

GREIN Map

GNA-G Community



Gustavo Araújo (RNP)
gustavo.araujo@rnp.br

Agenda

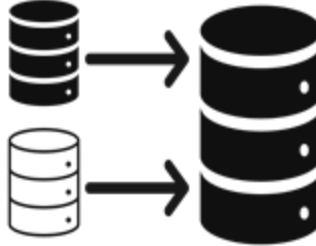
- Where We Come From
- Where We Propose to Go
- Some Motivations
- Ongoing proof of concepts
- Other ongoing actions
- How to contribute

Where We Come From

- **The Legacy:** The GREN Map WG has built a valuable foundation for standardized, store, shared and visualizing the global network.



Standard data
format



Storage and sharing
system



Data
visualization

Where We Propose to Go

The Opportunity: What if we evolve from a group focused on one tool to a *collaboration hub* that enables various initiatives?

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The New Vision: Working group focused on generating value through real *proofs of concept*, learning, and adapting based on them.

Empowering Working Groups:

Assisting other working groups in building their own customized network maps.

GRENML Repositories:

Creating shared GRENML repositories to facilitate data exchange and collaboration among working groups.

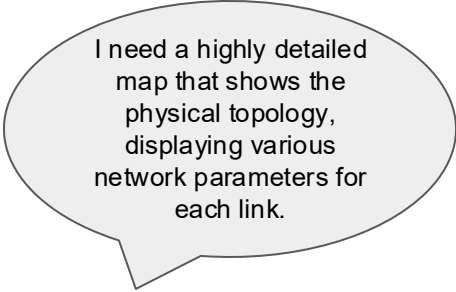
Secure Data Sharing Guidelines:

Developing clear guidelines to ensure the secure and responsible sharing of network data.

Exploring Visualization Tools:

Researching and presenting new tools to help build advanced and innovative network visualizations.

Some Motivations

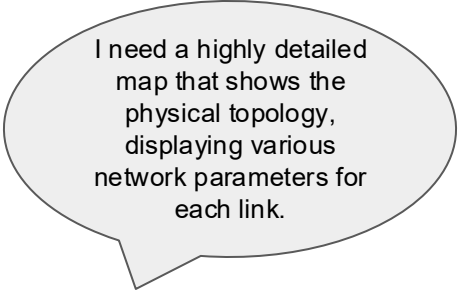


I need a highly detailed map that shows the physical topology, displaying various network parameters for each link.

Some Motivations

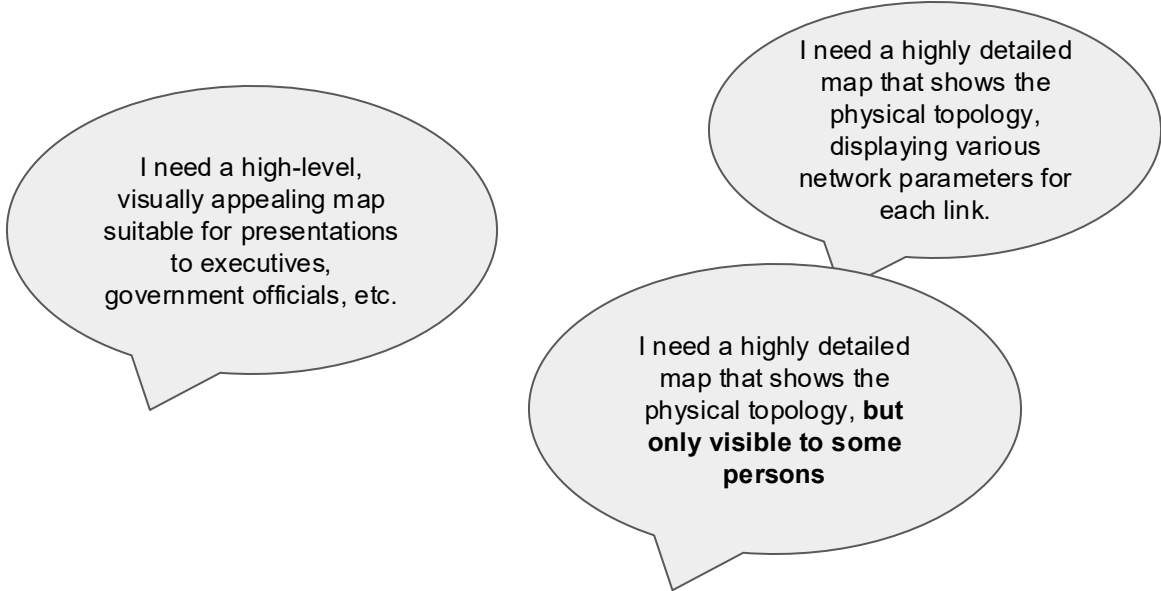


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suitable for presentations
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only visible to some
persons**

Some Motivations

I need a detailed Layer 1 map showing the physical fiber paths, including DWDM channels and amplifier sites connecting our Points of Presence (PoPs).

