

Argentine Internet Chamber



**CÁMARA ARGENTINA
DE INTERNET**

**KAIST GCC Conference and Workshop
Daejeon, Korea
July 12 – 14, 2017**



Brief History



- 1989 Association was established in Buenos Aires
- First called “Chamber of Database and Online Services”
- Members were BBS, Content and e-mail X.25 Providers
- No Internet available at that time
- By 1994 the entity had 47 members

The beginning of Internet in Argentina



- 1995 Internet bandwidth to Florida became available
- Telco charge for 64K link was U\$S 40.000 monthly
- First dial-up ISPs emerged
- Later that year first always on wired ISPs appeared
- Registration of Internet domains took off

The INTERCONNECTION issue



- All domestic Internet traffic routed via Miami
- An e-mail from one ISP to another was via Miami
- No local interconnection available
- In 1996 discussions began to establish IXP in CABASE
- In March 1998, the CABASE IXP was launched
- The IXP was in Buenos Aires, with 17 initial members

Evolution of the first CABASE IXP



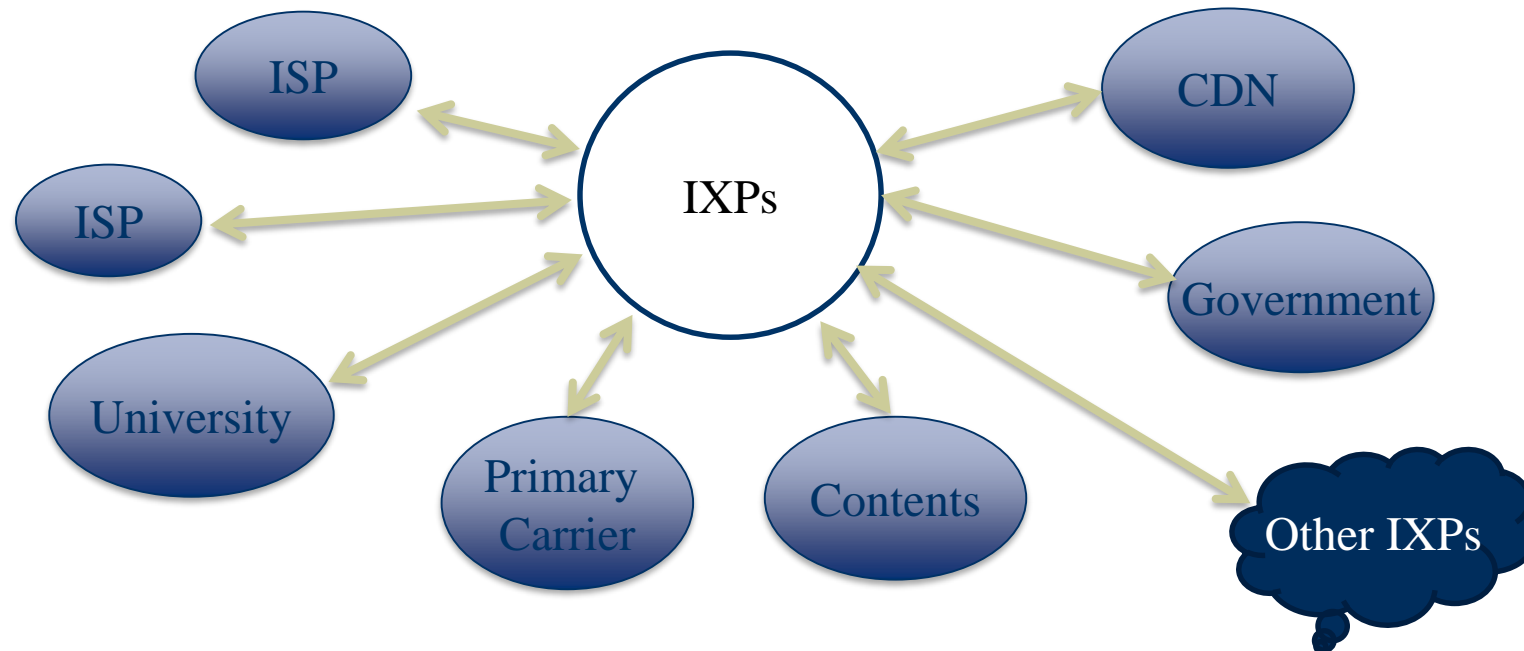
- Membership grew slowly over first years
- In 2000 both incumbent Telcos connected to IXP
- In 2005 Telcos decided to leave IXP and sell their “own” traffic
- Some smaller ISPs seemed then unable to survive
- The CABASE IXP resisted however, and grew again

Place Contents closer to the Consumer



IXPs:

- Building strategic Exchange Points among different Networks.
- Main Goal: Optimize Internet Routing Efficiency, and speed, and interconnection COSTS REDUCTION.



