

RNP updates SAACC annual meeting April 17th 2019

Aluizio Hazin



- Agreements signed with Electric Power Utility Companies for the Northeast, Southeast (including part of Center-West) and for the South regions
 - Companies: Chesf, Furnas and Eletrosul
 - 20 years partnership
 - Agreement: ¹/₂ capacity (20 x 50 GHz channels for RNP)
 - These are mainly for RNP core network but customers on the fiber routes will be connected as well, when possible
 - In order to reach this scalability level to customers connections, we will continue talking with other possible partners (e.g.: local ISPs)
- Working with other possible partners to upgrade the network segments not covered by these 3 agreements.



RNP National Backbone 2020+ - Partners

NE: CHESF

<u>SE & MW:</u>

Furnas

<u>S & MW:</u>

Furnas Eletrosul Providers (in negociation)

<u>NE & MW</u>

Telebras (agreement in negociation) Providers (in negociation)





RNP optical network for LSST connection

- RNP's agreements with Furnas and Eletrosul don't cover the full path from RNP PoP São Paulo to RNP PoP in Porto Alegre
 - RNP PoPs are located in the capitals
 - There is a gap in the countryside of the São Paulo state
 - We have options in advanced phase of negotiation to build the South – Southern connection (São Paulo – Curitiba)
 - <u>RNP needs a solution for itself as</u> well for LSST and Bella-T.
 - We are working to accomplish this connection by Q1-2020.



Connections to be deployed in 2019



• RNP and FIU are activating 2x 200G channels

- 200G in the "express path" from Miami and Boca Raton to São Paulo
- 200G connecting Miami Fortaleza São Paulo
- FIU is responsable for the US segments
- RNP is responsable for the Brazilian segments
- A single management tool will be used to make it easier to monitor the end-to-end service

• Equipment are in installation phase

- Expected to be operational in the next 30 days
- Physical installation should be done by next week
- Equipment will be ready for service by the end of April
- Working with Angola Cables to establish the submarine connections



Porto Alegre/RS – Buenos Aires/AR (Bella-T Project)

- Tender process in final phase
- Point of connection: RNP PoP and RedClara PoP
- Optical channels expected to be available by <u>September 2019</u>





Buenos Aires/AR – Santiago/CL (Bella-T Project)

- Tender process in final phase
- Point of connection: RedClara PoPs
- Optical channels expected to be available by November 2019
- Under negotiation a redundat path
 - If possible, the "burst" path will be available in a different route from the "dedicated" one.





- Optical equipment to connect Porto Alegre/BR Buenos Aires/AR – Santiago/CL (Bella-T Project)
 - RedClara is preparing the RFP to launch the process in May 2019.
 - Equipment in the "DCI format" (small chassis with transponders only)
 - Providers already have their optical networks ready for 100G channels
 - Expected to be installed and operational by the end of 2019.



New 10G link for supercomputing facility

 Upgrading the access of the National Laboratory for Scientific Computing (LNCC) by end of May 2019

a. Hosts the LIneA data center

- Working on 10G perfSONAR tests over LSST data path
 - a. Petrópolis, RJ (LNCC) to NCSA (Layer 3)
 - b. Petrópolis, RJ (LNCC) to La Serena (Layer 2)
- Challenge: amount of devices to configure for L2 testing in a small time frame
 - a. Already in touch with LIneA, NCSA, FIU and REUNA teams to coordinate the network performance tests
- Main objectives
 - a. Optimize scientific data transfer for LIneA
 - b. Preliminary path evaluation for LSST.



Thank you!

Aluizio Hazin

aluizio.hazin@rnp.br



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