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Road to Pulsant Edge Fabric

Engineering Resilient, Low-Latency Connectivity Across the UK

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About Pulsant

The UK's Edge Infrastructure Platform

Twelve Owned and Managed DCs

Three Areas:

- Scotland, North England and South England

LINX Presence:

- Edinburgh South Gyle → LINX Scotland
- Manchester → LINX Manchester
- Telehouse → LINX London

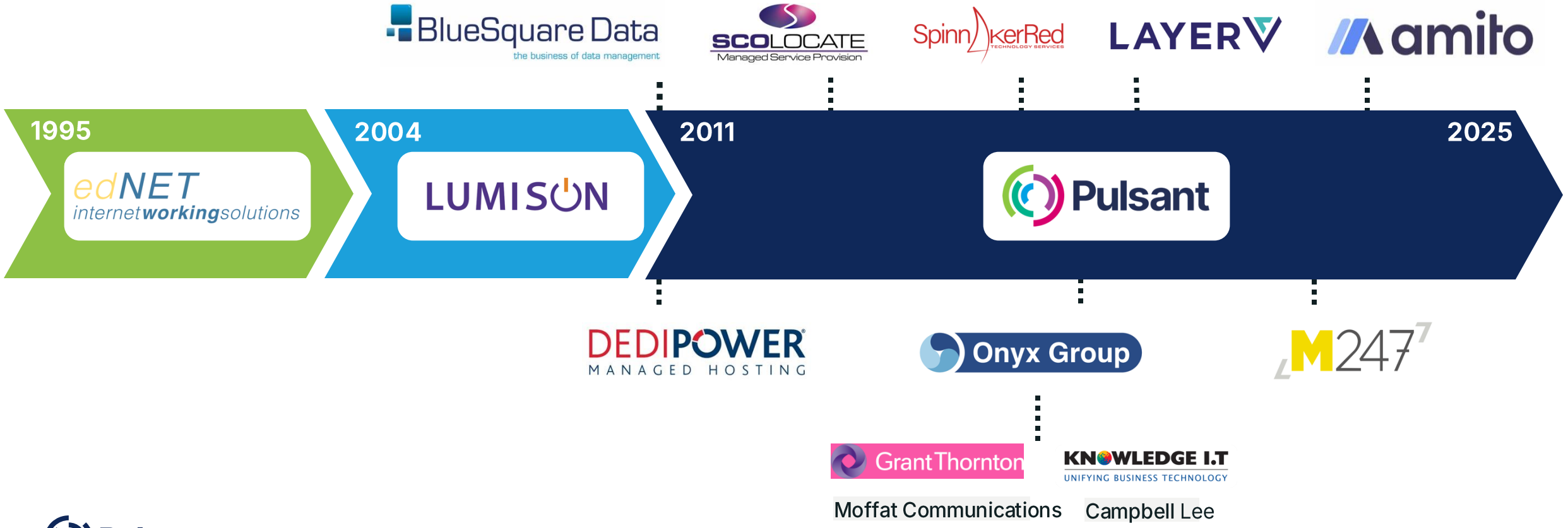
All DCs Connected by Pulsant National Network

Two New DCs

- Birmingham
- Fareham (Portsmouth)

Over **1,200** clients
Over **140** partners
Over **50** national providers
350 employees

