GB
58400		66		Universitas Negeri Semarang ↗	4 days, 45 min, 37 sec	 Rcvd	7.93 kbit/s	29.33 GB
7575		663		Australian Academic and Research Network (AARNet) ↗	42 min, 29 sec	 Sent	2.09 kbit/s	46.01 GB

Eduroam Indonesia



eduroam (education roaming) is an international roaming service for users in research, higher education and further education. It provides researchers, teachers and students easy and secure network access when visiting an institution other than their own. Authentication of users is performed by their home institution, using the same credentials as when they access the network locally, while authorization to access the Internet and possibly other resources is handled by the visited institution. Users do not have to pay for using eduroam.

<https://eduroamid.info/>

ID-Telemedicine Activity

- The 11th ID-Neuro case Telemedicine, taken from UGM-Sardjito Hospital. March 13th, 2018
- Almost every week there were activity on ID-telemedicine



Eduroam

- [Institut Teknologi Bandung](#)
- [Universitas Islam Indonesia](#)
- [Universitas Gadjah Mada \(limited availability\)](#)
- [Universitas Negeri Yogyakarta](#)
- [Universitas Brawijaya](#)
- [Stenden University Bali](#)



OF@TEIN Activity (SDN)/ONOS



- Seminar and workshop
 - @ITB , Bandung
 - @UII , Jogjakarta
- <https://www.eventbrite.com/e/itb-open-networking-day-transforming-networking-with-onos-tickets-43367540481#>
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