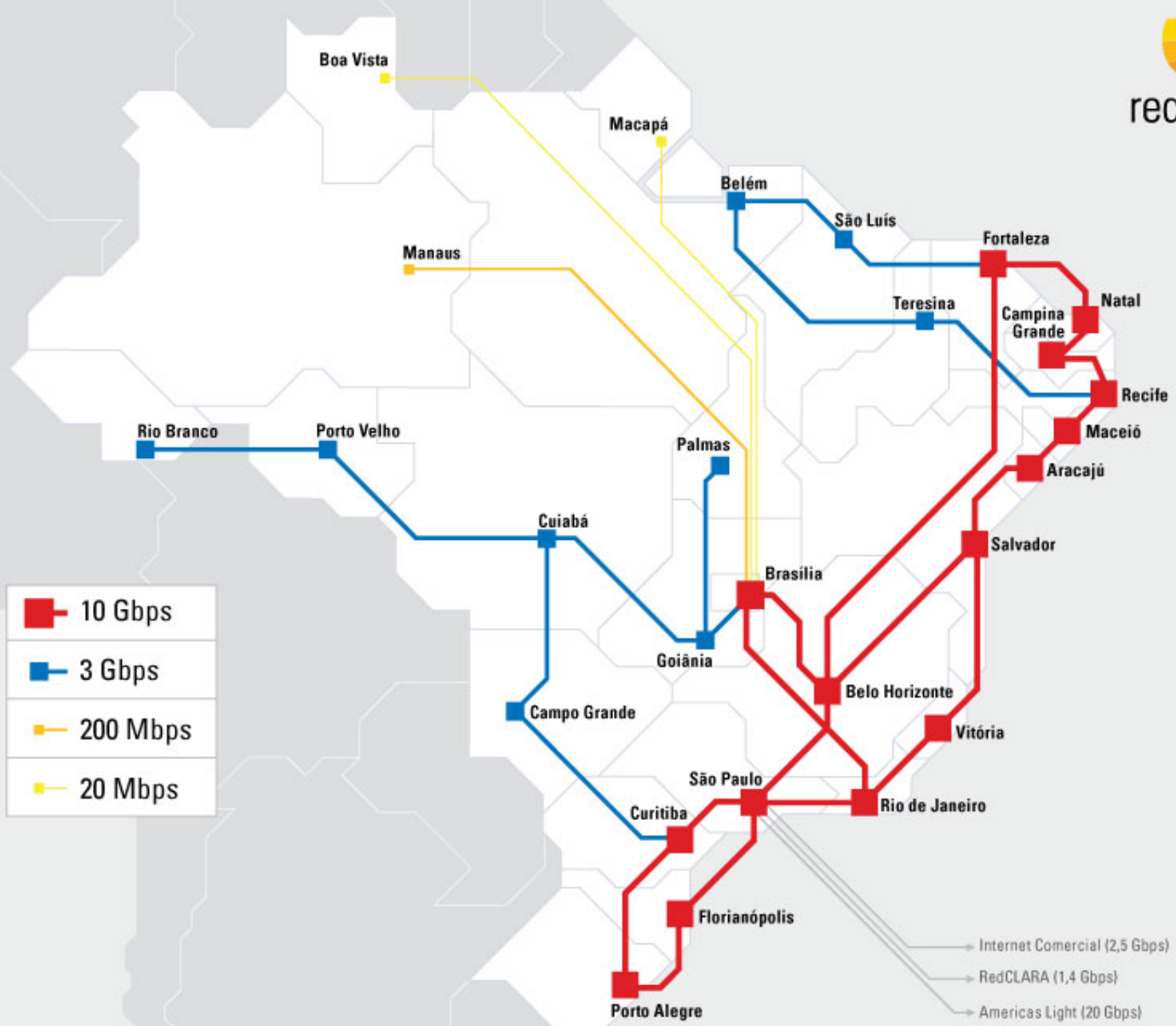
RNP

Brazil's National Education and Research Network

Ministério da Cultura
Ministério da Saúde
Ministério da Educação
Ministério da Ciência, Tecnologia e Inovação

GOVERNO FEDERAL
BRASIL
PAÍS RICO É PAÍS SEM POBREZA



Agreement with local telco Oi, brokered by regulatory agency

Reaching 24 of 27 capitals (no terrestrial fibre to other 3 capitals)

