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

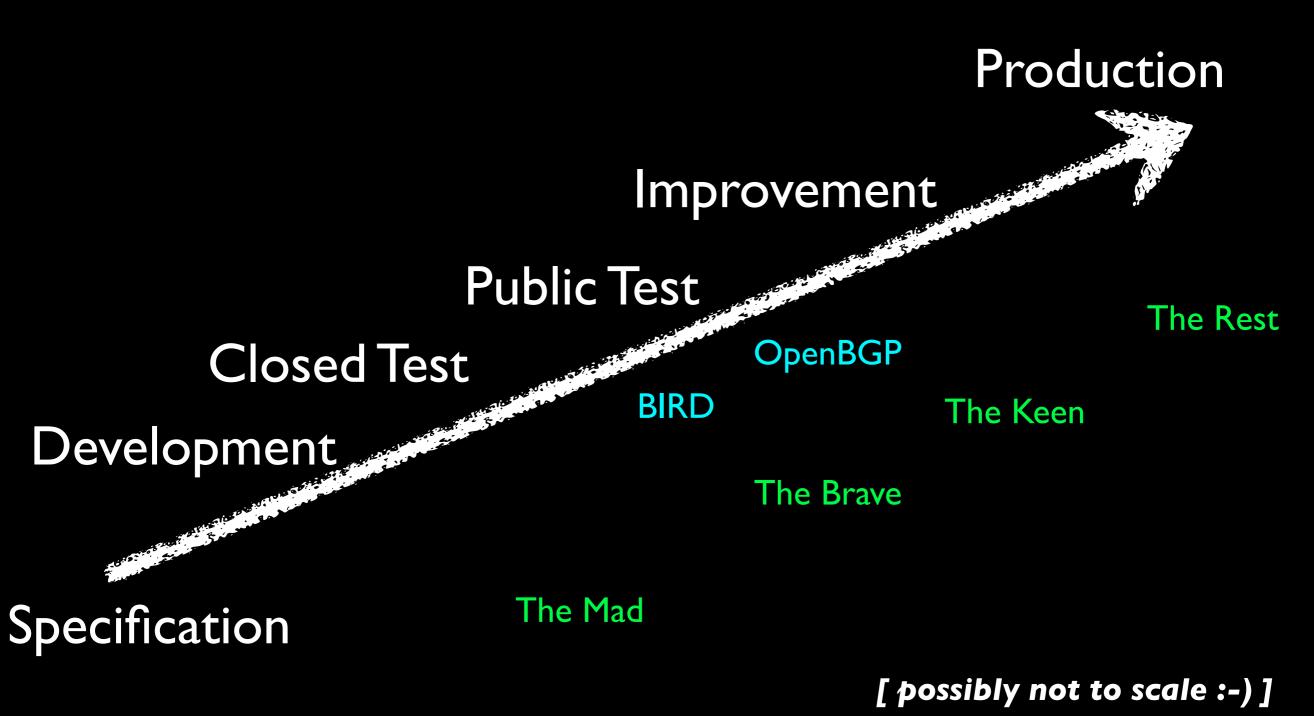
State of the Union

- 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



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

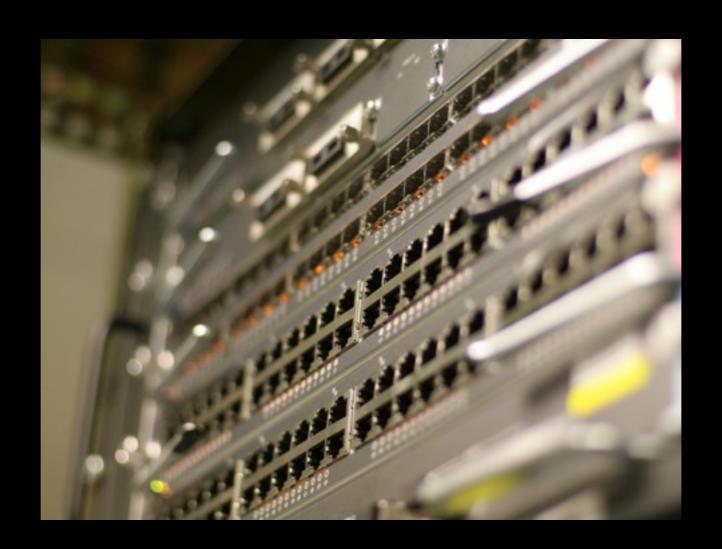
- The exchange is stable because we have rules and enforce them strictly
 - Enforced IRR database filtering on MLP
 - Required to peer with both MLP routers
 - Config change via automation system to reduce human error impact

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 - new connections support@lonap.net - MLP sessions andy@lonap.net - Complaints about these slides