# LINX's UK regional peering strategy

John Souter, LINX CEO September 2014 for UKNOF29



## **Presentation abstract**

- An update on LINX's UK regional peering strategy
- Where we are today and our plans for the future
- Some thoughts on what might be achievable in Northern Ireland/Belfast
  - Based on our current experience developing an exchange in Cardiff



# **Assumptions**

- 1. You know all about peering and Internet exchanges
- 2. You understand the benefits that accrue from peering



# LINX today

- The London Internet Exchange, a mutual owned by the members it serves, with dual mission:
  - To facilitate Internet interconnection, especially through public peering
  - To represent the interests of our members in matters of public policy
- 20 year old veteran of the peering scene
- Around 50 staff, supporting 5 (soon to be 6) peering LANs, in 2 continents (UK and LINX NoVA in the USA)
- ~550 ASNs, connecting members from ~60 countries
- Over 2Tb/sec (4Tb/sec) peak aggregate traffic
- ~9Tb (~16Tb) of connected member capacity
  - Figures in parentheses include LINX managed private interconnect



# **UK-wide peering initiative**





# **UK-wide peering?**

- LINX mission: "keep traffic local"
  - Which, from a UK-vs-the-world perspective,
    LINX has done
  - But there was little or no UK peering outside of London (in 2011, when this initiative took root)
- So can we keep traffic <u>more</u> local?



## So what have we done?

- Developed a strategy, and gained the support of the membership to pursue it
  - https://www.linx.net/files/literature/Regional-Peering-Strategy.pdf
- Opened IXManchester in 2012
- Opened IXScotland in 2013
- Opening IXCardiff in 2014



# The concept

- Use the established LINX membership structure
- Respect local 'ownership need'
- Keep it simple & straightforward
- Take the long term view about economic viability
- Separate stand-alone exchanges
  - Not connected back to London





## Services

#### Just like LINX in London:

- Nothing new to join/sign
- Existing order process
- 100Mb, 1G, 10G peering ports
- Ports stats & sFlow
- Monitoring & OoH NOC
- support@linx.net
- ConneXions partnership scheme





# **Pricing**

- Single membership fee
  - No matter how many LINX exchange networks a member connects to
- No charge for 100Mb & 1G ports during establishment period
  - This could be long (~ 2 years?)
  - Then low pricing
- 10G ports at £675/month

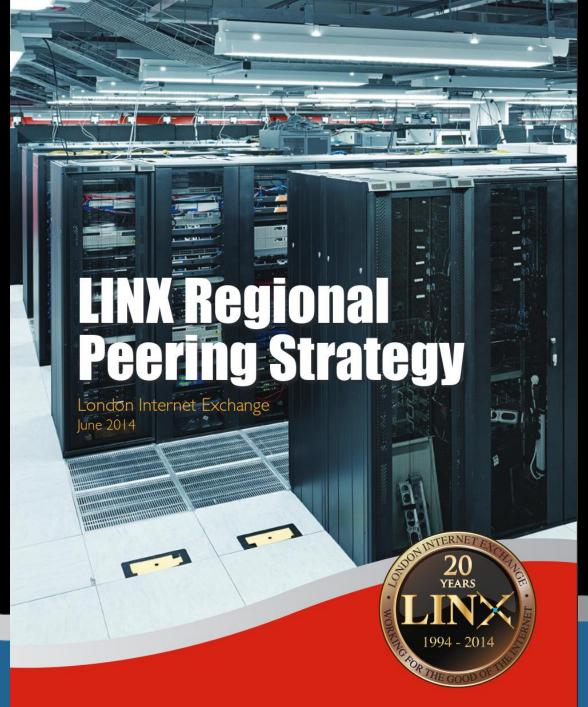




# Establishing local viability

- This is the **key** issue
- We are trying very hard:
  - Not to be prescriptive
  - And to take the long term view
- But:
  - It does need a <u>local community</u> of both network content <u>and</u> access providers
  - It does need supportive local data centres







# Strategic support from members

- Apart from our strength & experience, the LINX member support for this initiative is the key to it working
  - Large content providers always like IXPs
  - But large access providers are also supportive
- And all say that they need long term stability assurance to invest in connecting



## **IXManchester**

- A return to peering in Manchester
- In two years it has grown to ~50 ASNs
- Presently in Telecity Williams/Kilburn datacentres
  - With great support from TelecityGroup
  - But shortly expanding to Telecity Joule House and M247's datacentre
- Some larger networks now present...



## **IXScotland**

- We had the advantage of a dominant datacentre, to establish IXScotland
  - With great support from Pulsant (who own it)
- A little slower to take off, despite that
- 11 ASNs connected today
- But the local steering committee is adopting a long term vision:
  - 50 networks, 50 Gb/s peak traffic, in 5 years



## **IXCardiff**

- Our latest initiative
- Local steering committee have driven this forward, against the odds
- No carrier neutral datacentre
  - But getting round this by hosting inside BT Stadium House
  - With LINX providing a carrier neutral 'layer'
- Expect to open in October 2014



## The future?

- We've already conducted consultations in the West & East Midlands, and Belfast
- Expect to develop something for Birmingham next year
  - Local datacentre scene is developing there
- Overall, we may be 'ahead of the curve' in some places we are looking at
  - But perhaps that is a good thing?



# Belfast/Northern Ireland?

- Belfast/NI suffers the same disadvantages as Cardiff
  - Certainly in respect of datacentres
  - Plus the isolating effect of the Irish Sea
- But our Cardiff experience shows what is possible
  - <u>If</u> the local community of interest cares enough!



# **Questions?**

- Some resources for reference:
  - Stats and looking glasses (ASNs present):
    - https://stats.linx.net
    - https://stats.linx.net/cgi-pub/xlg.pl?run=true&site=IX-Manchester1&query type=+BGP+Summary&address=&Su bmit=Submit
    - https://stats.linx.net/cgipub/xlg.pl?run=true&site=IXScotland&query type=+BGP+ Summary&address=&Submit=Submit
  - Prices:
    - https://www.linx.net/service/servicefees.html