Bandwidth strategy: COUNTRYWIDE

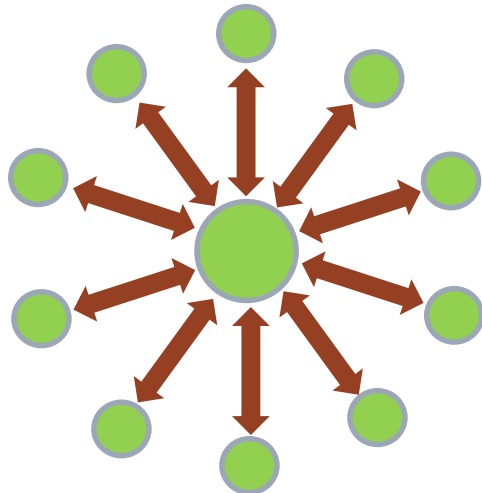


- In 2010 countrywide study of bandwidth conducted
- Network facilities not owned by Telcos detected
- First IXP in provinces set up in Neuquén in south
- Telco wholesale bandwidth charges reduced by 300% there
- This was noticed by ISPs all over Argentina (approx. 1600)

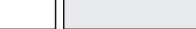
IXPs Growth

25 IXPs

+1 Central Routing



ATLAS DE LA RED NACIONAL PUNTOS DE INTERCAMBIO DE INTERNET



IXPs 21
 Miembros 300
 Capacidad de la Red 302
 Sistemas Autonomos 500
 Redes Publicadas 12.000



The national IXP explosion

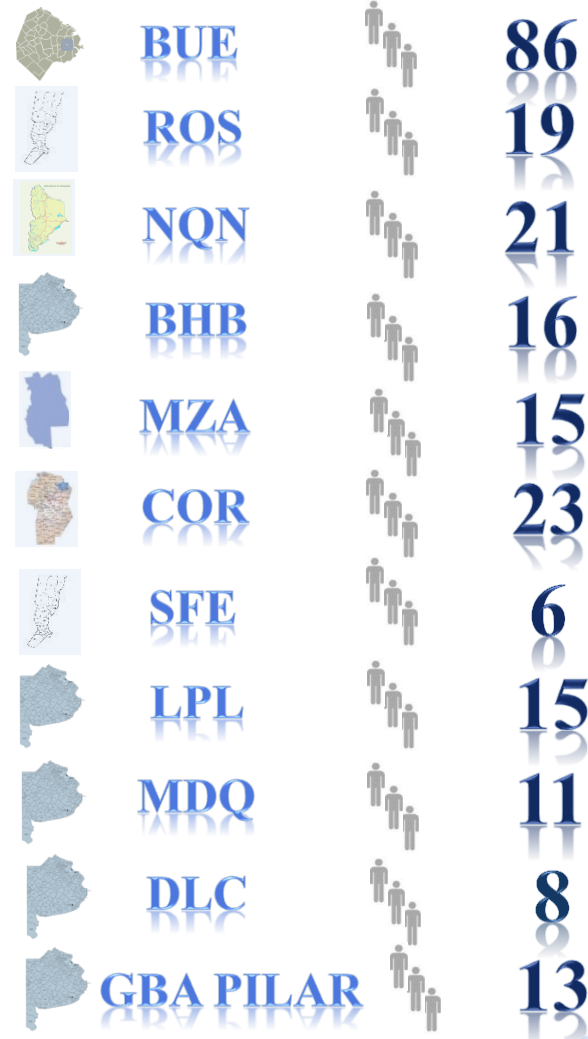


- From 2011 on, other locations set up CABASE IXPs
- Initially these cities – Bahía Blanca, Rosario and Mendoza
- Secondly – Córdoba, Santa Fé, Mar del Plata, La Plata
- By 2017, there are 25 CABASE IXPs and 3 more in production
- All IXPs are interconnected through Buenos Aires

Current Members (mid 2017)



