

LINX Report – RIPE 59

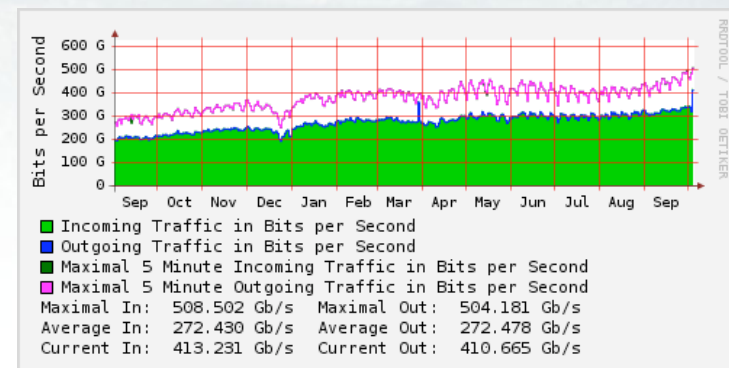
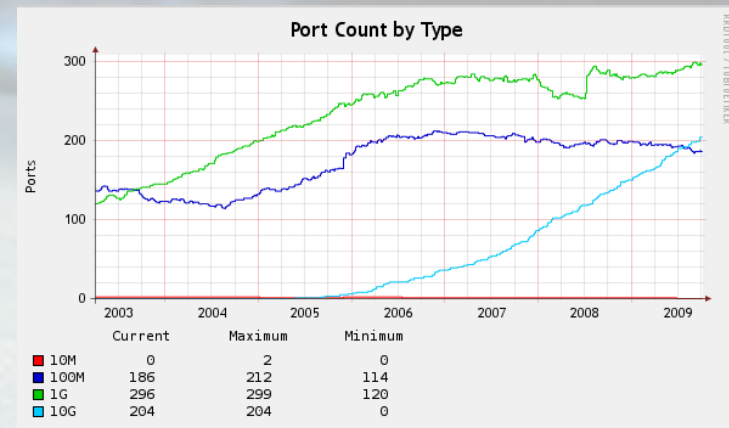
Mike Hughes

