

# Milan Internet eXchange update

RIPE 54

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# Administrative

- Relaxing of admission policies:
  - ISPs, Hosters and ....
  - **NEW !!**  
*“Subject that produces and distributes under license editorial contents” (content providers)*



# Charging fees

- Decreased fees, increased NB granularity

- 100 MB 2006: 10,26 €/Mb/m 1FE ▶ 2007: 8,23 €/Mb/m, 2FE or 1 GE ports
- 200 Mb 2006: not in NB 7,74 €/Mb/m 2FE ▶ 2007: 5,85 €/Mb/m, 2 FE or 1 GE ports
- 1 Gb 2006: 2,23 €/Mb/m 1GE ▶ 2007: 1,63 €/Mb/m, 1GE port
- 2 Gb 2006: 1,14 €/Mb/m 1 GE ▶ 2007: 1,11 €/Mb/m, 2 GE ports

Details at: [www.mix-it.net/costi-2007\\_en.htm](http://www.mix-it.net/costi-2007_en.htm)

- “MIX Italia” Contest: first Six-monthly bonus assigned

- 50k € total bonus (year 2006)
- Bonus for 1st classified around 10k €



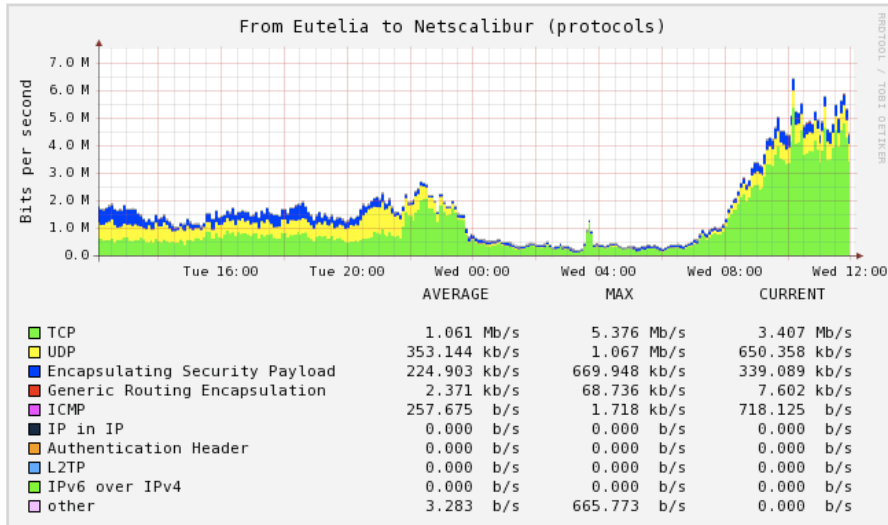
# Technical

- New traffic peak - 24.7 Gbps
- New core-switch, Foundry RX-16
- Data center expansion, space doubled (on going)
- sFlow
  - Traffic matrix (sep. '05) private
  - Peering matrix (nov. '06) public/private
  - **Traffic typology matrix (NEW!)** private



# Traffic typology matrix

## Protocol classified traffic



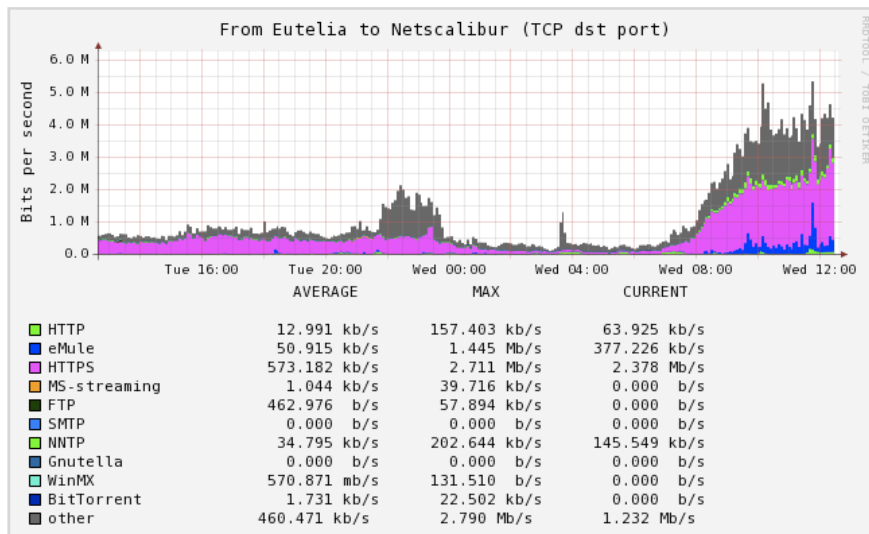
Select protocol to customize graph

- TCP
- UDP
- ESP
- GRE
- ICMP
- IPinIP
- AH
- L2TP
- IPv6
- other

Create graph

- Interface-to-interface traffic typology
- Protocol classified traffic
- TCP ports traffic details
- UDP ports traffic details
- Customizable graphs