Pulsant Down Memory Lane



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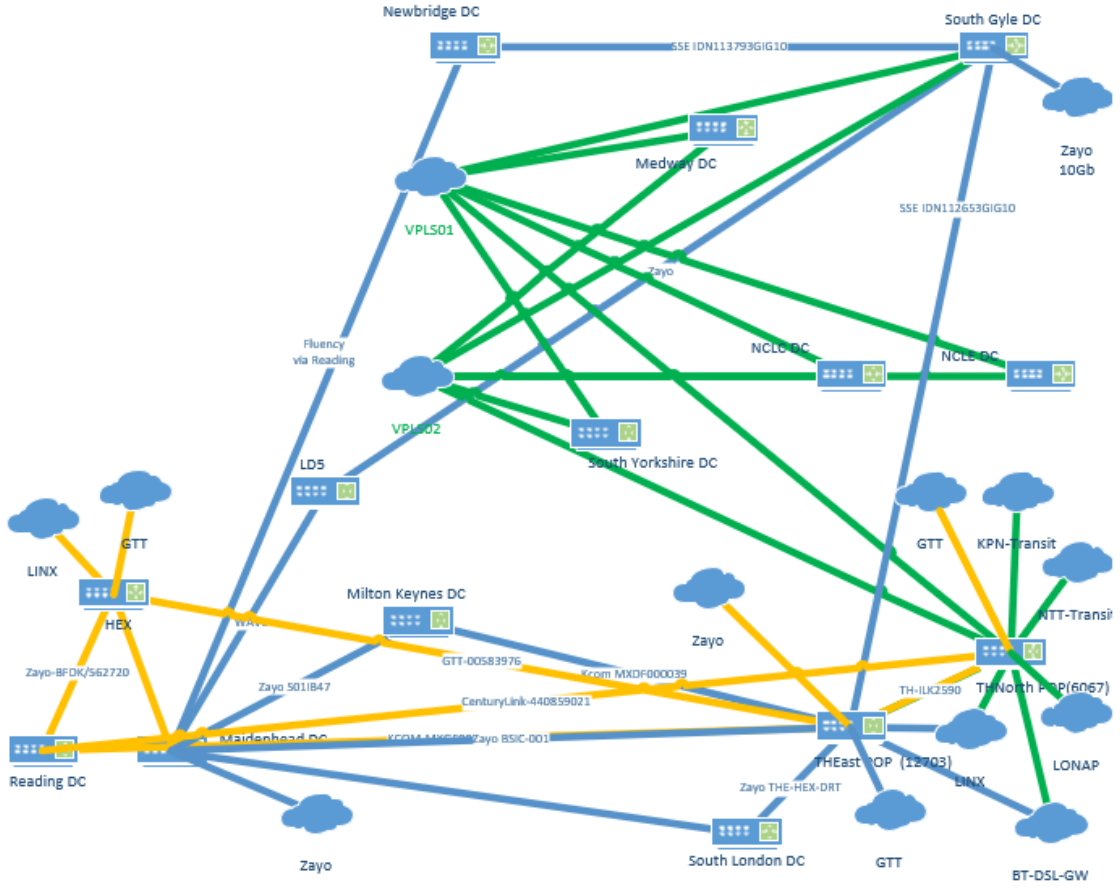
Somewhere in 2020

Three Different Networks

- AS12703, AS24931 and AS6067
- Different DCs per network
- Three sets of Internet connections
- IP renumbering issues
- Different IP services per network

- **Different Telco Providers**
- **Pulsant Owned Dark Fibre and Optical Networks**
  - But not everywhere
- **Huge Operational Overhead**
- **DC Networks**
  - Different topologies
  - Different hardware



