





**AMPATH Meeting
VALDIVIA, Chile
12th April, 2002.**



RETINA

RETINA (REd TeleINformática Académica) is a project launched by Asociación Civil Ciencia Hoy, (non profit NGO) in 1990.

Main goal was to offer easy access to the e-mail and file transfer tools (The “new ICT tools”) at that time.

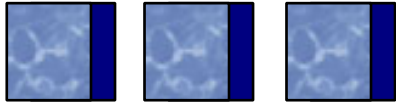
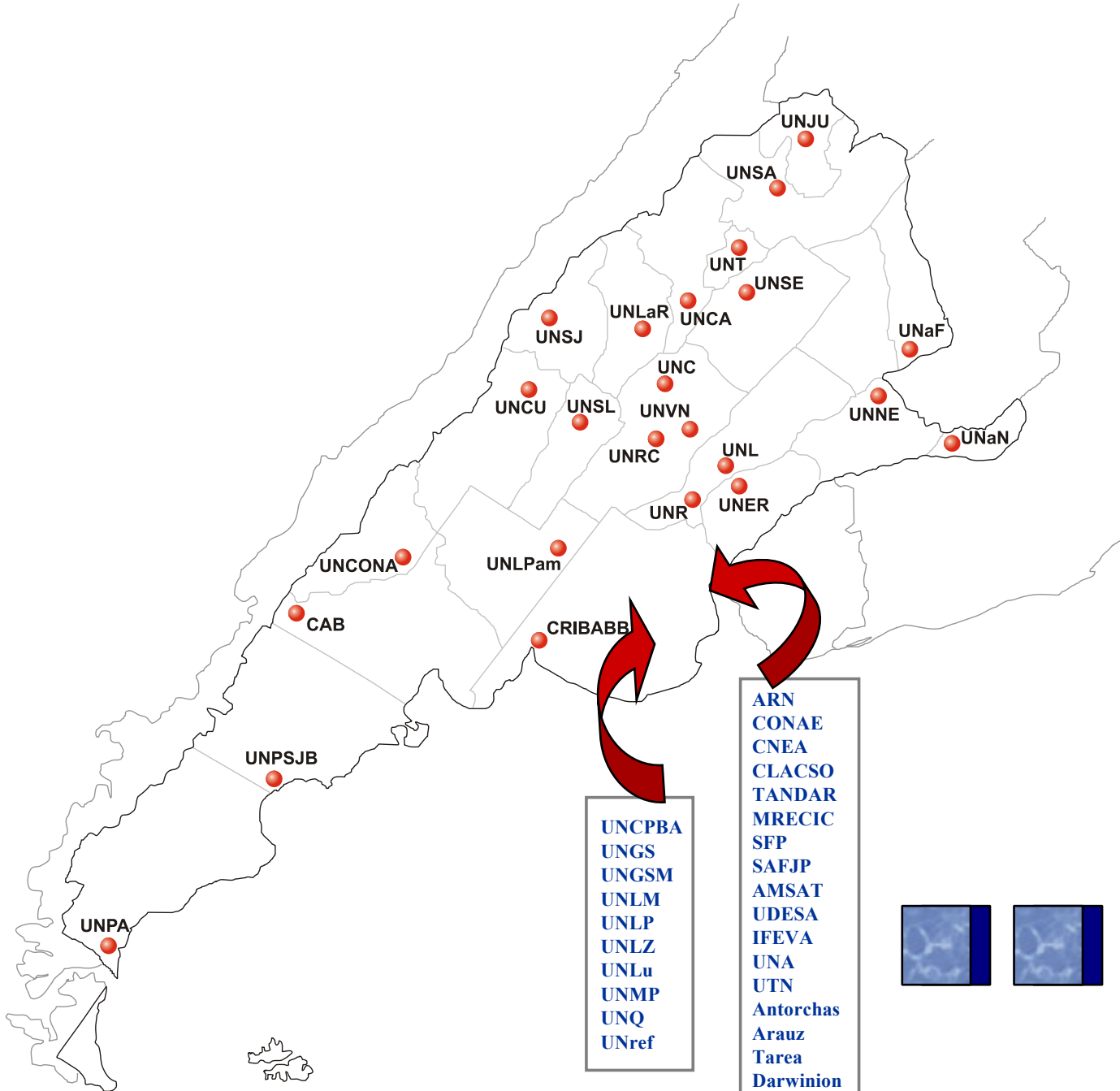
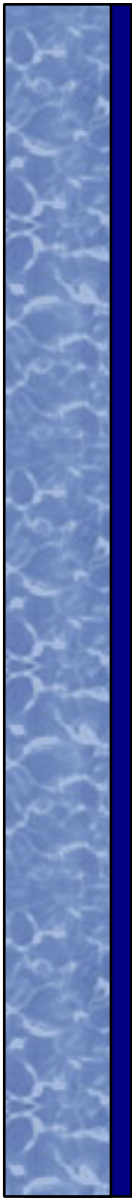
Help in integrating the existing academic networks.



