Optimal course of IXP development – NIX.CZ

Tomáš Maršálek
NIX.CZ, Director of Association
16.1.2009, PLNOG 2

Ideal IXP form

- HW interconnecting platform
- Association of competitors
- Place for experience sharing
- Place where member delegates share their Company's approaches to IXP
- Place enabling communication among competitors
- Reflection of the Internet development in the country or region
- Neutral body

What should not be an IXP

- Battlefield for competitors
- Equivalent to IP transit service
- Place for fulfilment of individual member/person ambitions
- Rigid association where Board member or management position means just a business cards and nice entry in CV
- Political force

NIX.CZ - history

- First discussion at RIPE in 1995
- Association established in 1996
- Long debate about neutrality, political role and structure of NIX.CZ
- Up to 2002 based on voluntary work
- In 2002 first full-time employee

NIX.CZ - today

- Since 2002 transforming from non-commercial association to commercial association
- Periodical board members change
- Gradual increase in active marketing
- Participation in essenti a l conferences (RIPE,NANOG,APRICOT)
- EURO-IX membership – great platform for sharing technical and political knowledge, experience and information

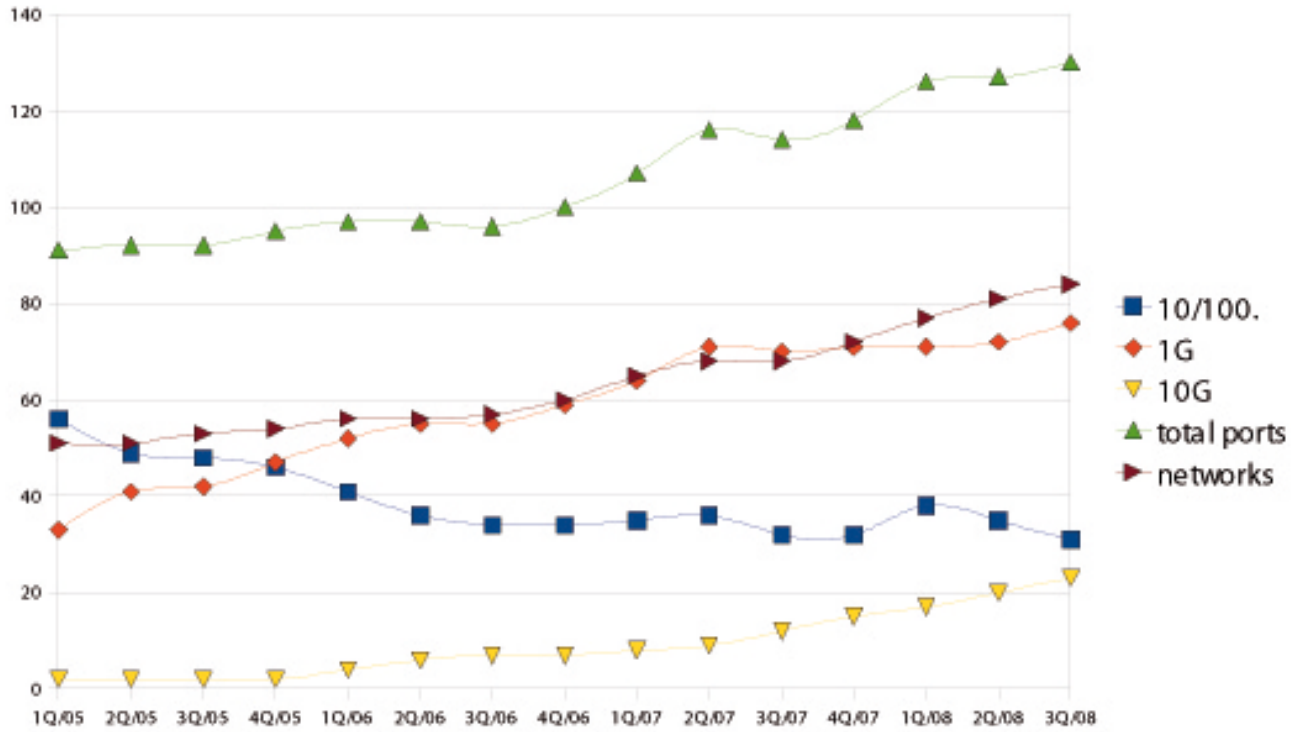
NIX.CZ – in numbers

- No.7 in Europe regarding traffic
- 10GB 2006 -> 70GB 2008
- 6 full-time employees
- 7/24 NOC
- 89 members/customers
- VAS - TLDs hosting (10)
- Internal stability of the organization
- High credit regionally and internationally