I need a highly detailed map that shows the physical topology, including various parameters for each link.

I need a high-level, visually appealing map suitable for presentations to executives, government officials, etc.

"I would like an interactive map showing all network equipment by location, allowing us to filter by vendor, model, and software version for asset management.

We need a live logical topology map that displays BGP peering sessions and real-time traffic flow between member institutions and international transit providers.

We need a simple, clean map for our public website that visualizes the main redundant fiber rings ensuring high availability for our member institutions.

I need a high-level, polished map for the Ministry of Education, highlighting all connected universities, research centers, and schools to facilitate our national reach.

I need a highly detailed map that shows the physical topology, **but not visible to some persons**

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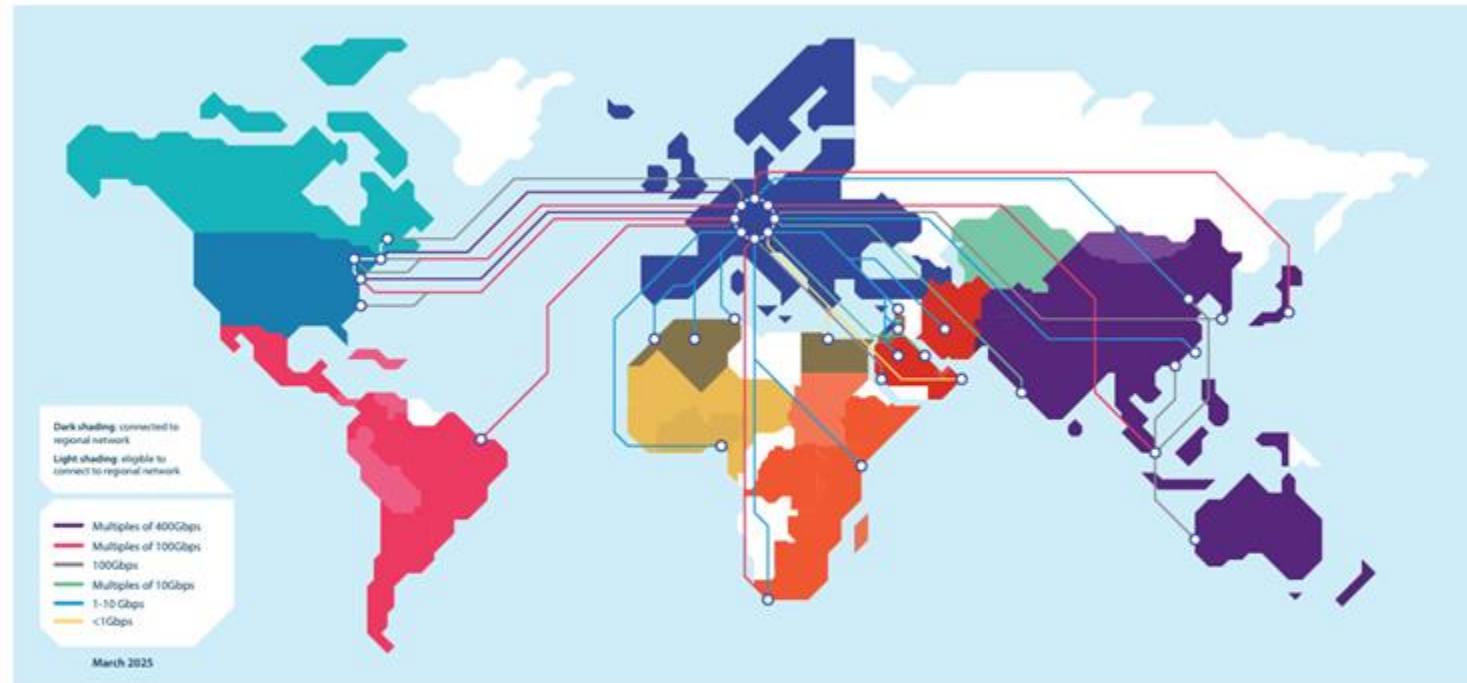
I would like a thematic map that shows the available bandwidth capacity across our backbone, using a color gradient to indicate upgrade priorities for the next fiscal year.

