

**RONOG3
MEETING**
Romanian Network Operators Group

12 OCTOBER 2016, BUCHAREST
NOVOTEL CITY CENTRE
Community sharing space for innovative technologies



RONOG 3 - INTRODUCTION

INTERLAN & THE OPERATORS COMMUNITY

The Internet & The neighborhood networks

- 1994 – First dial-up connections available in Romania
- 1997 – First Internet Café's with leased lines
- 1998 – LAN Parties & first Local Area Networks between neighbours

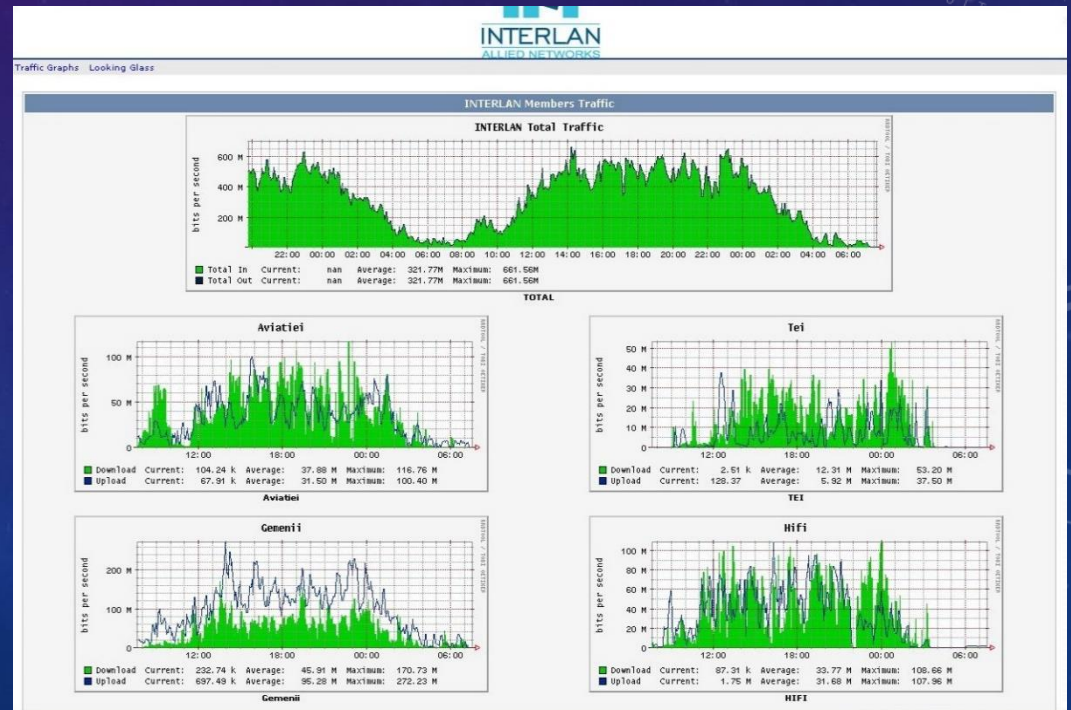


INTERconnecting Local Area Networks

- 2000 – The first permanent internet connections are available through the local area networks
- 2002 – The first neighborhood networks with over 1,000 users
- 2003 – Optical Fiber connections with internet providers
- 2004 – Representatives of the networks met each other and decided to interconnect

Founding of Interlan & the Internet Exchange

- 2005 – The Neighborhood Networks decided to establish an organization which will operate the Internet Exchange
- 2008 – Interlan become a member of Euro-IX and started to attend RIPE Meetings, EIX Working Group



First Steps

- On November 12th, 2012, at the 23th Euro-IX Forum in Stockholm, Sweden, **IXP's in Romania** – presented by Interlan in the Lightning Talks Session



- On April 15, 2013 at the 24th Euro-IX Forum in Hamburg, Germany, Interlan officially presents the Romanian dubbed version of the Euro-IX film, **„The Internet Revealed“** – a film about IXP's.

The Internet Revealed – IXP Movie



Now available in English, Portuguese, French, Spanish, Turkish, Romanian, Arabic and German, check out our Youtube channel:
<https://www.youtube.com/channel/UCFyucVRAAMzxyJlsanGwsiw>

=> more languages to come, if your interested in translating the video, contact us!

euro-IX

The first Euro-IX Forum in Romania & The first RONOG

- October 28, 2013 - 25th Euro-IX Forum in Helsinki, Finland: Interlan express the availability to host a Forum in Bucharest and initiate discussions with Euro-IX representatives in this regard.
- March 17, 2014 - 26th Euro-IX Forum in Leeds, UK: Interlan is officially announced as the host of the next Forum. The participants asked Interlan to meet local operators after the Forum.
- 27 October 2014 - The 27th Euro-IX Forum in Bucharest: Interlan Euro-IX hosts the first Euro-IX Forum in Romania. Interlan representative is elected to the Board.
- October 29, 2014 - First RONOG edition with the support of Euro-IX, RIPE NCC and Internet Society (ISOC).



