

LineA

Inter-institutional Laboratory for e-Astronomy

www.linea.gov.br

Consortium formed by 4 research units supervised by the
Brazilian Ministry of S&T:

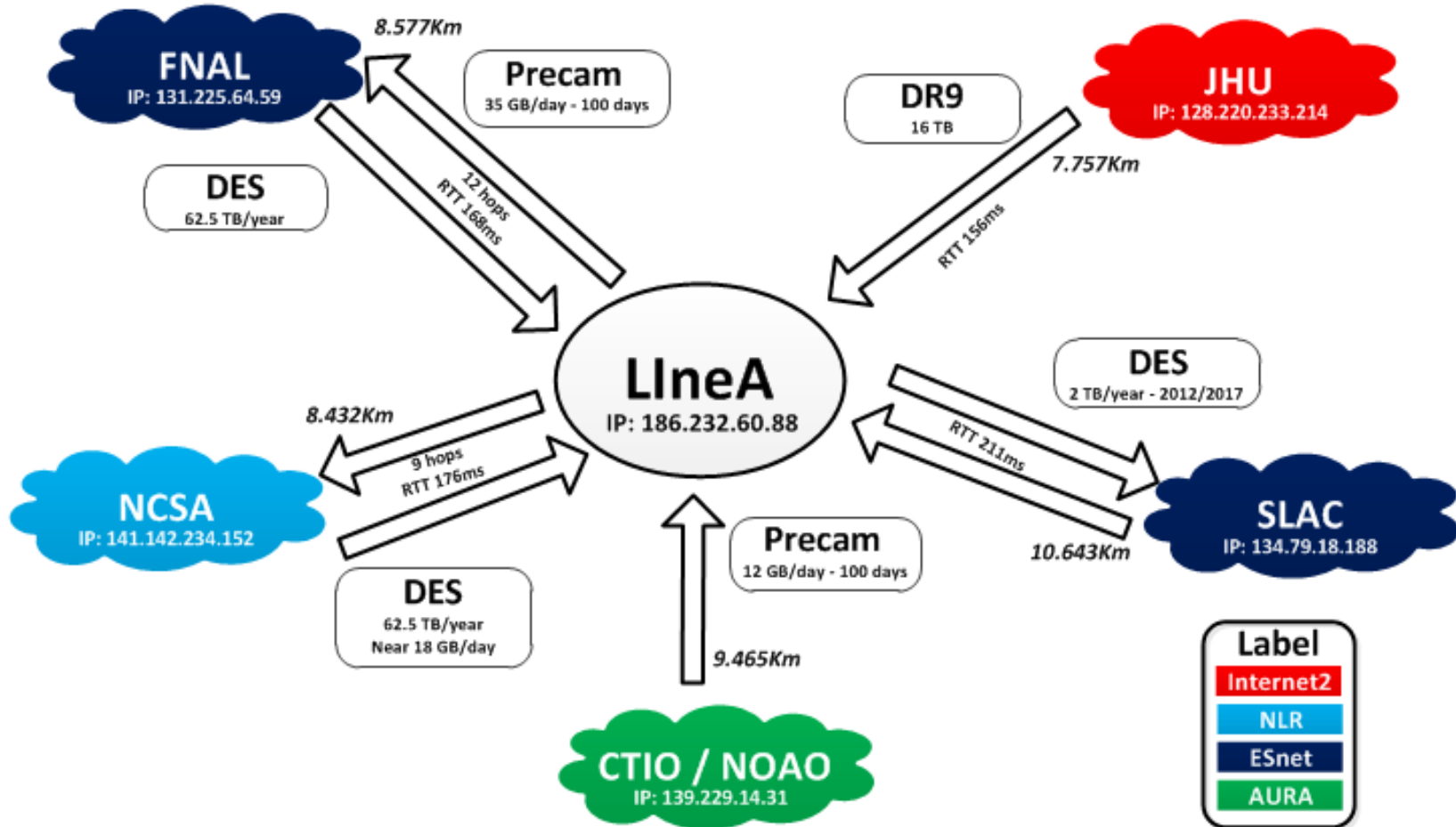
National Observatory (ON)