313 Members



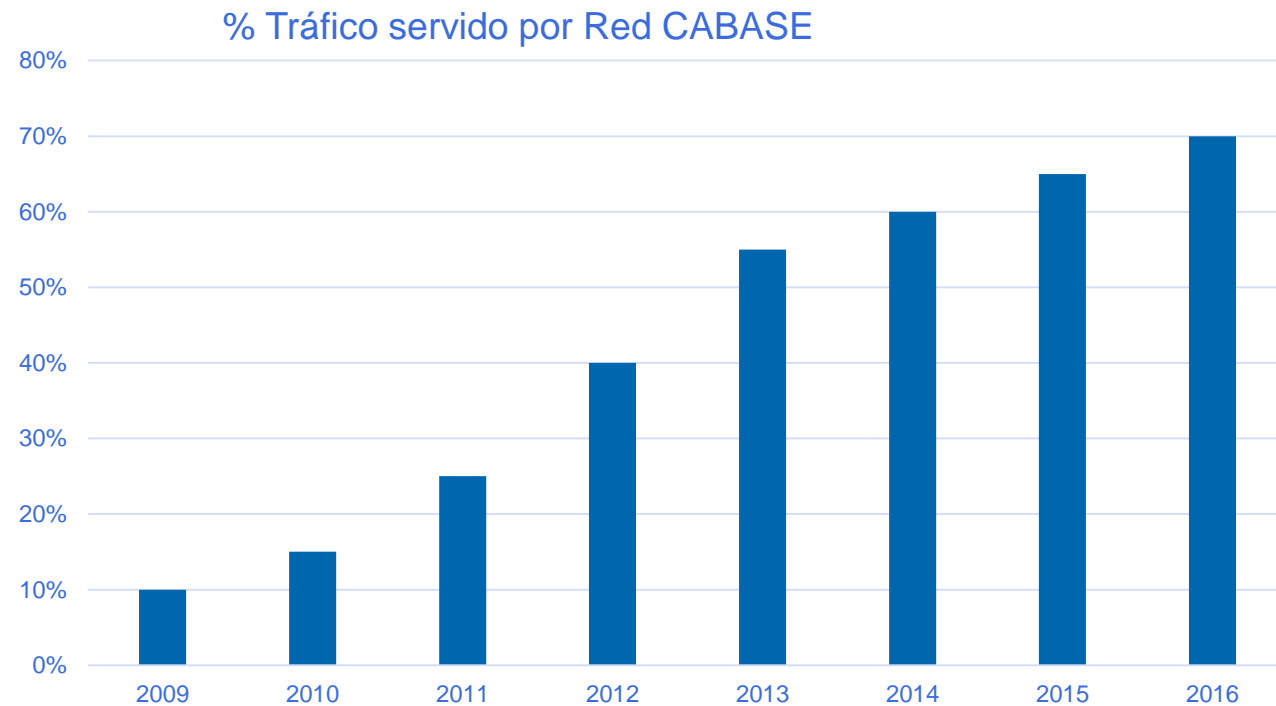
Members Traffic



Traffic for Members Routed through CABASE IXPs Network

70%

TIER 1

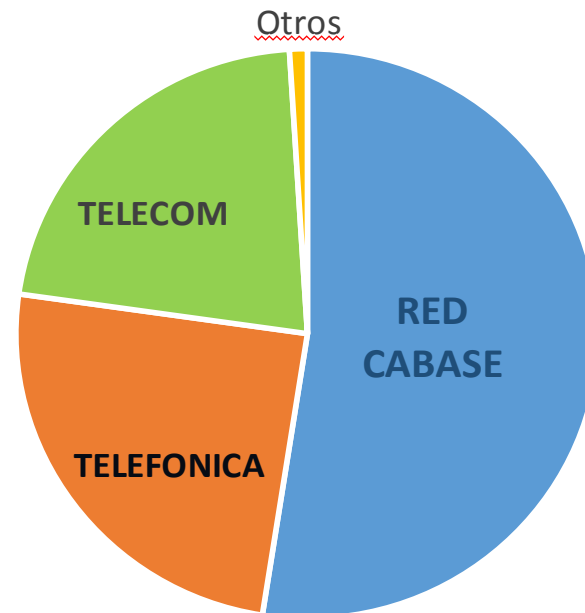


CABASE Network Share



CABASE National Network **12.500.000 End Users**

CABASE Share

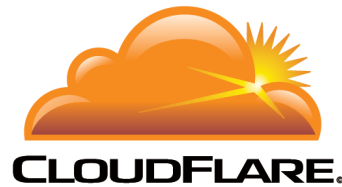


The addition of key local caches



- Success of IXP network supported by main CDNs
- First CDN to install servers locally was Google in 2011
- Second was Akamai in 2012
- Then Cloudflare, Riot Games, Turner
- This year Netflix, Yahoo and Amazon Web Services