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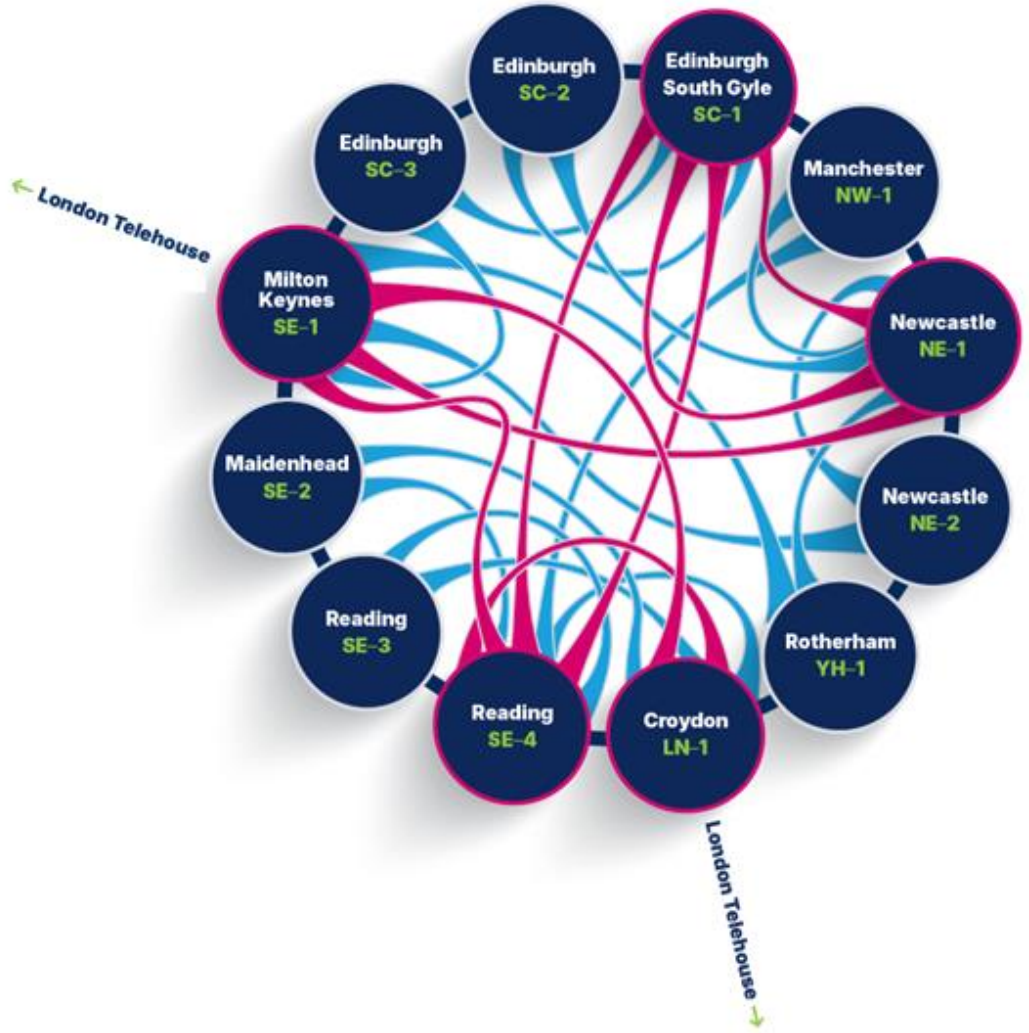
Pulsant National Network - Core Network

- **Single Fibre and Optical Partner**
  - Both national e international
- **Singe ASN**
  - ASN 12703
- **100Gbps Core Links as Standard**
- **Consolidation of Internet Connections**
- **Exit 3rd Party DC's**
- **Hardware Refresh**
- **Issues:**
  - Wayleaves
  - Duct ownership
  - Adoption of new templates



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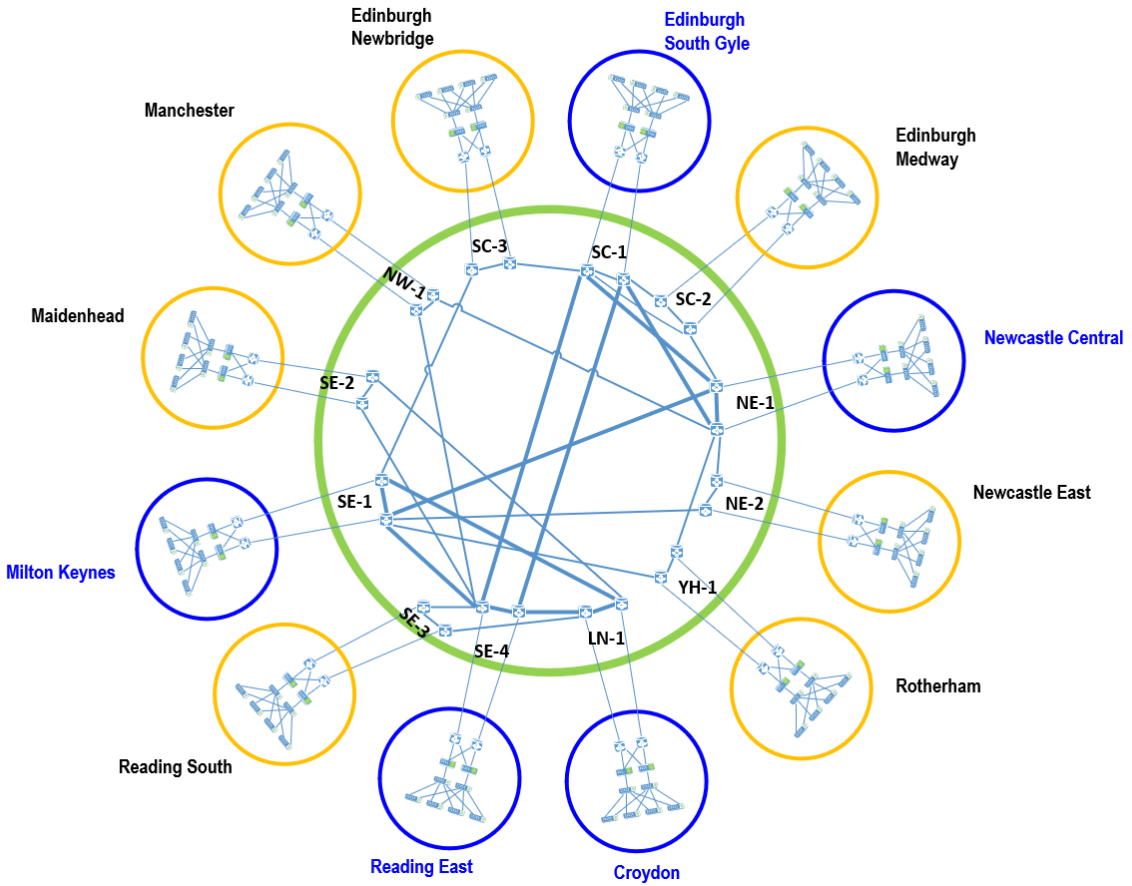
Pulsant Edge Fabric - Data Centre Network