NIX.CZ today – regarding IPv6

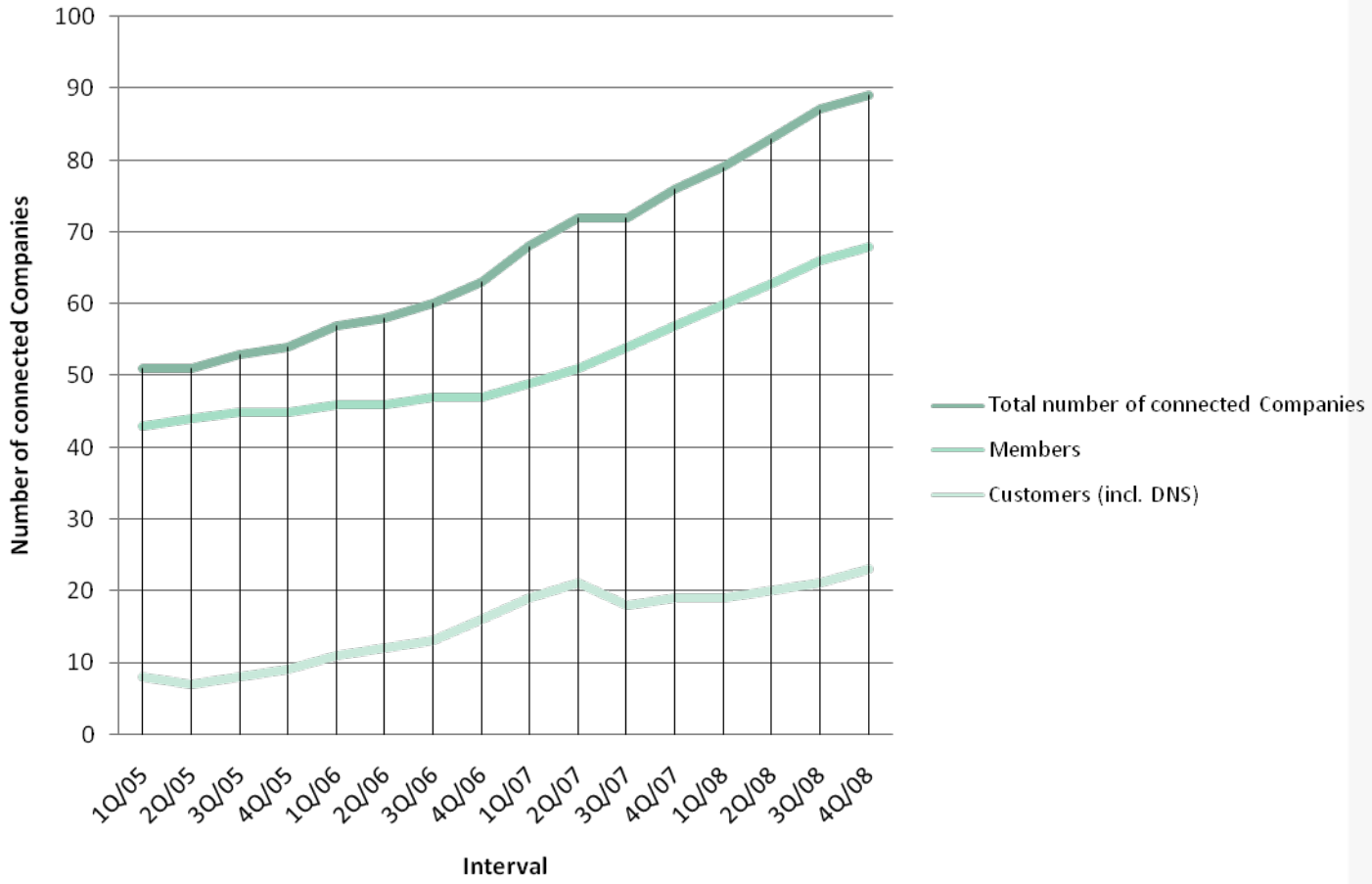
- IPv6 based peering since the beginning of 2003
- 47 connected ports
- 30 connected companies
- 45 prefixes
- All internal services fully available
  - Routeservers, web servers, etc…
- Aproximately 70 Mbps traffic