☞ **http://www.rnp.br/backbone/**

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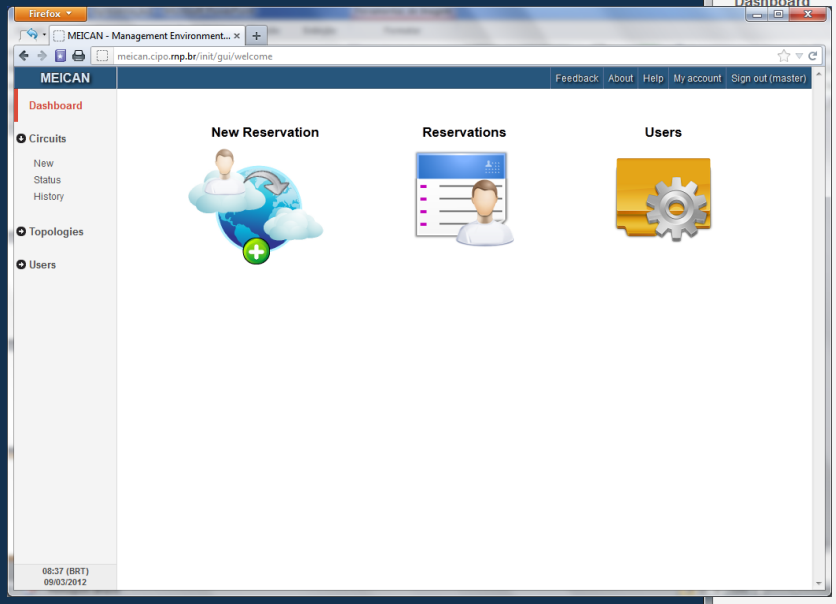
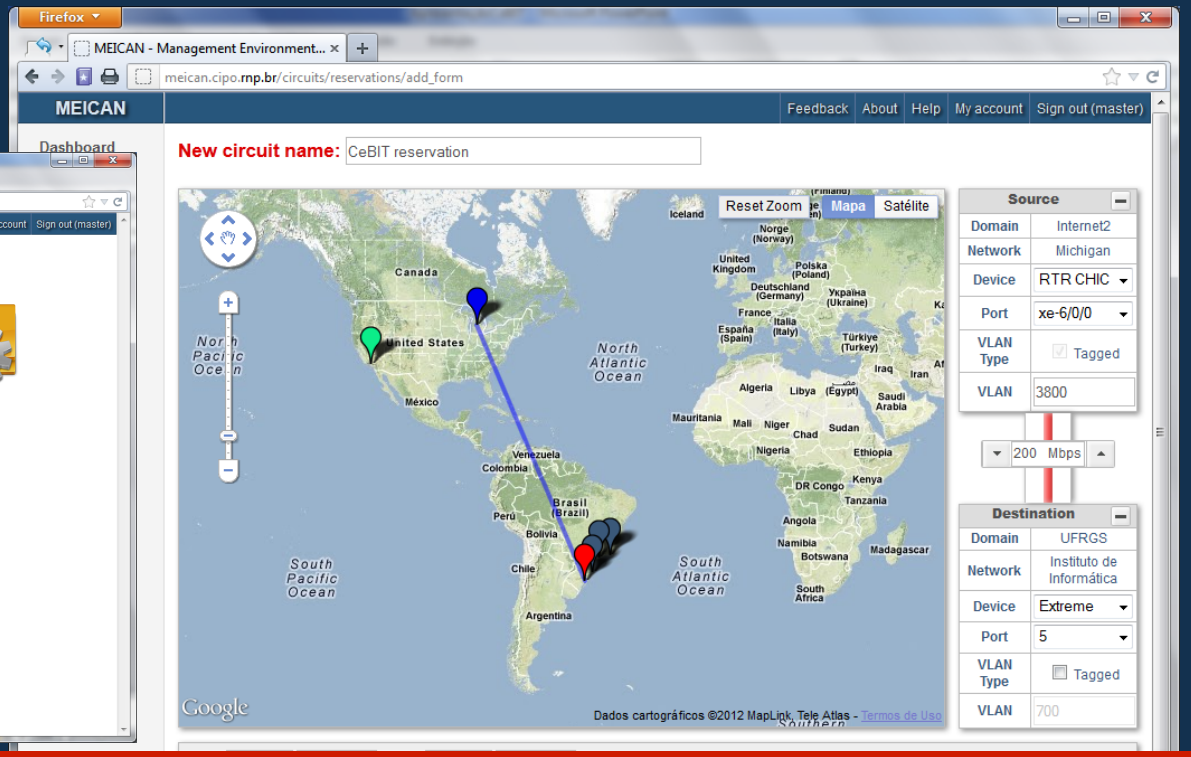
Hybrid Networks