- **Unified Architecture**
- **IP Fabric**
  - Leaf and Spine Topology
- **Scalable Design**
  - Different DC physical topologies
  - Easy to upgrade
- **100Gbps Capacity**
  - 3:1 oversubscription
- **EVPN – VXLAN Technology**
  - Replace VLANs
  - CRB Design
  - E-LAN Layer 2 services
- **Not using Type 5 EVPN routes**
  - IP VRF instead



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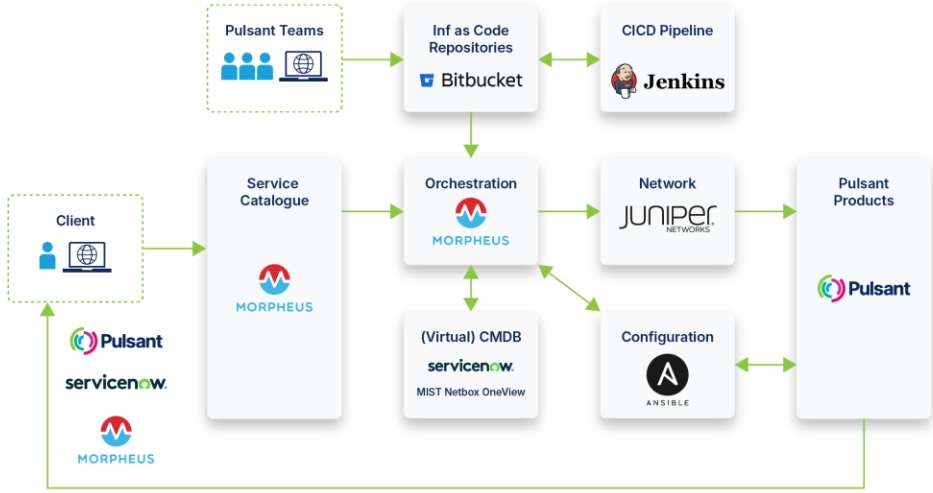
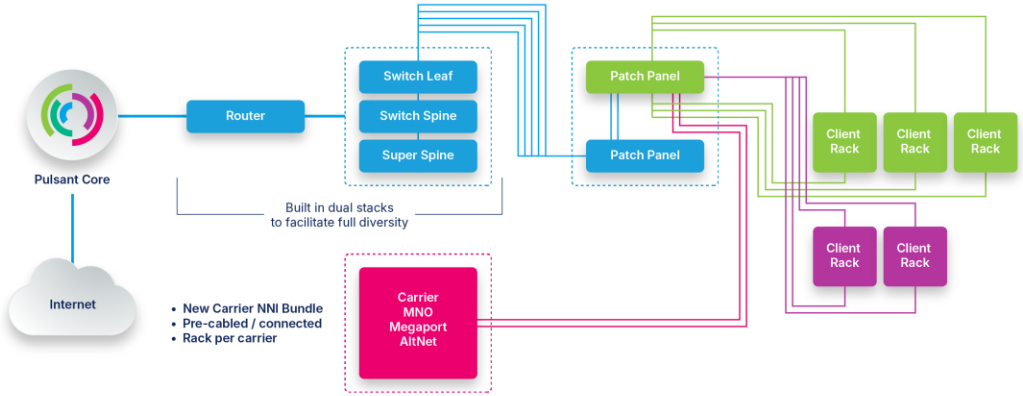
Pulsant Edge Fabric - Products