RETINA 1

- 25 Academic Institutions Connected
- 37 Public Universities Network Management
- Administration of domain **edu.ar**
- Argentina's Academic NAP





RETINA 1 : Features

- An important fact to highlight is the continuous effort made, during the past years, to maintain the project rolling in despite of the troubled waters and this is an asset to take into account in order to make plans for the years to come.
- The non-stop work done by RETINA is what gave it its kudos.
- RETINA makes special efforts to use and share existing facilities and resources so as to avoid overlapping





Advanced Networking in Argentina

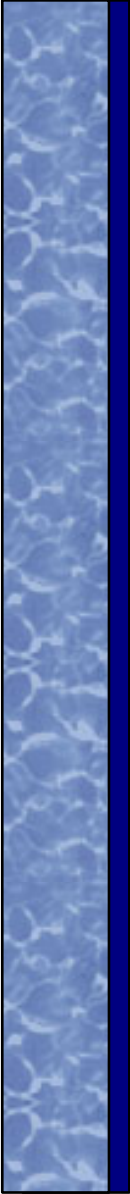
RETINA 2



Previous Activities & Goals

- Ensure integration of every single project or institution with high speed requirements.
- Coordinate with academic, scientific and government areas having interest in High Speed links.
- To ensure always the best service available.
- To negotiate with the TelCo's, private and public sponsors, in order to connect projects in Argentina to RETINA2 POP.



- 
- To increase capacity so as to offer technical assistance and train users with different kinds of applications.
 - To promote new applications regarding the increasing offer of bandwidth availability and affordable costs in the future.
 - To look for projects that take advantage of a disadvantage, such as Argentina's geographic position in the world, bad for trade and transportation of goods, but a strategic point for climate and environmental data acquisition, for international cooperating projects.

