

LINX's UK regional peering strategy

John Souter, LINX CEO
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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 **more** 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 local community of both network content and access providers
 - It does need supportive local data centres

LINX Regional Peering Strategy

London Internet Exchange
June 2014



LINX

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
 - **If** 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=&Submit=Submit
 - https://stats.linx.net/cgi-pub/xlg.pl?run=true&site=IXScotland&query_type=+BGP+Summary&address=&Submit=Submit
 - Prices:
 - <https://www.linx.net/service/servicefees.html>