Brazilian Center for Physics Research (CBPF)

National Laboratory for Scientific Computing (LNCC)

National Research and Education Network (RNP)

LineA data requirements

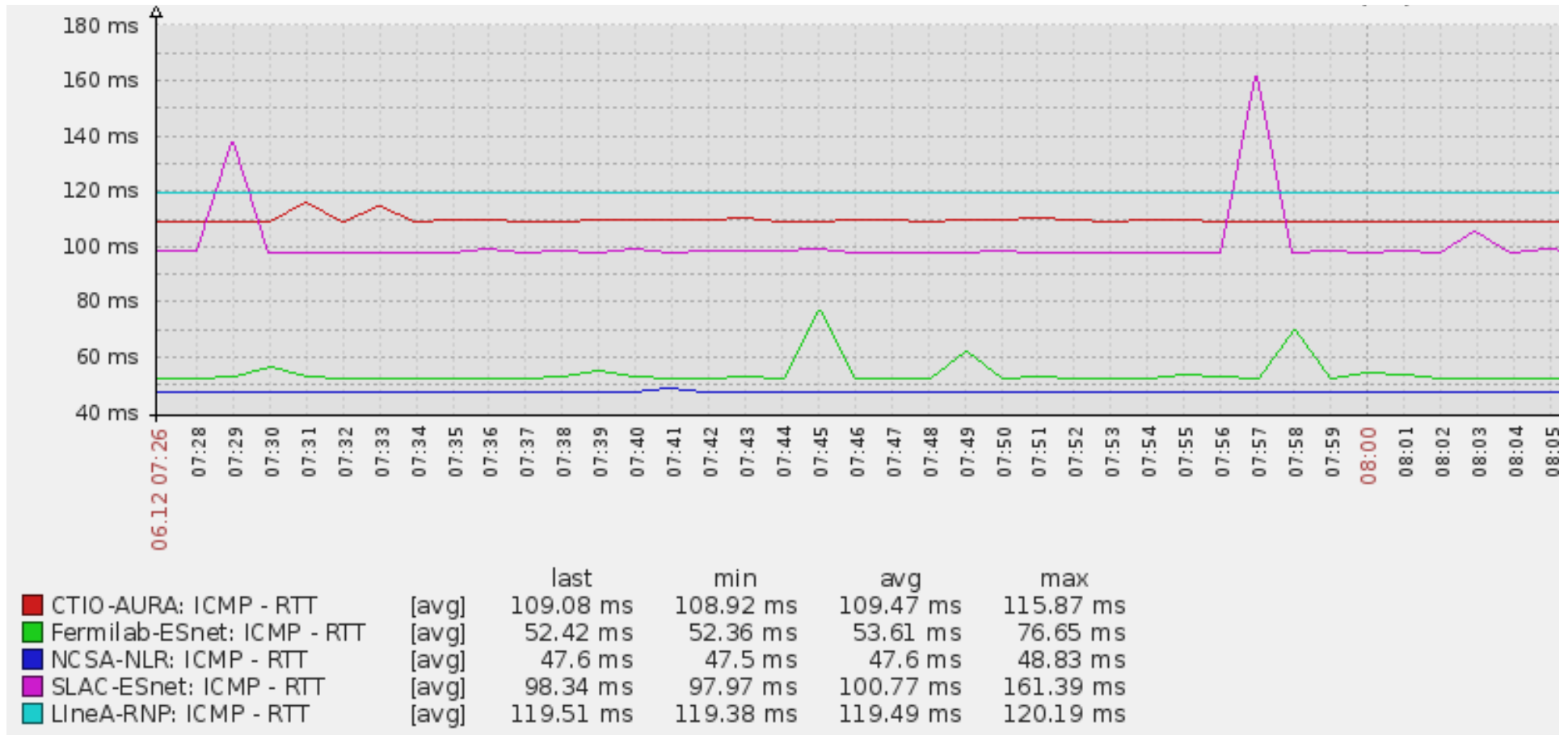


MoU between LIneA and RNP

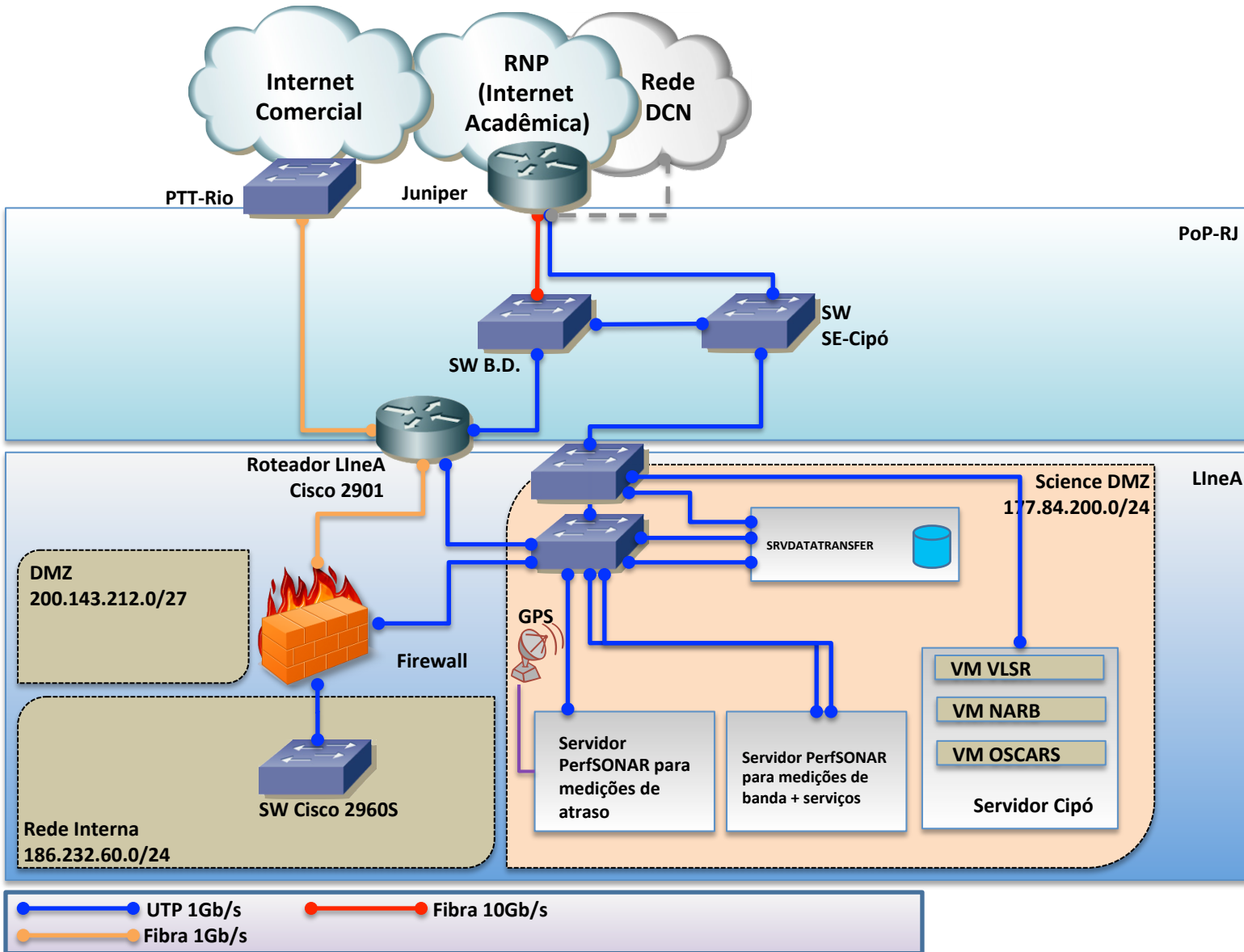
Cooperation activities

- Environment diagnosis
 - Network tuning
 - Data Challenge
 - LIneA Scientific Portal
 - performance and load tests
- Network monitoring
 - Installing perfSONAR monitoring tool
- Dynamic provisioning of lightpaths
 - Experimental service to create end-to-end circuits among LIneA, Fermilab and NCSA
- Science DMZ setup
- Identification of other R&D activities