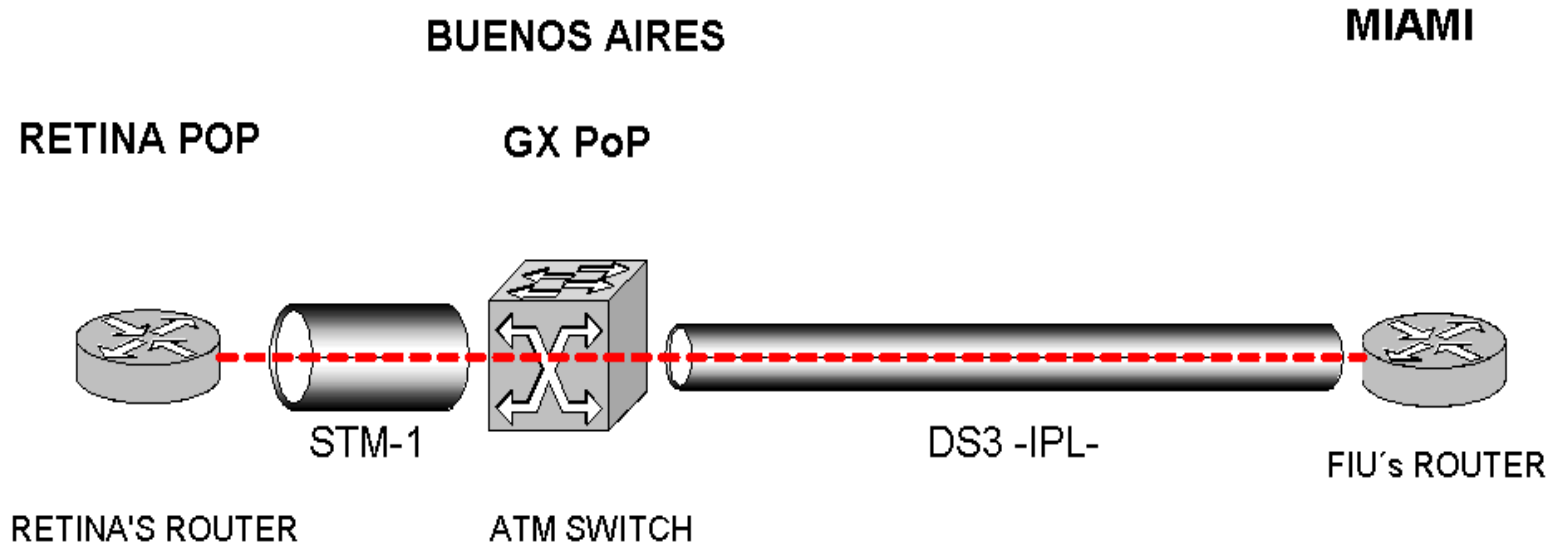


AmPath & Retina

- 2000: Retina represented Argentina in AMPATH.
- 2000-2001: Look for funds outside of Government Budgets to ensure continuation.
- 2001: Grant from “Fundacion ANTORCHAS” to partially support AMPATH’s 3 years term.
- 2001: Signing of MoU with UCAID, GC, FIU
- Starting connectivity to I2 from Argentina .
- Nov-2001: AMPATH is online in Arg.
- 12-12-2001 Formal launching of Retina 2
- Mar-2002: 3 Univs. Connected.



RETINA - AMPATH LINK

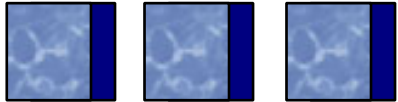
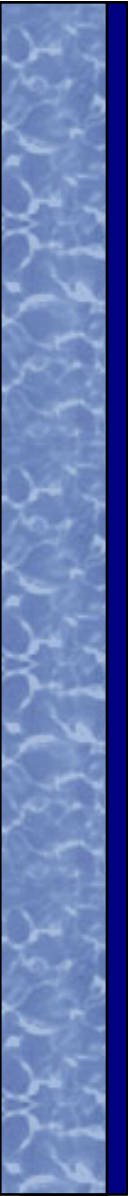
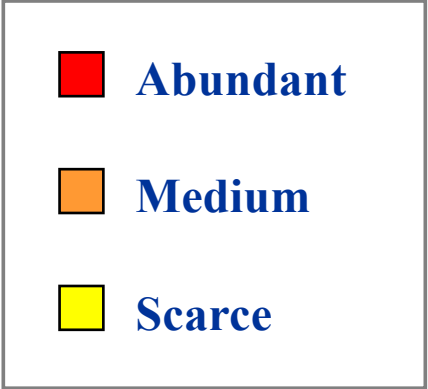
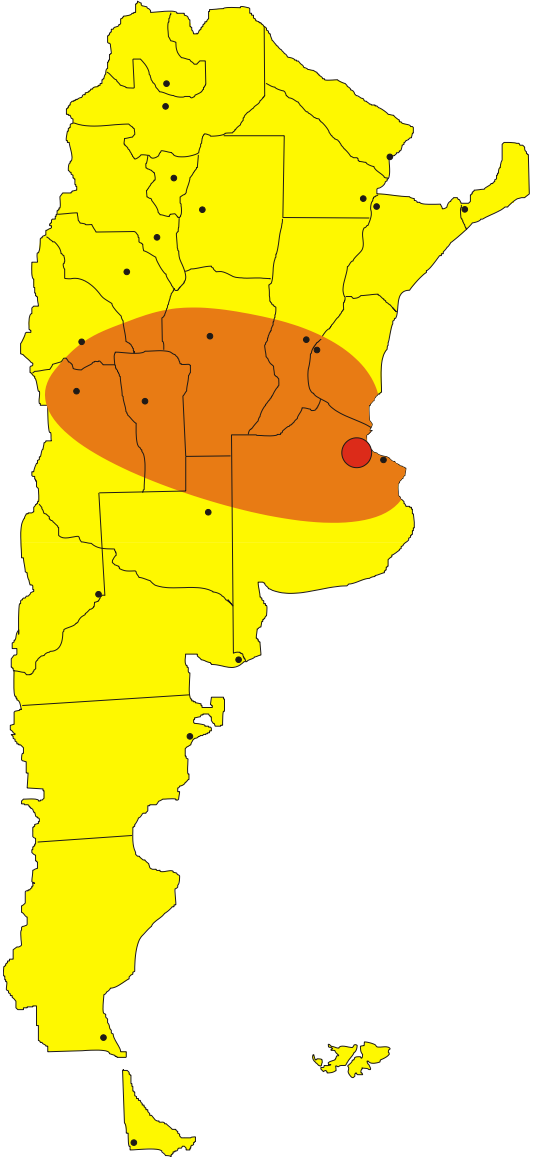