- **Consolidation of Connectivity Services**
- **Road to Automation**
- **Edge Fabric Connection**
  - Two ports using two cable routes
  - Resiliency by design
  - Operational benefits
- **Issues:**
  - Migration of legacy services
  - Migration of customer networks
  - Cabling

Automation



Pre-cabled and connected



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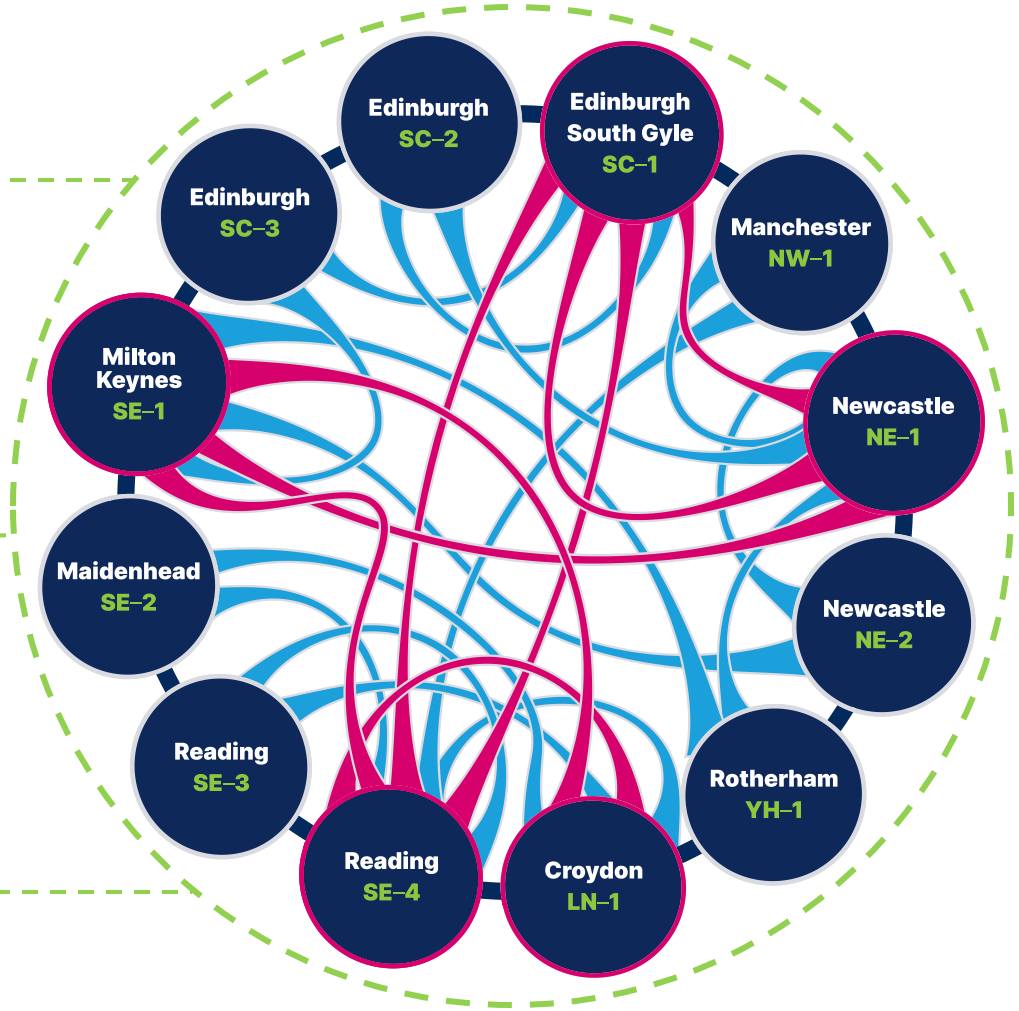
aws
SAP
Google Cloud
salesforce
Microsoft Azure
rackspace technology
Alibaba Cloud
ORACLE Cloud
IBM Cloud