CTO, LINX

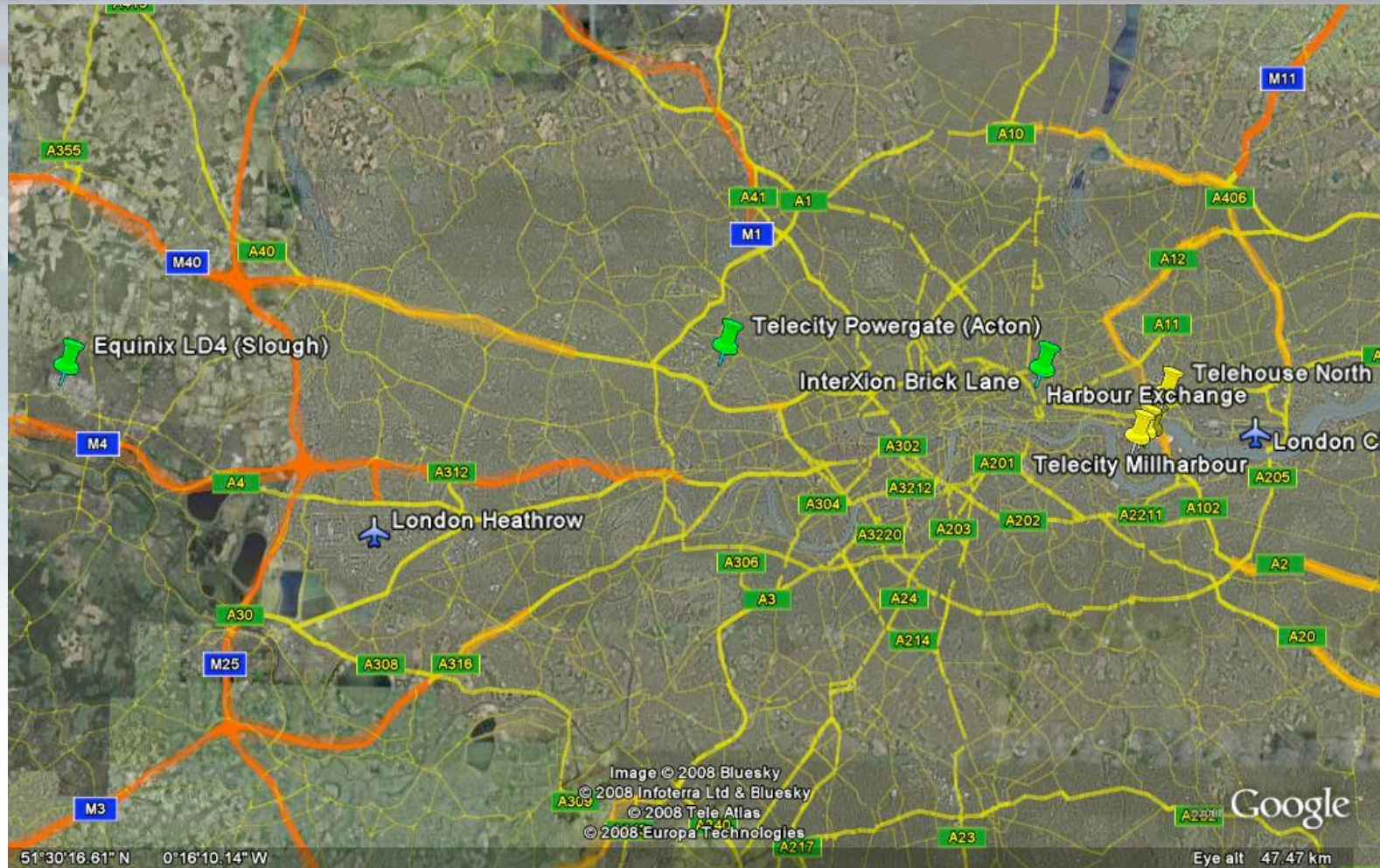
<http://www.linx.net/>

Vital Stats

- ~0.5Tb/sec peak
- 2.35Tb/sec of edge ports connected
- 340 members connected
- Switches hosted in 10 interconnected locations
 - Docklands, Central and West London



LINX London Locations

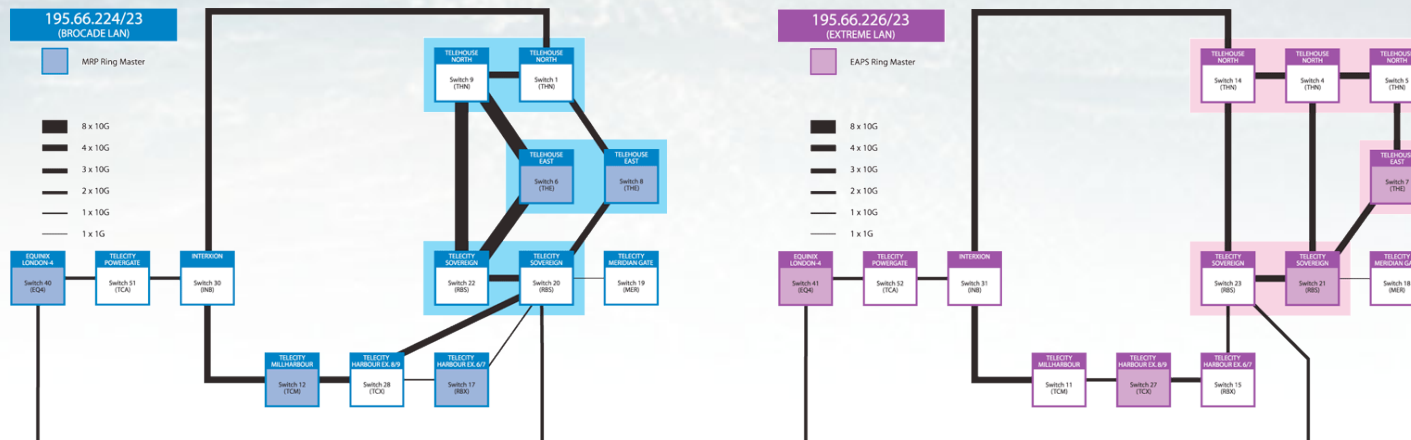


Engineering

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Network Overview

- No major changes to architecture
- Dual Diverse LAN, Dual Vendor
- *nx10G* switch interconnect
- Ring-type architecture

