

k.root-servers.net anycast deployment plans

Andrei Robachevsky andrei@ripe.net



K-root current status

- 2 instances have been deployed
 - LINX & AMS-IX
 - Average load: 3K/2K qps

- Specification
 - Cluster of 2 servers
 - NSD
 - Sniffer box
 - Global reachability
 - Funded by the RIPE NCC (AMS-IX provides 1G port)



Future nodes

Objectives

- Improving access to K for a significant ISP community
- Isolating impact of an "external" DDoS
- Localising impact of a "local" DDoS

Location

- IXP, main beneficiaries are the members of the IX
- Hosted by a neutral party (IXP itself?)
- Open peering policy
- Fully funded by a hosting party

Operations

Exclusively performed by the RIPE NCC



Technical setup

- Single box solution
 - Capable of handling 6 times the average load
 - No built-in redundancy, but less points of failure
 - DNS server (nsd), router (zeebra) and sniffer (tcpdump)
- Reachability
 - Service net
 - Local
 - Global (coordinated)
 - Management net
 - Global, reliable



Questions?

- More discussion today, 3.09
 - Interested parties invited
 - The Dam room, 1 floor
 - -17:30-18:30
 - Just before drinks
- Technical setup and experience gained
 - Presentation tomorrow at the DN* by Dave Knight