Virgin media
neos NETWORKS
BT WHOLESALE
vodafone
COMMSWORLD
amsix

linx



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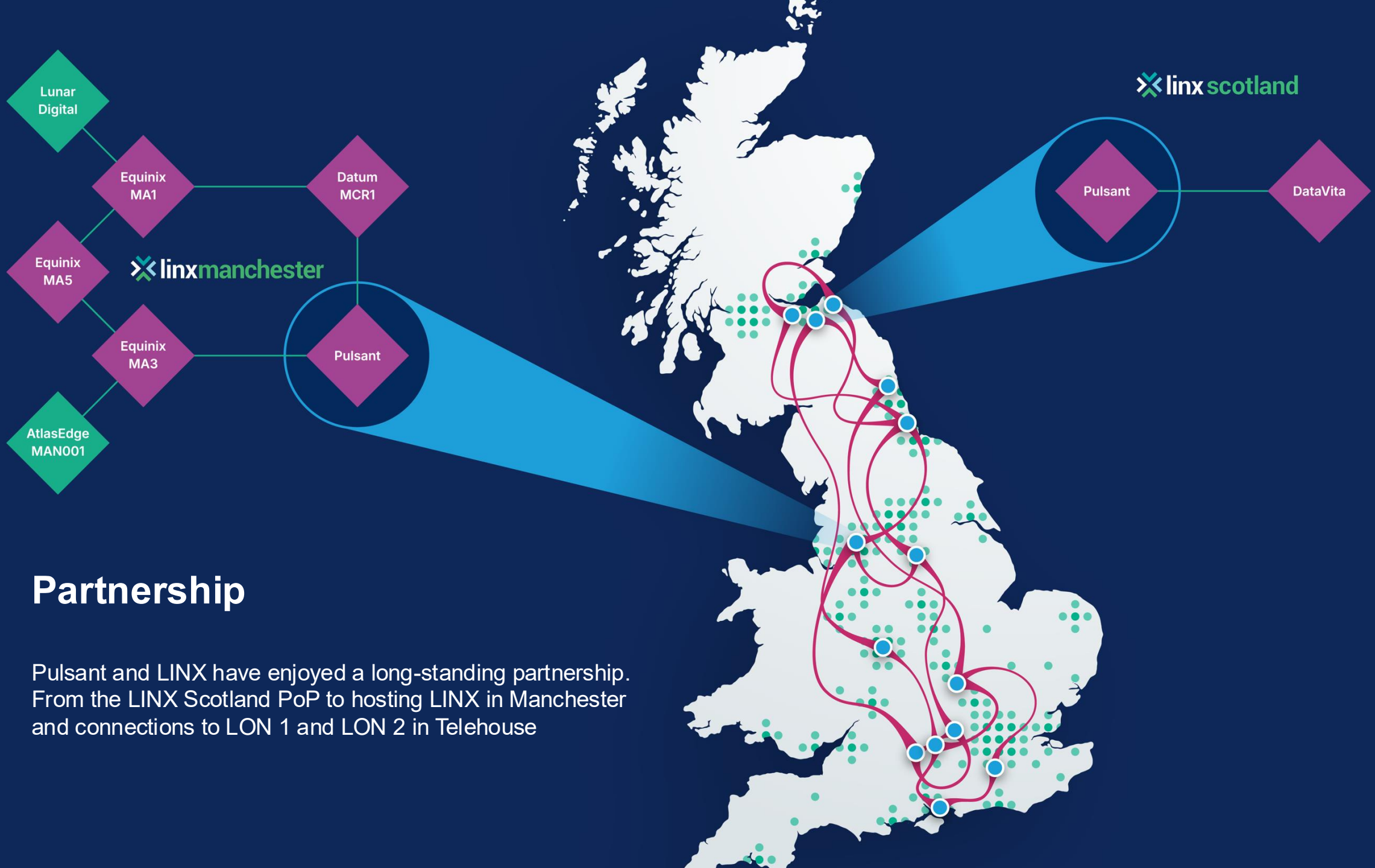

Partnership

Pulsant and LINX have enjoyed a long-standing partnership. From the LINX Scotland PoP to hosting LINX in Manchester and connections to LON 1 and LON 2 in Telehouse

Questions?

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