**Ongoing proof of
concepts**



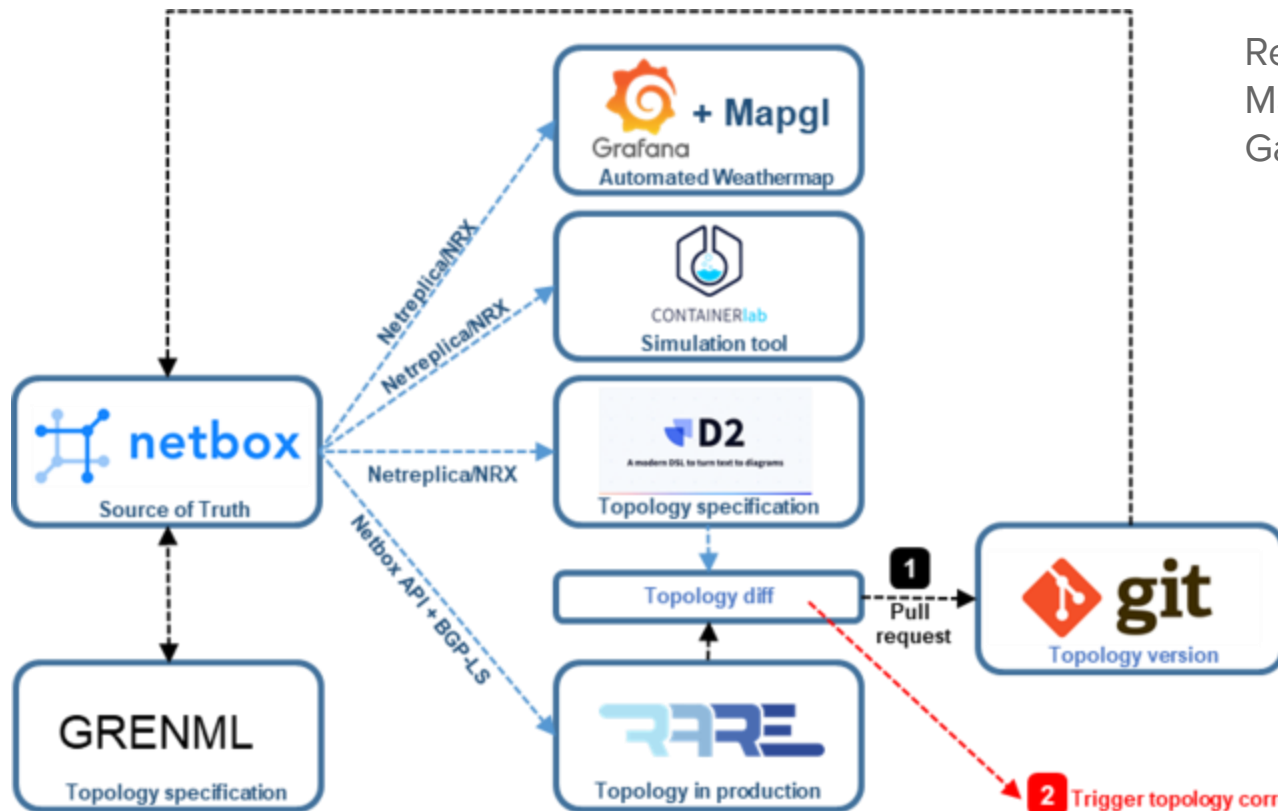
GNA-G Projects
Leading by Gustavo Araújo/Hugo Romão

NRENs Map



Leading by
Lucas Bondan

Netbox from/to GRENML



Responsables:
Marcos Schwarz and
Gabriel Vassoler

Other ongoing actions

- Guidelines for Topology Data Shared
- Collaborations with GNA-G Resilience group
- Exploration of new tools to aggregate to GREN Map
 - Chameleon Map: <https://github.com/RNP-INF-Collab/ChameleonMap>
 - Netbox and Grafana

How to contribute and propose a new PoC

- ❑ To propose a new map or demonstration, email us at gren-mapping-wg@lists.nordu.net. Please describe the purpose of your project and the data you would require. We will then schedule a meeting to discuss how we can help.
- ❑ GREN Map WC Drive:
https://drive.google.com/drive/folders/1aRmY391bMvMBqHu6dPa_FnzUhMXlutT1?usp=sharing

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Thanks!

Questions?