National Connectivity Deployment

- Buenos Aires and regional area have very good fiber infrastructure.
- Other main cities like Cordoba, Rosario, Santa Fe, Mendoza have many providers.
- Main issue: to extend advanced connectivity to the rest of the country (monopolies, bad infrastructure).



Network availability



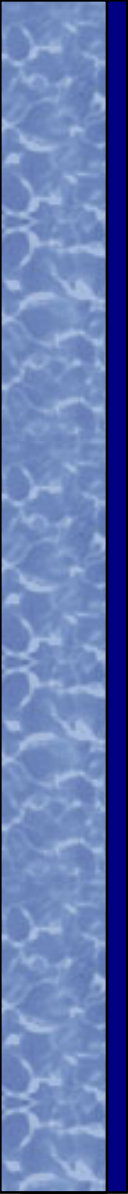
Where are we today?

So, as it was in the very beginning, Retina is working on the dissemination of NTIC's for academic and research users.

Till now, high speed applications have not been developed in Argentina, because of the high costs for links, which cause researchers to avoid starting with projects with I2 requirements. Also regulations, such as the non availability of ISDN for teleconferences and important political changes work against the development of our applications.

AmPath connectivity will give Argentina a valuable lift to start with I2, and, for sure, a quick growth in high speed applications.





However, users from physics (Pierre Auger Project, supercomputing needs, etc), chemistry (virtual labs, simulation), computing (high performance communications tools and applications), medicine (Telemedicine, remote consulting), remote use of telescopes and microscopes, and many interested groups for distance learning, with existing agreements are ready to use AmPath PoP in Argentina.



Other Projects interested in Argentina's I2 connections

Laboratory of Physics: Study of the Electronic Structure of Complex Materials. They have students from other countries in this theoretical physics area.

Universidad de Belgrano: Distributed Multimedia Libraries used for distance learning & Distance Learning with agreements in the U.S

Laboratory of Biomedicine: use of semantic web and supercomputing. Project with Stanford (pandegroup)

UTN – Avellaneda: Digital Signal Processing. Use of distributed kits & MPEG2 Video broadcasting. Distributed editing and browsing.





Services we will offer

- Multipoint for H.323 videoconferencing
- Audio and Video multicast
- Remote equipment operation
- Advanced applications support
- High Computing service and support



Working Groups

- IPv6
- Multicast
- H.323 videoconferencing
- QoS
- Advanced routing



Thanks

Carlos F. Frank
frank@retina.ar

RETINA
FRBB-UTN
CRIBABB-CONICET

ARGENTINA