Delay monitoring, from Miami (RNP's Int'l endpoint)



Assisting LIneA to setup a ScienceDMZ



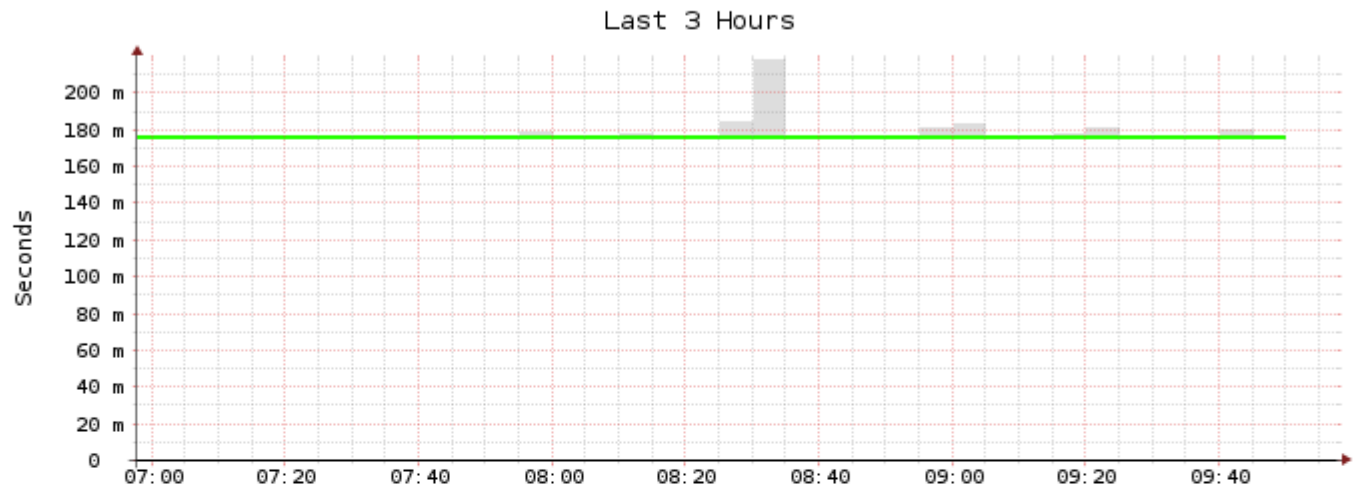
Packet loss monitoring, from Rio de Janeiro

SmokePing
Targets:

Filter:

- Internet
- America Latina
- EUA - Europa
- Clientes Especiais
- LineA
- NCSA-NLR**
- SLAC-ESnet
- CTIO-AURA-AS19228
- Fermilab-ESnet

NCSA-NLR-141.142.234.152



median rtt: 176.1 ms avg 176.2 ms max 176.1 ms min 176.2 ms now 0.0 ms sd 4.5 k am/s
packet loss: 0.00 % avg 0.00 % max 0.00 % min 0.00 % now
loss color: 0 1/20 2/20 3/20 4/20 10/20 19/20
probe: 20 ICMP Echo Pings (56 Bytes) every 300s end: Fri Dec 7 09:57:31 2012

**CTIO-AURA (139.229.14.31) and SLAC-ESnet (134.79.18.188)
are blocking pings from LineA**



We need your help for Troubleshooting

- Does your system support Jumboframes?
Do you use the standard size of 9000 bytes?
- Which TCP congestion control algorithm do you use?
- Please indicate your recommended data transfer tool (e.g. GridFTP)
- Do you have the perfSONAR tool installed in your network domain?
- Is there any URL where we can check the network statistics (traffic, packet loss) of your network provider?
- Do you have a “Looking Glass tool” so that we can run a *trace* command from your network domain?
- Please run the Network Diagnostic test available in the following URL and send us the test result.
<http://ndt.pop-sp.rnp.br/#>

