



**RedCLARA**

Cooperación Latino Americana  
de Redes Avanzadas



SA3CC meeting 2026

Marco Antonio M Teixeira

CTO

RedCLARA

# About RedCLARA



## Our members are our wealth

With a history spanning more than 20 years, RedCLARA is the result of cooperation among countries in Latin America for the creation of a high-capacity research and education network.

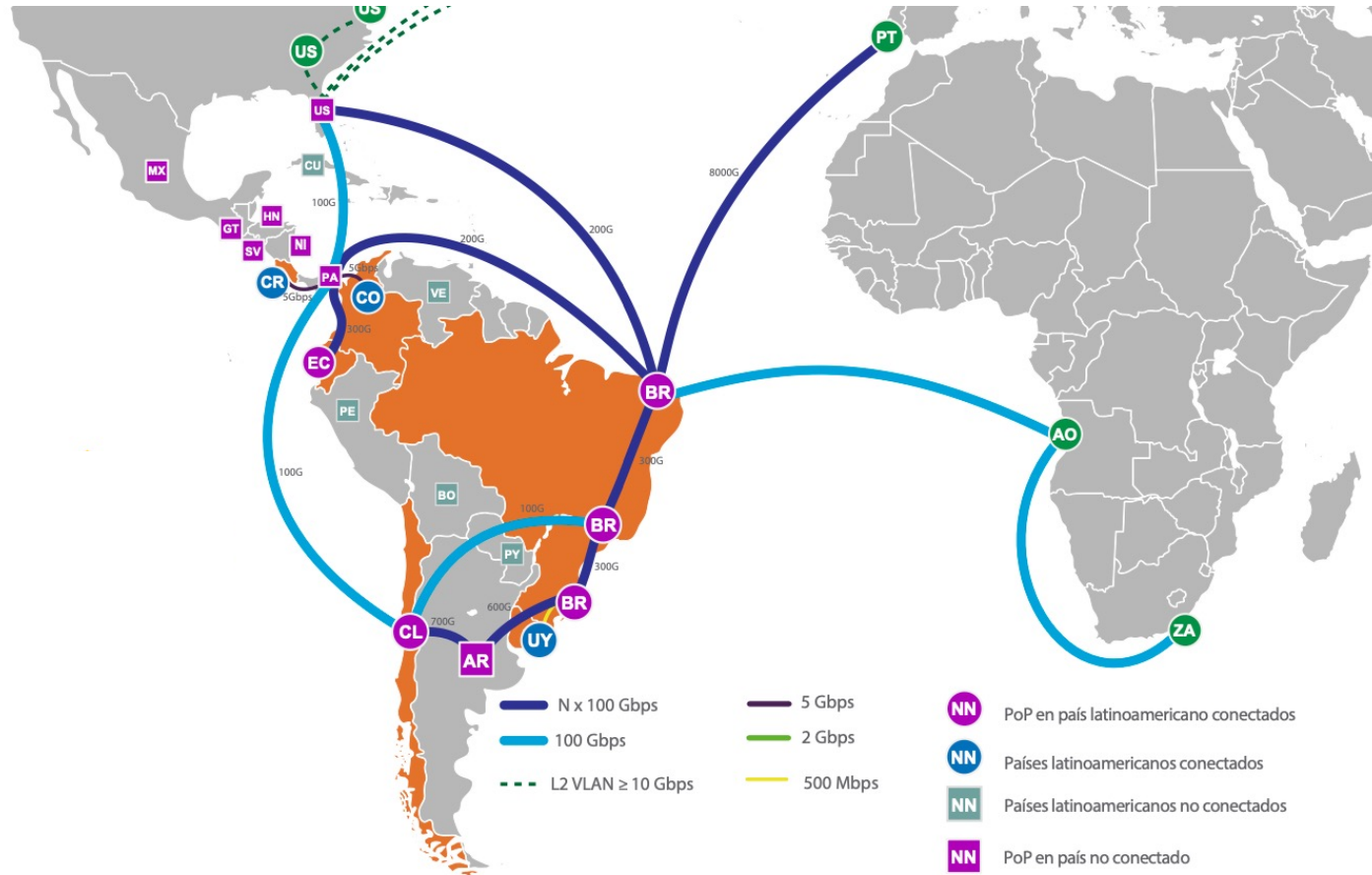
Today, this cooperation includes a total of 105,435 km of fiber, connecting Brazil, Colombia, Costa Rica, Chile, Ecuador, Mexico, and Uruguay.