Increase in port numbers



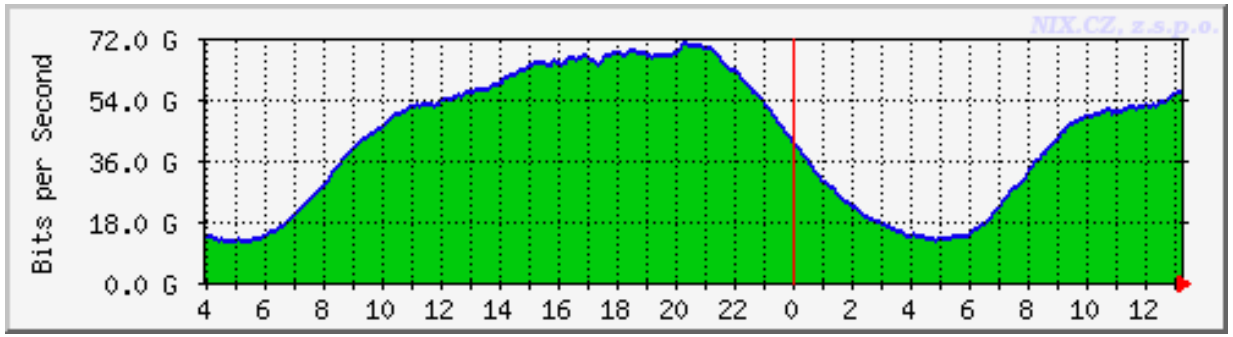
	1Q/05	2Q/05	3Q/05	4Q/05	1Q/06	2Q/06	3Q/06	4Q/06	1Q/07	2Q/07	3Q/07	4Q/07	1Q/08	2Q/08	3Q/08
10/100.	56	49	48	46	41	36	34	34	35	36	32	32	38	35	31
1G	33	41	42	47	52	55	55	59	64	71	70	71	71	72	76
10G	2	2	2	2	4	6	7	7	8	9	12	15	17	20	23
total ports	91	92	92	95	97	97	96	100	107	116	114	118	126	127	130
networks	*51*	*51*	*53*	*54*	*56*	*56*	*57*	*60*	*65*	*68*	*68*	*72*	*77*	*81*	*84*

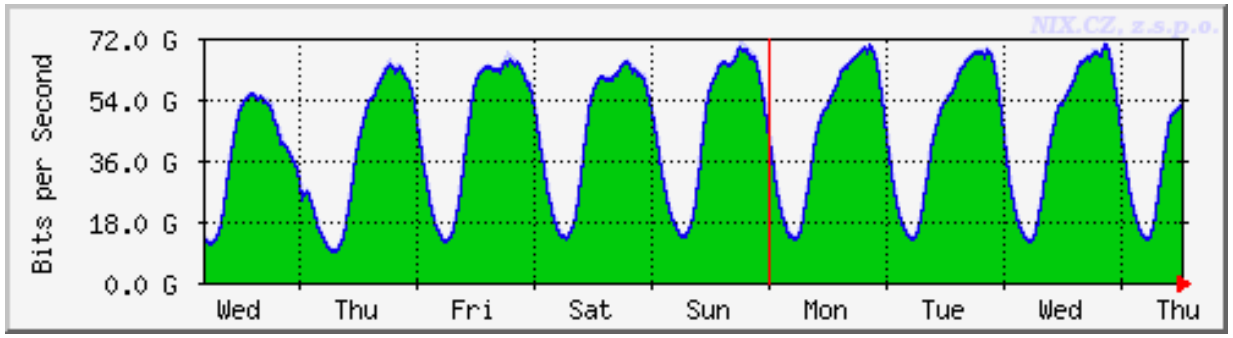
Connected companies



Traffic trend

Exceeding 70 Gbps in December 2008
(compared to 40 Gbps in May 2008)





How has it been achieved?

- You can have money, nice ideas but one of the major risk factors are people
- Nothing is for free – volunteering model does not work forever
- Quick management transformation
- Ill-willed individuals and wrong ideas gradually become extinct– but that takes time
- Strategic location – Prague is the natural geographical Central-European connection point between Western and Eastern Europe

How has it been achieved?(continued)

- Link-up with government and regulatory bodies
- International experience
- Participation in international meetings
- Euro-IX member
- Cooperation with other IXPs and knowledge sharing
- Meeting hosting <Euro-ix, RIPE, CENTR, IETF>

Prospective risks

- People – unsuitable people in the board
  o
  r

  in management (sleeping on the wheel)
- ISP market globalization
- IP Transit price decreasing almost to 0$
- Government regulatory bodies
- Lack of technology?
- Internet future in general????
- Force majeure

Plans for future

- Keeping EU “market” connection price
- Building reserves, avoiding financial risks
- Transition to more stable internal model – board voting procedure similar to ams-ix model
- Marketing strategy aimed at foreign networks
- Keeping service quality
- Goodwill building
- Keeping neutrality

Thank you!

- Questions?
- **tm@nix.cz**