First RONOG edition: October 29, 2014



Second RONOg edition: October 29, 2015



Relationship with RIPE NCC



- April 14, 2014, SEE 2 RIPE meeting in Sofia, Bulgaria: Interlan invites RIPE NCC to organize a RIPE meeting in Bucharest
- November 5, 2014, RIPE 69 meeting in London, UK: RIPE NCC decided to organize RIPE 71 in Bucharest, choosing Interlan as the local host
- November 11, 2014: Interlan is the host of RIPE NCC Focus Group Meeting, between an independent consultant and operators from Romania
- January 2015: Interlan becomes a LIR and full member of RIPE NCC General Assembly
- May 11, 2015: RIPE 70 meeting in Amsterdam, Netherlands: RIPE NCC consultant supported by Interlan is elected to the RIPE NCC Board.
- November 16, 2015: RIPE 71 Meeting is held in Bucharest, Romania. It's the first RIPE Meeting in Romania, Interlan being the local host.
- May 26, 2016, RIPE Interlan representative joined the RIPE SEE 6 Programme Committee. The meeting will be held in June 2017 in Budva, Montenegro

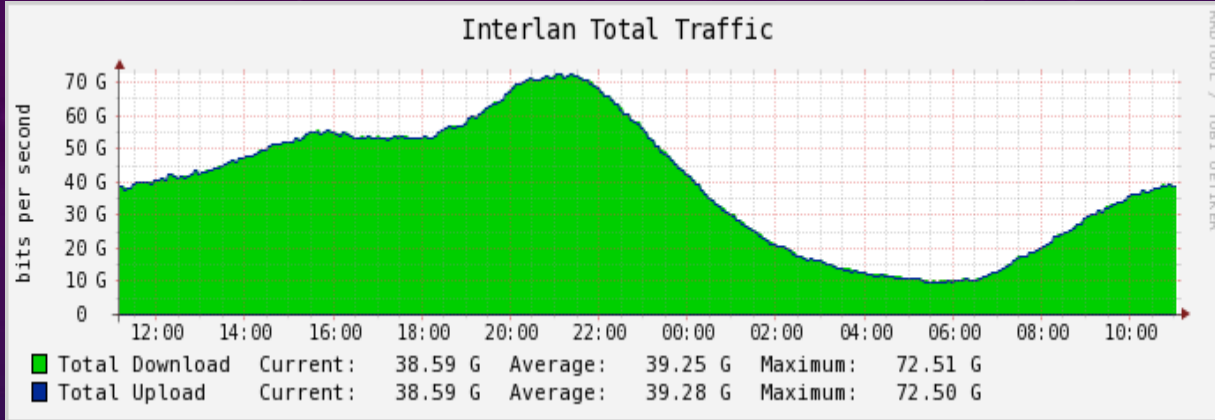
NOGs:

- Internet Network Operators' Groups (NOGs) are informal groups which exist to provide forums for Internet network operators to discuss matters of mutual interest, usually through a combination of mailing lists and annual conferences. Although these groups have no formal power, their members are typically influential members of the Internet Service Provider, Internet Exchange Point, Regional Internet Registry, Operational Security and other network operations communities and discussions within these groups are often influential in the overall process of running the Internet.
- National NOGs: PLNOG (Poland), DENOG (Germany), UKNOF (United Kingdom), FRNOG (France), DKNOG (Denmark), SWINOG (Switzerland), RONOG (Romania).
- Regional NOGs: NANOG (North America), MENOG (Middle East), ENOG (Eurasia), SANOG (South Asia), CARIBNOG (Caribbean), AFNOG (Africa).

IXPs:

- An Internet exchange point (IX or IXP) is a physical infrastructure through which Internet service providers (ISPs) and Content Delivery Networks (CDNs) exchange Internet traffic between their networks (autonomous systems).
- 376 Internet Exchanges in early 2013 according to the ITU. The biggest are: DE-CIX (Frankfurt), AMS-IX (Amsterdam) and LINX (London).
- Romania has 3 operational IXPs: Interlan, RONIX (both independent) and Balcan-IX (owned by Telekom Romania).
- In 2013, following a research, ANCOM recommend operators to increase their presence in IXPs.

Interlan Internet Exchange in 2015



Features:

- Over 70 Gbps daily peak traffic
- 60 connected parties: ISPs, content providers, educational networks, financial institutions
- Available ports: 100 Mbps, 1 Gbps, 10 Gbps
- Akamai and Google cache servers
- Regional connections: Moldova, Bulgaria, Serbia, Hungary
- Verisign J-root DNS Server
- Interconnection with Netograf application developed by ANCOM
- Main POPs: Bucharest, NXDATA-1 and NXDATA-2
- Regional POPs: Constanta, Timisoara, Craiova

Affiliations:

- Euro-IX member from 2008
- RIPE NCC LIR from 2015

Additional services:

- Dark Fiber data transport through Netcity Network in Bucharest
- Layer 2 data transport through the Internet Exchange
- IP numbering resource management services (LIR)

Host:

- October 27-28, 2014: The 27th Euro-IX Forum
- October 29, 2014: RONOG 1
- October 29, 2015: RONOG 2
- November 16-20, 2015: RIPE 71
- October 12, 2016: RONOG 3

INTERLAN – 10 Years of Peering!

October, 29th, 19:00 – onwards

Maraboo Lounge, 12th Blanari street, Old Town Center