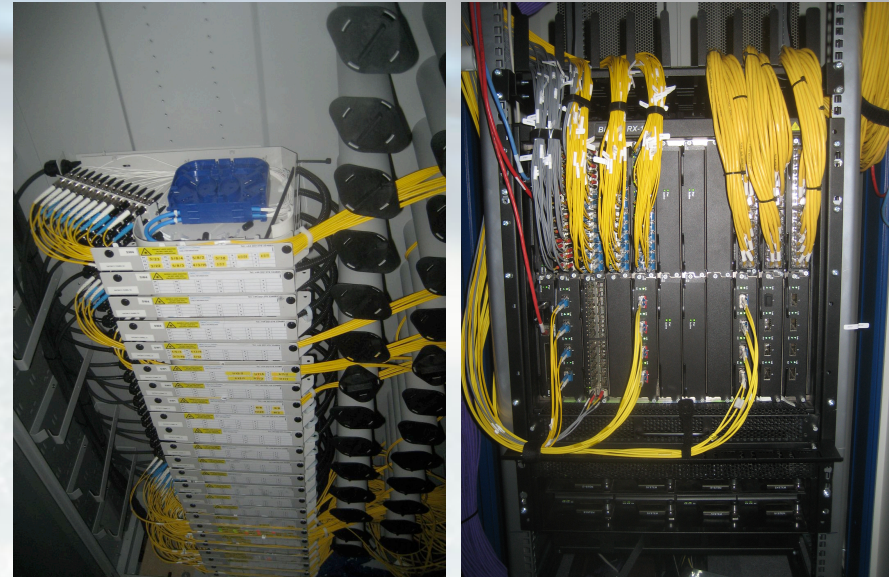


IPv6. Yes, you can...

- LINX has supported peering over native IPv6 since 2002
- Native dual-stack peering LAN
- Route Reflectors support IPv6
- We'll get around to our "supporting" services (Web, DNS, mail, etc.) in the coming months
- IPv6 workshop to distribute clue

Telehouse PoP Rebuild

- Refreshing a 12 year old PoP
- Year long project
- Almost complete



- New cabs, ODFs, power infrastructure

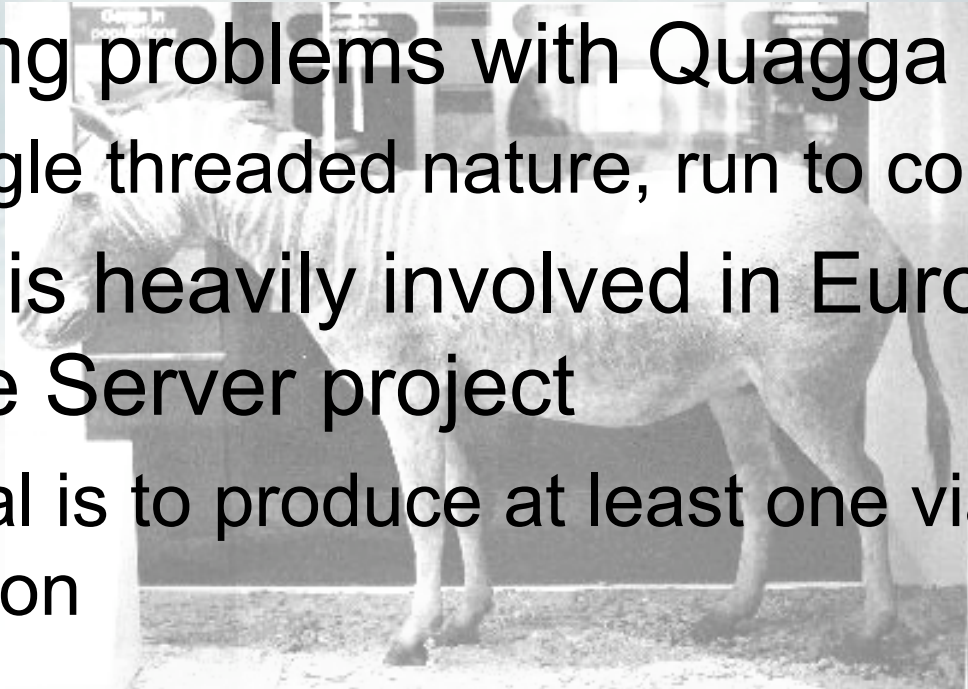
Route Server

- Definition of Quagga: “an extinct sub-species of zebra”