Content Partners/Caches



CABASE on IoT



- CABASE understands the strong upcoming of IoT
- Consequently, we started a line of action in this area
- WE call it “**IoT Marketplace**”
- Started 2016, It works as a meeting point among different players
- Solution providers, developers
- Equipment suppliers
- ISP and end user counterparts
- You can find it at: www.cabaseiot.com.ar

IOT Market



CABASE DESARROLLA LA CONVERGENCIA ENTRE LA CONECTIVIDAD E INTERNET DE LAS COSAS EN LA ARGENTINA



1998



27 IXPs



200 Gbps



13 millones de usuarios



80% de tráfico

Desde 1998, la Cámara Argentina de Internet – CABASE, ha construido una red nacional de Puntos de Intercambio de tráfico Internet –IXPs. Actualmente, la red consta de 27 IXPs activos, con un tráfico total de más de 200 Gbps, con 380 ISPs, Carriers, Cooperativas Telefónicas, y operadores de TV por Cable interconectados, quienes brindan servicio de acceso a Internet a más de 13 millones de usuarios finales. La red de CABASE abarca el 90% de los ASNs de la Argentina.

La red de IXPs de CABASE provee cachés locales de las principales redes de entrega de contenidos (CDNs), tales como Google/YouTube, Netflix, Akamai y Turner, entre otras, y resuelve más del 80% del tráfico que cursa un ISP.

En el año 2016 CABASE lanzó la Iniciativa de IoT, y creó el Centro de Coordinación y Marketplace IoT, acceder a: www.cabaseiot.com.ar

En 2017, CABASE organiza pruebas piloto (demos) que involucran a proveedores de soluciones IoT, ISPs, Cooperativas y Municipios. La red CABASE de IXPs está en proceso de realizar pruebas de servidores de red y de aplicaciones IoT, para agregar operatividad IoT a la red.

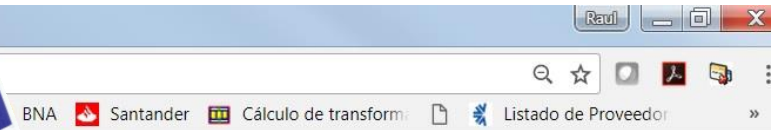
El objetivo es crear condiciones favorables para que los ISPs miembros de CABASE, puedan proveer también soluciones y servicios de IoT a sus propios clientes, actuando en modo asociativo con proveedores de soluciones de IoT.

**Conectividad Internet + Internet de las Cosas:
el nuevo modelo de negocios para ISPs**

316

75%

65%



Argentina

net que se avecina tiene nombre y
plemente IoT (según el acrónimo
tina de Internet (CABASE)
ancia fundamental para sus
esarrollo futuro de Internet en
o el CENTRO DE
mo herramienta para
tria, detectar aspectos
ser encarados, facilitar
s IoT, concentrar
conocimiento de
fusión y promoción
n la Argentina.

IOT Marketplace



Proveedores de Tecnología/Productos

Empresas que participan del MarketPlace

- EXO
- LESS
- WEHAUS
- eca Artimar
- mc electronics*
- VELCOM Una empresa de GRUPO DATOS
- SEMAK Componentes Electrónicos
- QuadMinds
- ELEMON Componentes Electrónicos
- Solidmation Tu hogar inteligente
- POINTER
- bb
- CeSPI Centro Superior para el Procesamiento de la Información UNIVERSIDAD NACIONAL DE LA PLATA

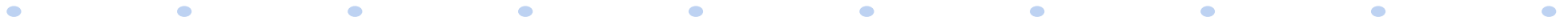
Cooperation with KAIST



SUMMARY



- CABASE is not only a sector industry lobby Chamber
- We OPERATE a collaborative countrywide, fast-growing, Exchange Network – WE MAKE THE INTERNET HERE
- CABASE encourages Internet Growth and Quality through continuous improvement, supported by its Members
- We are adding solutions, technology, and business lines to the Internet Industry
- We play a leading role in the regional arena, with active presence in the field (standards, governance, promotion)
- **WE ENCOURAGE OUR FRIENDS FROM ABROAD TO JOIN US IN THIS FASCINATING ADVENTURE!!**



CABASE



THANK YOU!!

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