- Since ~2002, NRENs have begun to provide 2 *network services*:
  routed IP (traditional Internet)
  end-to-end virtual circuits (aka “lightpaths”)
  - This lightpath service is intended for users with high QoS needs, usually guaranteed bandwidth, as is implemented by segregation between their traffic and the general IP traffic.
- The **GLIF** organisation (www.glif.is) coordinates international collaboration using lighpaths

Dynamic Lightpath Establishment
The **Cipó** experimental service

- We are now beginning to deploy **dynamic circuits** as an **experimental service** on our network
  - This will also interoperate with similar services in other networks.





ON, the National Observatory, was previously selected as a beta-tester

LINeA
Interinstitutional Lab of e-Astronomy

Institutions:

- ON: National Observatory
- LNCC: National Lab for Scientific Computing
- CBPF: The *Brazilian Center* for Physics Research
- RNP

Projects:

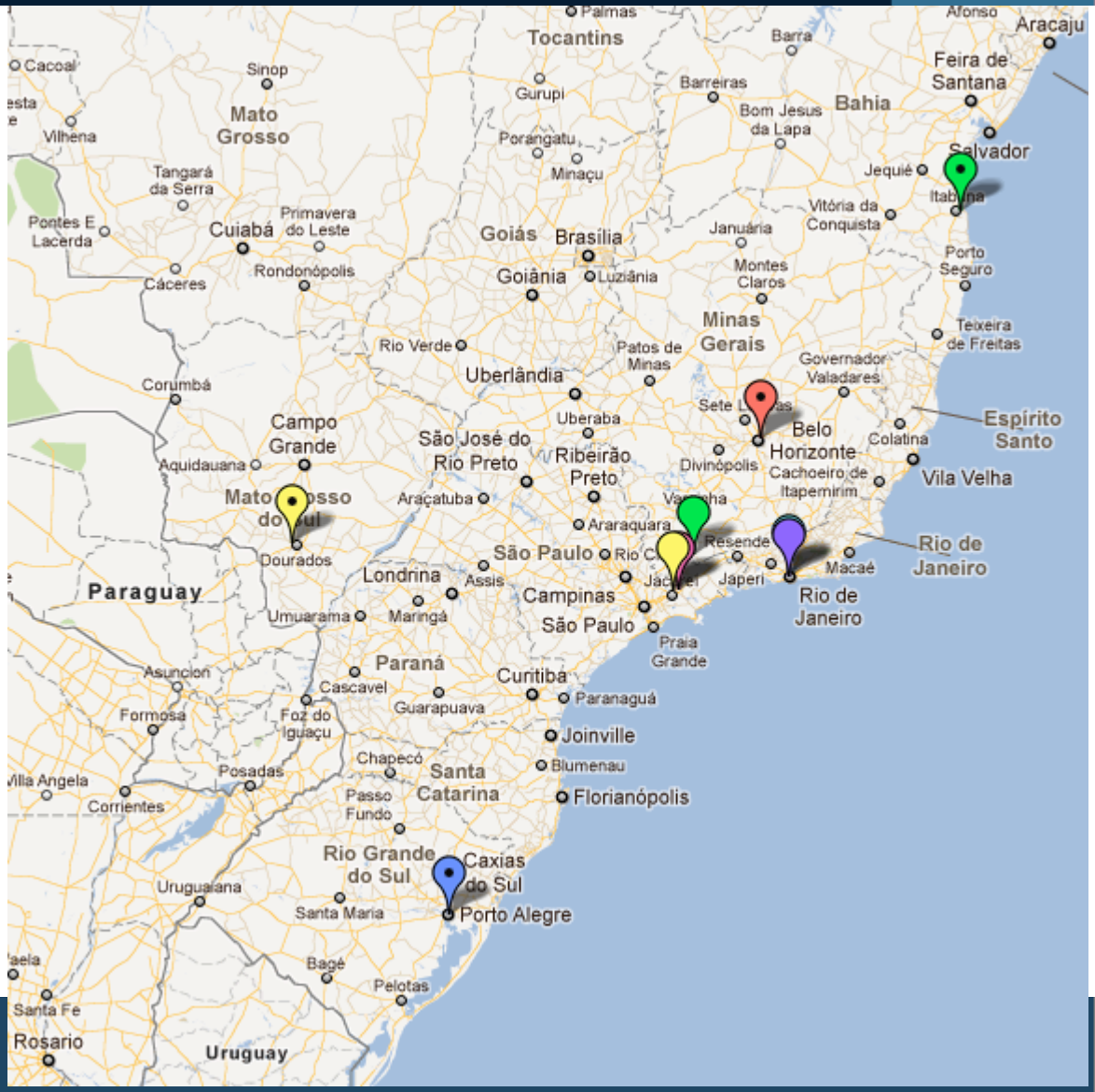
- Dark Energy Survey
- SDSS III

Source	Data	Hostname
LBL	DR8 Datasweeps	data.sdss3.org
SLAC	**Addgals**	**www.slac.stanford.edu**
NCSA	LSST	lsst1.ncsa.uiuc.edu
NCSA	DC5*	cosmology.illinois.edu
FNAL	**PreCam**	**desar.cosmology.illinois.edu (offline for maintenance)**
CTIO	**PreCam**	**Temporary server, now offline**
JHU	DR8 Database	gwln1.pha.jhu.edu

SOAR - SOuthern Astrophysical Research Telescope

Academic connectivity from user institutions

- UFRGS - 1Gbps
- UFGD - 34Mbps
- INPE - 155Mbps
- UESC - 50Mbps
- UFMG - 1Gbps
- UFRJ - 1Gbps
- ON - 34 Mbps / LIneA - 10Gbps
- UNIVAP - 155Mbps
- LNA - 34Mbps



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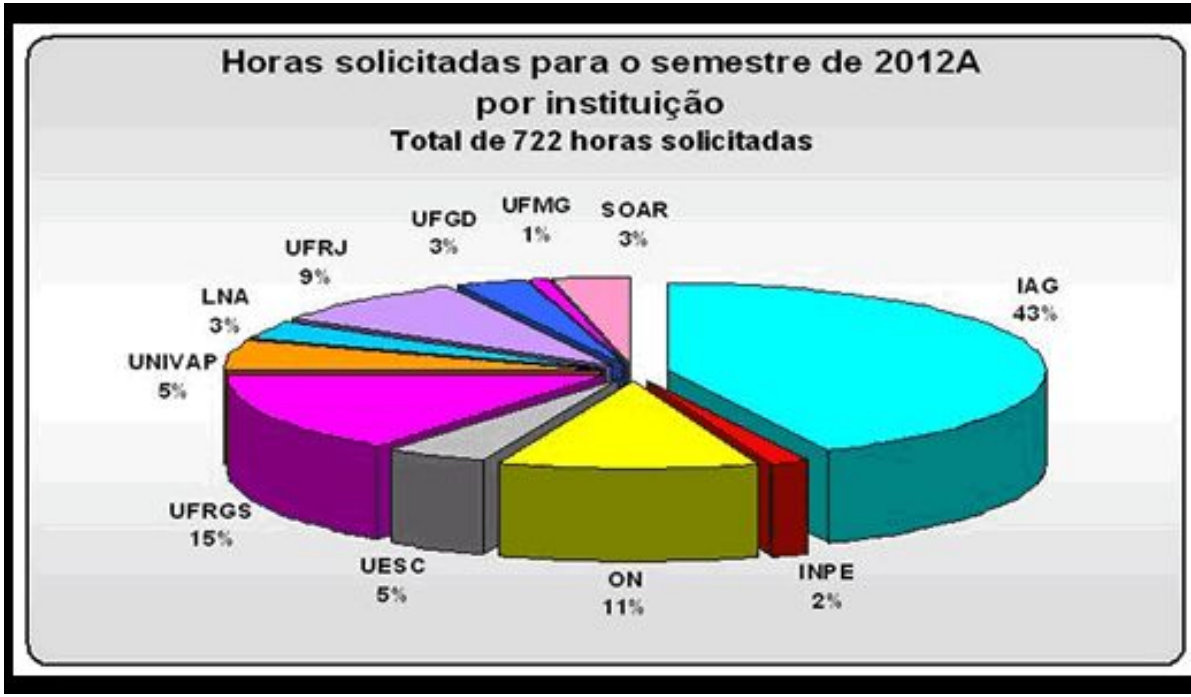

http://www.lna.br/soar/NSO/SOARNSO.html

Thank you / Obrigado!

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