Route Server

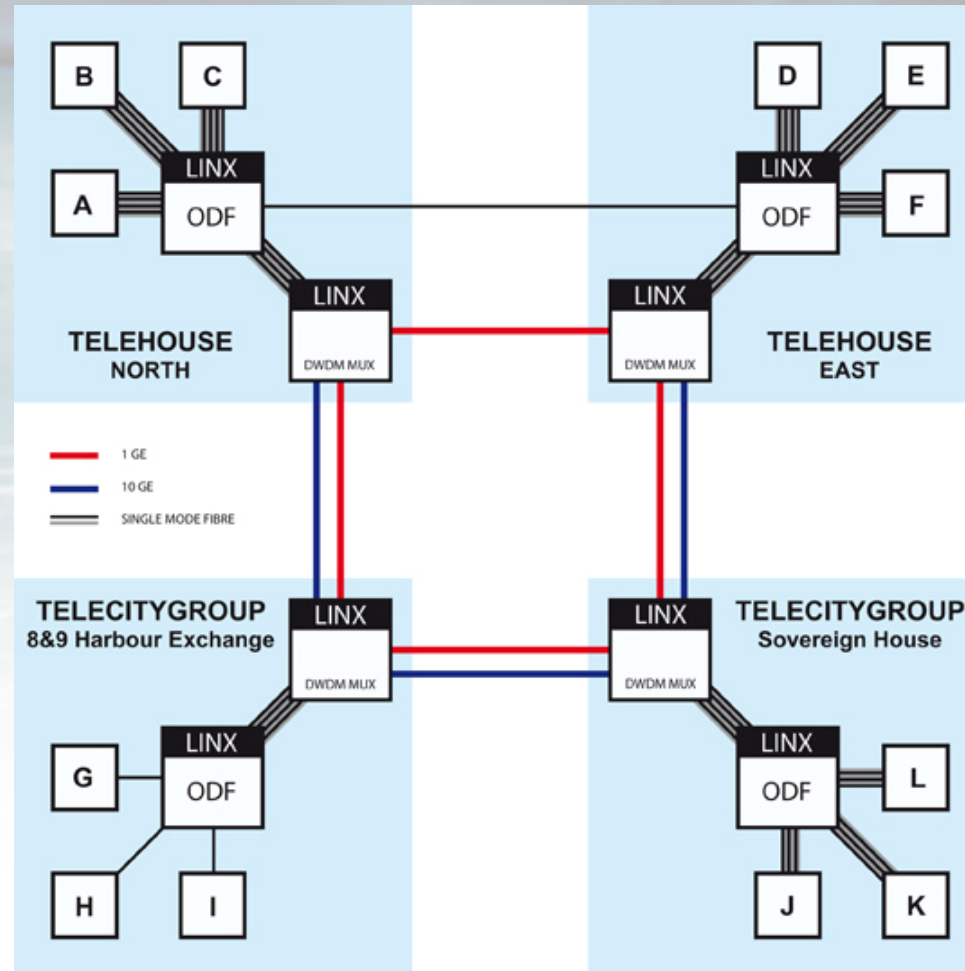
- Definition of Quagga: “an extinct sub-species of zebra”
- Scaling problems with Quagga
 - Single threaded nature, run to completion
- LINX is heavily involved in Euro-IX Route Server project
 - Goal is to produce at least one viable option



Intersite DWDM PNI Service

- A logical extension to our existing site-local (aka “intrasite”) PNI offering
- 1G and 10G service available between selected different LINX sites
 - Alternative to dark fibre
- Uses Transmode TM-series DWDM shelves
- 10G delivered over a native wavelength
- 1G is done using TDM of a 10G wave