## TCP traffic



Select application to customize graph

- HTTP
- HTTPS
- FTP
- NNTP
- WinMX
- other
- eMule
- MS-streaming
- SMTP
- Gnutella
- BitTorrent

Create graph

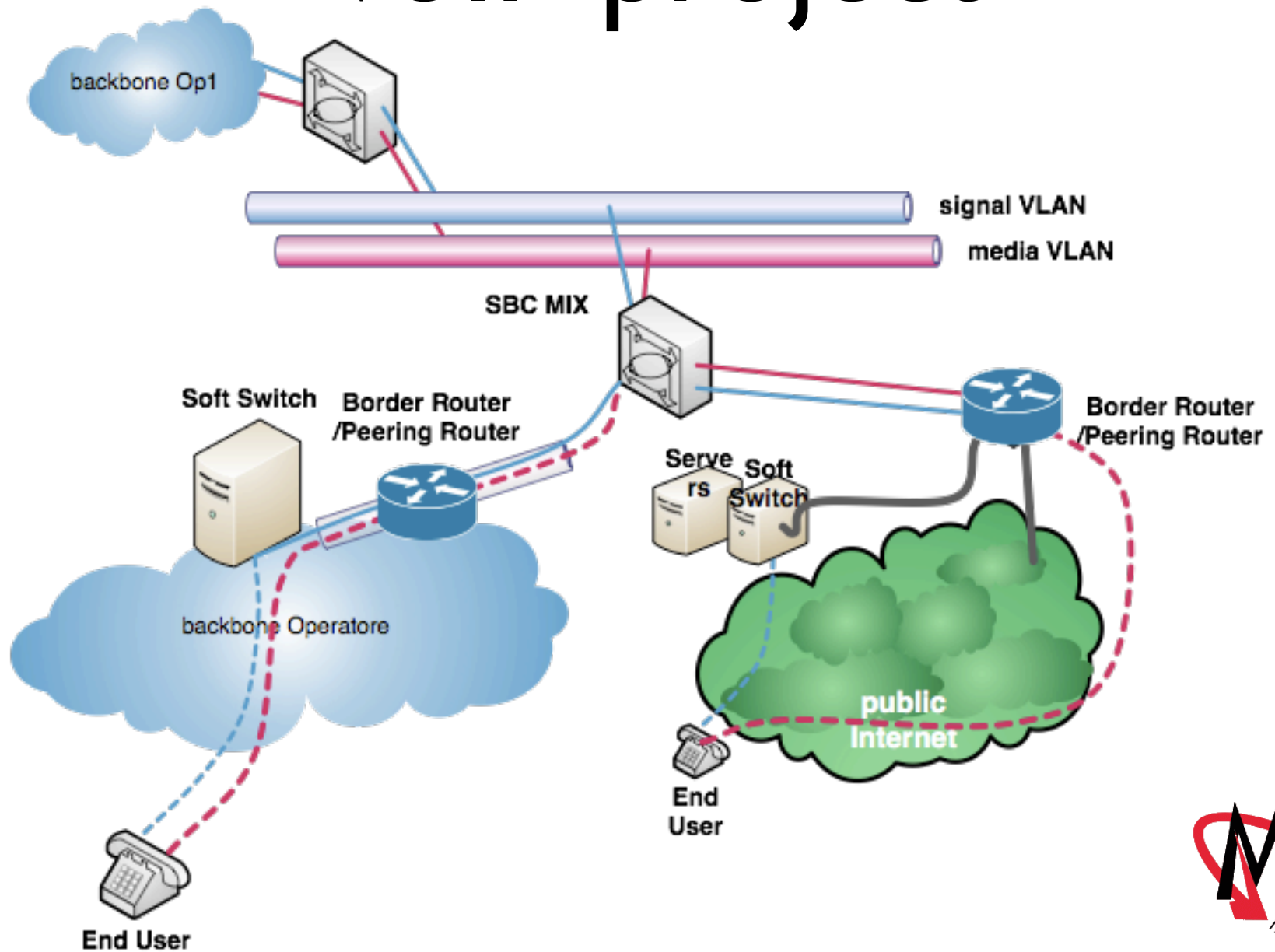


# VoIP project

- Based on a shared SBC cluster
- New interconnection scheme:
  - Built-in 'Realm' feature
- On a dedicated L2 environment, each VoIP SP has its own signaling and media virtual interfaces that
  - are addressed within its own IP space
  - belong to a dedicated L2 VLAN
- Mutual topology hiding scenario
- Twin VLAN option available



# VoIP project



# VoIP project

- Service cost scheme based on simultaneous calls fee
- Open to non-MIX members
- Dedicated monitoring and management console available
- Private Carrier ENUM database
- 12 testers connected





# Questions?

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