# Conectivity



# High speed connectivity



## Ciena Waveserver AI

- 1 RU
- Up to 2.4 Tbps
- 3 shelves



## ASR9904

- 6 RU
- Up to 16 Tbps
- 2 Line Cards, 2 RSPs



An abstract graphic on the left side of the slide, consisting of several vertical lines in orange, green, yellow, red, blue, and light red. These lines are connected by horizontal segments at various heights, creating a complex, stepped pattern that resembles a stylized staircase or a data visualization. The lines are set against a solid dark blue background.

# Projects



## BELLA II

Building the Europe Link to  
Latin America and the Caribbean

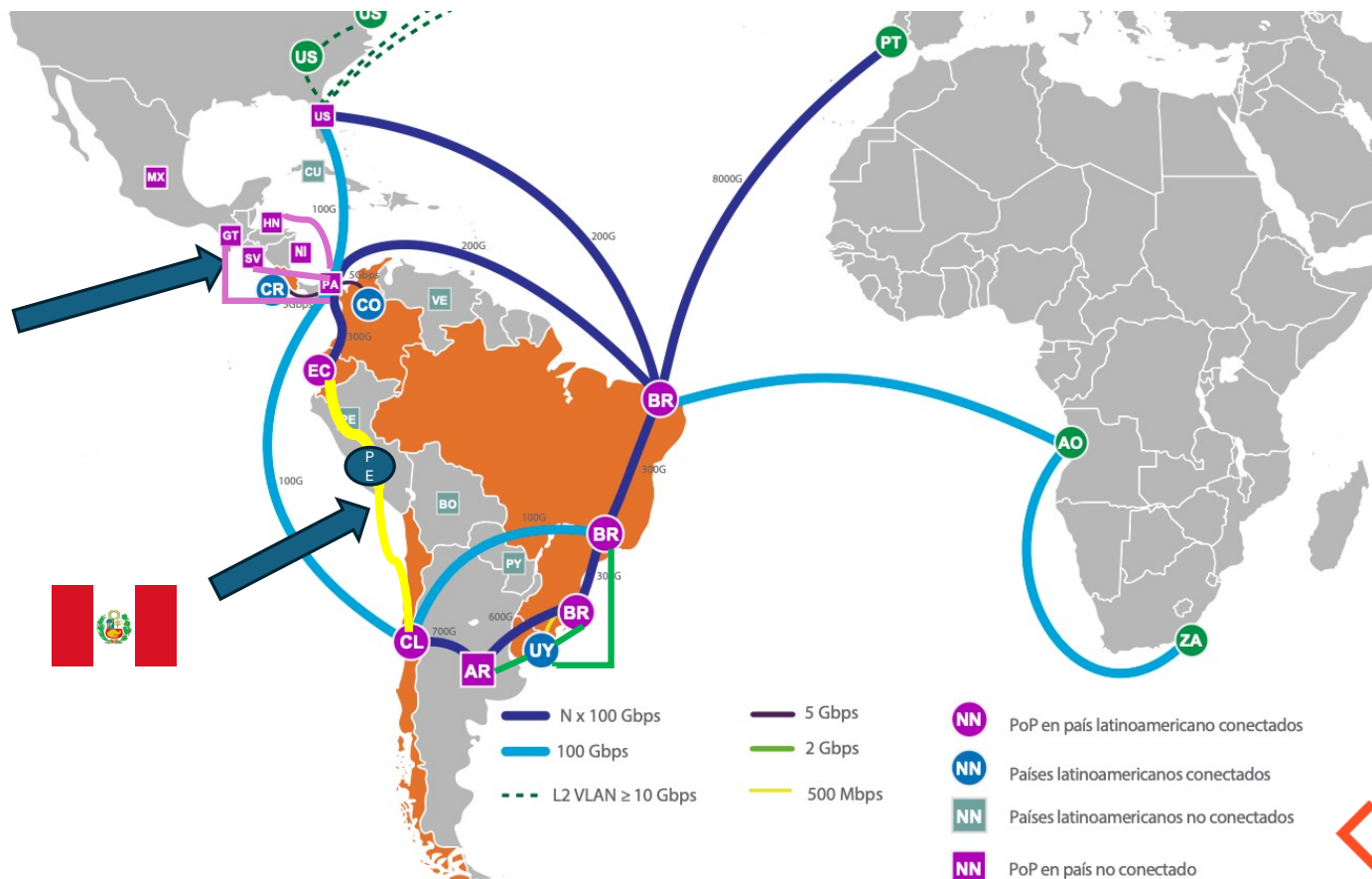
### Objective:

Strengthen and expand the Latin American and Caribbean digital ecosystem, facilitator of relationships and exchanges between companies, research centers, educational institutions and Latin American and European academic networks to contribute to the achievement of the region's strategic goals, focused on strengthening education, science, technology, and innovation.



