



# Technology Operations & Projects Update

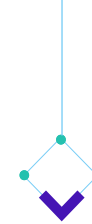



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20<sup>th</sup> November 2025

LINX125



-  **Operational Update** 
-  **LON2 Update** 
-  **Projects Update** 
-  **Route Servers Update** 





## Operational Update

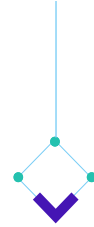


## Incidents

| LAN                               | Incidents |
|-----------------------------------|-----------|
| Systems (including route-servers) | 2         |
| LON1                              | 2         |
| LON2                              | 0         |
| LINX Manchester                   | 0         |
| LINX Wales                        | 0         |
| LINX Scotland                     | 0         |
| LINX NoVA                         | 1         |
| Jeddah & Riyadh                   | 1         |
| ManxIX                            | 1         |
| Nairobi                           | 4         |
| Transmission PoPs (London)        | 0         |

Portal: <https://portal.linx.net/maintenance-and-outages>





# Incidents & Problem Management

**LON1**

10 July

## **Unexpected routing engine failover on LON1**

- Issue with core3-tch resulted in iBGP flap at RE failover
- Member traffic on switch core3-tch was affected for approximately 15 minutes
- Raised case with vendor, RMA was issued





# Incidents & Problem Management

## LON1

10 July

### **LON1 MAPS router connections down**

- 18-minute outage affecting both Microsoft MAPS connections and LON1 MAPS member traffic impacted
- Microsoft identified root cause was FPC1 on their device was faulty and were advised to RMA the card





## Change Freeze

### NoVA Thanksgiving Change Freeze

- From 17:00 EST on Wednesday, 26 November to 09:00 EST on Monday, 1 December 2025

### Holiday Season Change Freeze

- From 17:30 UTC on Friday, 19 December through to 09:00 UTC Monday, 5 January 2026







## LON2 Update





## LON2 – Migration Plan

### Why are we doing this?

- Existing Edgecore 5812-54 (Broadcom Trident 2+) hardware platform becomes EoL 2026
- 7712-32x (Broadcom Tomahawk) to follow Mid 2027
- OcNOS 1.3.x software also to enter EoS Q1-2026
- Multiple vendors (Nokia IXR, Juniper QFX, Arista, Edgecore w/ Sonic/OcNOS reviewed in late 2024/25)
  - Nokia IXR platform running SR-Linux selected
- LAN will remain on VxLAN based EVPN technology
- Supporting the full product coverage from LINX, including; Peering, PVLAN, CuG and MAPs, 10GE through to 400GE





## LON2 – Migration Plan

- Parallel build of new Nokia D2, D3 and D5 switches
- NNI to be built between Edgecore/Nokia networks (essentially a LAG port connected between networks, configured as a member port to allow traffic to flow between both networks)
- Will migrate members on a per-site basis over multiple maintenances
- Site Captains and Route Servers, etc. to be migrated when the sites they are connected to are migrated





## LON2 – Progress So Far

- Migration delayed until Q4-2025 due to issues with hardware availability
- Parallel build now almost complete
  - All sites have been built and patched
  - Probes (devices placed on edges to monitor network availability) in process of being deployed
  - Per site/switch Acceptance Into Service (AIS) nearing completion
- NNI expected to go live before network freeze
- Stability will be monitored over holiday season
- Aim to migrate all members over 4/5 maintenances over 2-week period (Jan/Feb '26)
- Decommissioning of Edgecore equipment to follow (Feb/Mar '26)





**Projects**

**Software Upgrades**

**International/Regional Builds**

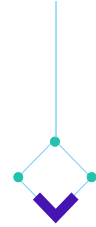


## Projects – Software Upgrades

- LON1 Juniper MX10K hardware and Junos software upgrades to 23.4R2-S4 completed
- Nokia IXR Software upgrades
  - All existing IXR switches to be upgraded to 24.10.5
  - NoVA completed, remaining LANs to be completed Q4-2025/Q1-2026

This will enable us to deploy Proxy-ND (in addition to Proxy-arp) on IXR based exchanges





## Projects – International/Regional Builds

- LINX Accra
  - Initial 2 sites now live (PAIX & ONIX). Digital Reality expected to go live late November
- LINX Riyadh
  - Hardware refresh complete enabling 400G
- LINX Damman
  - Still awaiting final build date but all possible prep work done on the LNX side, potentially still Q4-2025, but may be pushed to Q1-2026
- LINX Jeddah
  - As with Damman, still awaiting final build date, likely to be Q1-2026
- LINX Wales
  - BTS site decommissioned. NGD (Newport Vantage) remains operational (Hardware refresh planned for 2026)





## Route Servers Update





## Route Servers

### BIRD

- Currently still running on 2.13.1
- Testing 2.17.1 (bug fixes, improvements)
- Plan to deploy between now and early 2026
- Will deploy LINX Collectors first



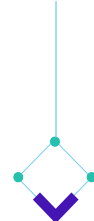


## Route Servers

### OpenBGPd

- Successfully deployed OpenBGPd on LON1 for rs3.lon1
  - Also serving MAPS
- Running version 8.8
  - Evaluating version 8.9 for future deployment
- All other route servers have been updated to version 8.8
- Currently LINX is one of 2 IXPs now using 2 route-server types on all its LANs within Euro-IX
- Replaced API exporter OpenBGP-State-Server with BGPLGd for the Looking-Glass
  - Comes as part of the OpenBGPd package




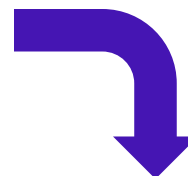


## Route Servers


- Alice-Looking-Glass
  - OpenBGPd now has 64 character descriptions making them more useful

### BGP SESSIONS ESTABLISHED

| Neighbour                     | ASN  | State       | Uptime   | Description                               |
|-------------------------------|---|-------------|----------|---|
| <a href="#">195.66.246.20</a> | 42  | established | 2 months | <a href="#">PEER AS42 195.66.246.20</a>   |
| <a href="#">195.66.246.22</a> | 3856  | established | 2 months | <a href="#">PEER AS3856 195.66.246.22</a> |
| <a href="#">195.66.246.9</a>  | 4455  | established | a month  | <a href="#">PEER AS4455 195.66.246.9</a>  |
| <a href="#">195.66.246.5</a>  | 5564  | established | a month  | <a href="#">PEER AS5564 195.66.246.5</a>  |
| <a href="#">195.66.246.12</a> | 6461  | established | 2 months | <a href="#">PEER AS6461 195.66.246.12</a> |



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|-------------------------------|---|-------------|----------|--|
| <a href="#">195.66.246.20</a> | 42  | established | 2 months | <a href="#">Packet Clearing House (PCH)</a>        |
| <a href="#">195.66.246.22</a> | 3856  | established | 2 months | <a href="#">Packet Clearing House (PCH)</a>        |
| <a href="#">195.66.246.9</a>  | 4455  | established | a month  | <a href="#">IX Reach</a>                           |
| <a href="#">195.66.246.5</a>  | 5564  | established | a month  | <a href="#">Brightsolid Online Technology Ltd.</a> |
| <a href="#">195.66.246.12</a> | 6461  | established | 2 months | <a href="#">Zayo Group</a>                         |



Thank You