UKNOF 1 LoNAP Update

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Introduction

- LoNAP formed in 1997, members owned not for profit Internet Exchange.
- 650Mbps traffic
- 44 Members
- 1x 10GE member, 13x GigE members, remainder at 100Mbps

History

- 1997 – Cisco 2916 & 1924 switches, 2500 collector, one site
- 2000 – Cisco 3500XL switches, 2621 collector, second site
- 2001 – First GigE member - BBC
- 2002 – Third site. 7200 collector.
- 2003 – Start of upgrades to Cisco 6500
- 2005 – Fourth site (pending)

Non core activity

- AS112 anycast instance since early 2003
- Interconnect with Xchangepoint since early 2003
- Member of Euro-IX
- Member of ISPA
- Have signed an MoU with the RIPE NCC regarding a link to k.root-servers.net
- In discussion with ISC regarding hosting an f.root-servers.net instance

Locations

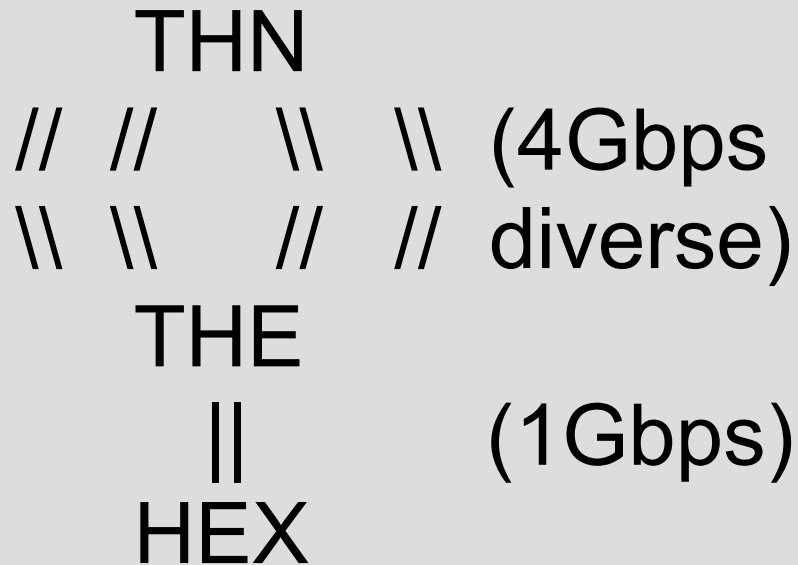All within the London docklands area
- 1997 – Telehouse North, TFM1
- 2000 – Telehouse East, TFM40
- 2002 – Redbus Harbour Exchange, Floor 8
- 2005 – Redbus Soverign House. (July)

Infrastructure

- Cisco Catalyst 6506 switches
- Sup720 Supervisor Engine running IOS
- 6700 series linecards (the high end ones)
  - WS-X6704-10GE
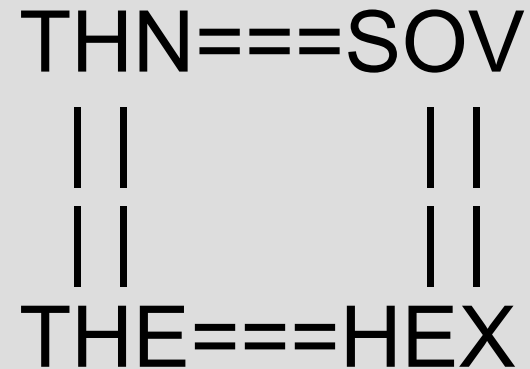 - WS-X6724-SFP
  - WS-X6748-GE-TX

Topology

```
       Present                    Future
                              10Gbps diverse ring

      THN
 //  //    \\  \\  (4Gbps       THN===SOV
 \\  \\    //  //  diverse)      | |        | |
      THE                        | |        | |
       ||       (1Gbps)          THE===HEX
      HEX
```

Peering

Now

- IPv4 Unicast (193.203.5/24 vlan4)
- IPv4 Multicast (195.35.120/24 vlan5)
- IPv6 Unicast (2001:7F8:0:17::/64 vlan 6)
- LoNAP-XPE (195.47.243/24 vlan 550)
- LoNAP-XPE (2001:7f8:0:27::/64 vlan 551)

Future

- Jumbo frames VLAN (MTU4470)
- IPv6 Multicast (when requested)

VLANs

Can be created between ports on request
Some uses:
- Backup link between sites
- Transit traffic
- Semi-Private peering (more robust)
- ADSL aggregation
- Non IP traffic
- Jumbo Frames

Fees

- Membership fees (including 2 connections) are £2000/year + VAT
- Joining fee is £500 +VAT

No extra fees charged for traffic levels, VLAN creation or participation, etc.