BELLA es cofinanciado por la Unión Europea a través del Instrumento de Vecindad, Desarrollo y Cooperación Internacional (NDICI), bajo el acuerdo número 438-964 con DG-INTPA, firmado en diciembre de 2022. El período de implementación de BELLA II es de 48 meses.

# BELLA II - Conectivity



## BELLA II – Services – HPC Testbed



Researchers at any Latin American NREN will be able to access high-performance computing capabilities directly from their web browser: over 36 nodes, hundreds of physical cores, fast storage, and queue management with Slurm. All of this is available through Open OnDemand, without the need for additional accounts thanks to federated authentication. Basic academic access will be free for at least one year, with tiered access levels for more intensive use.



## BELLA II – Services – IA Testbed



Users will be able to train machine learning and deep learning models on high-performance GPUs, manage versioned datasets, and work with frameworks such as TensorFlow and PyTorch. All of this is supported by an AI agent that enables interaction in natural language, reducing technical complexity. The architecture is federated and can be distributed among NREN. Basic access will be free for the first year; advanced services will operate on a pay-as-you-go model.

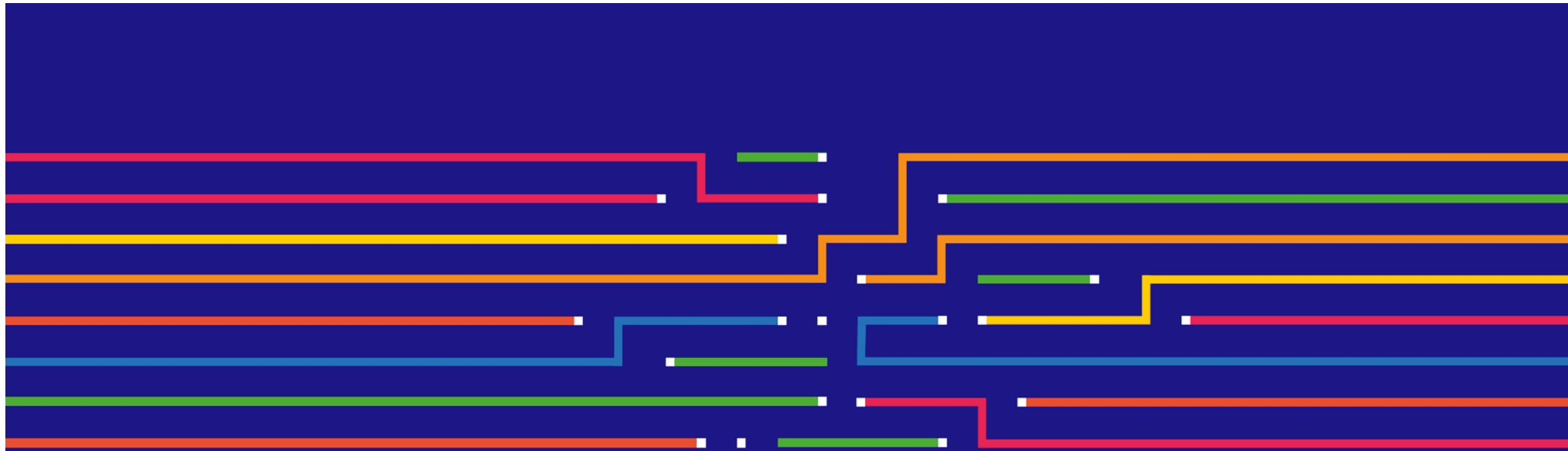


## BELLA II – Services – Cybersec Testbed



Institutions will have access to a virtualized laboratory for forensic analysis, AI-assisted penetration testing, and Capture the Flag exercises based on real-world threats in the region. It includes simulations of critical infrastructure (SCADA/ICS) without risk to real systems. Access is federated and can be via VPN. The platform issues digital certificates and badges under the Open Badges standard and operates with Zero Trust principles and the MITRE ATT&CK framework.





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[redclara.net](http://redclara.net)



[Marco.teixeira@redclara.net](mailto:Marco.teixeira@redclara.net)

