

# LONAP's route servers

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# Motivation

- We get asked for it quite a lot
- Easy ramp for new participants on exchange
- Develop “hygienic” peering platform, to make peering with new networks safe

# State of the Union

- Most IXPs deploy MLP platforms using Quagga
- **Good** because it has all the features needed
- **Bad** because it appears to be unstable under load, and hard to fix
- Not keen to roll out more Quaggas in London because **LONAP** want to **offer resilience** alongside other offerings.

# Strategy

- 2 route servers, hosted in different buildings in London Docklands
- One running OpenBGP on OpenBSD
- One running BIRD on Debian Linux.

# Progress

Production

Improvement

Public Test

Closed Test

Development

The Rest

OpenBGP

BIRD

The Keen

The Brave

Specification

The Mad

*[ possibly not to scale :- ) ]*

# OpenBGP

- Missing feature - Per peer RIB
- Therefore a IXP community derived effort to introduce this feature in development

# BIRD

- Fairly new software
- Therefore **LONAP** and developers working very closely to make this roll out successful

# Rules

- The exchange is stable because we have rules and enforce them strictly
  - Enforced **IRR database filtering** on MLP
  - Required to **peer with both** MLP routers
  - Config change via **automation system** to reduce human error impact

# Features

- MLP based IRR Filtering gives members very hygienic peering platform
- Per-peer filtering (via communities) means you don't need to send routes to all MLP participants
- And, of course, it's free to members.

# Automation

- rsbuild
- Perl, Template::Toolkit, config file
- Templates for OpenBGP and BIRD
- Will share with any other IXP



# Any Questions?

[sales@lonap.net](mailto:sales@lonap.net) - new connections

[support@lonap.net](mailto:support@lonap.net) - MLP sessions

[andy@lonap.net](mailto:andy@lonap.net) - Complaints about these slides