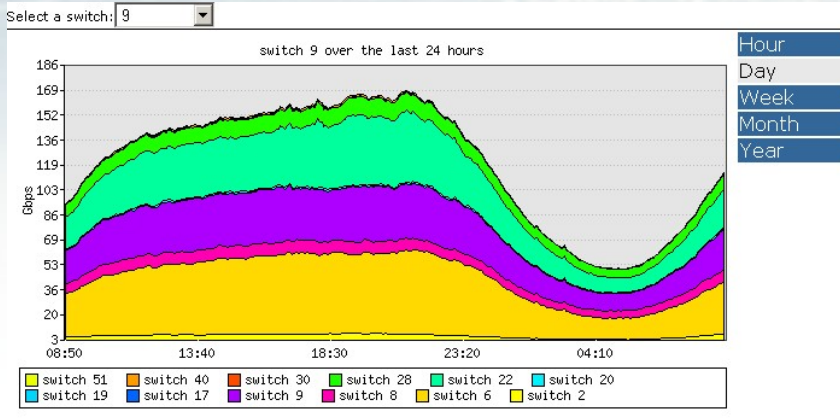
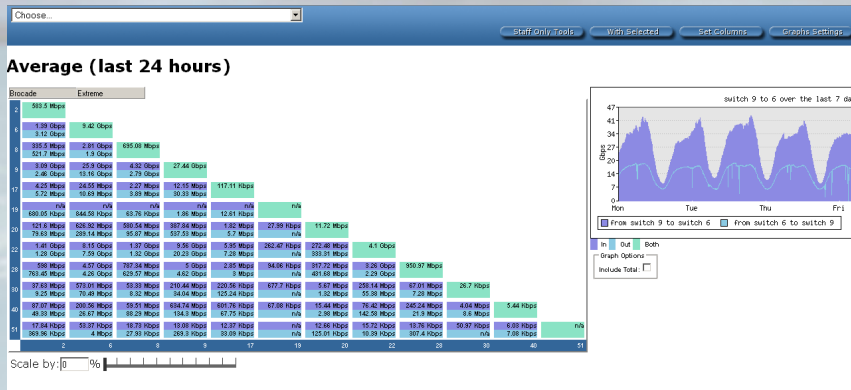
DWDM Infrastructure Overview



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sFlow Internal Tools



- Matrix of switch to switch flows
- Breakdown of switch to switch traffic
- “Virtual Switch” modelling tool
- Aids in upgrade modelling work

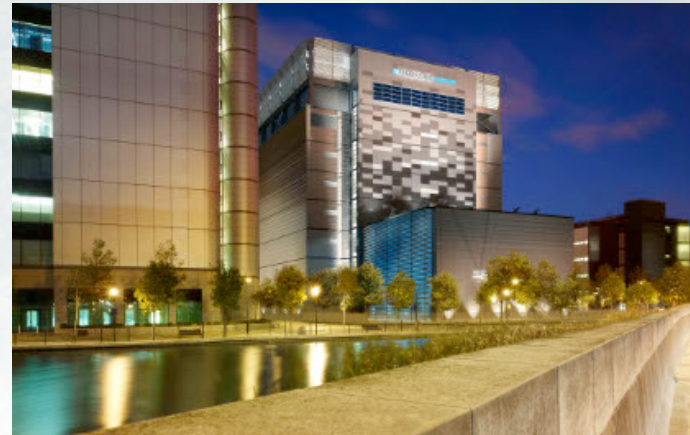
Test Equipment

- Optical Spectrum Analyser
 - Essential for working on DWDM trunks
- IXIA Platform
 - Added router testing functionality to facilitate route-server stress testing



Developments in 2010

- Telehouse West
 - 11th LINX PoP in 19000 m² facility
- 100G/40G readiness upgrades
- Plan for over 50 new members
- New Head Office



We're Hiring!

- 2 engineering vacancies open
 - One immediate start
 - One for a January start
- Job spec and apply online at:
 - <https://www.linx.net/job>
 - Must have right to live and work in the UK
 - e.g. Visa, British citizen, already EU citizen

LINX is 15!

- Celebrating 15 years of LINX during our LINX 67 quarterly members meeting
 - 16th-17th November 2009 in London
- If anyone has any “memorabilia” in their archives that record key events in LINX history, do let us know!

Questions?

- LINX staff here in Lisbon are:
 - Public Affairs
 - Malcolm Huddy, Christos Kaitzakis
 - Engineering
 - Anne Bates, me
 - Sales/Marketing
 - Richard Yule, Jennifer Atherton, Jeremy Orbell
- More info at <http://www.linx.net/>