## **BIRD Internet Routing Daemon**

**Short update** 



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#### **BIRD**

- Open source routing daemon (RIP,OSPF,BGP,BFD,IPv6 RAdv)
- Developed by CZ.NIC (domain .cz) Knot DNS, Turris, ...
- Flexible configuration
- Powerful filtering language
- Very popular at IXPs as route server (more than 2/3 worldwide – source: Euro-IX)



#### **Version – 1.4.5**

- Mainly BGP-related
- Main recent features
  - BGP add-path
  - BGP graceful restart
  - OSPF multipath
  - BFD protocol (OSPF & BGP)



#### **Current version 1.5.0**

- Major OSPF redesign
  - Many small fixes better compliance to standards
  - RFC6549 OSPFv2 multi-instance extension
- Minor enhancement of BGP code stable
  - Link state support
  - Parameters to option 'neighbor' extended.
  - Separate option 'interface' added.
  - Options 'start delay time' and 'route limit' deprecated



#### **Future versions**

- Soon 1.6.0
  - RIP redesigned
  - SHA-1 and SHA-2 support OSPF, RIP
  - BGP multipath support
  - MRT table dumps
- 2.0 new "experimental" line
  - Merge IPv4 and IPv6
- 2.1 / 3.0 new stable and "LTS" line



### RS & RTBH @ NIX.CZ

- Route servers
  - IRR DB filtering
  - Checking prefix and origin ASN
- RTBH
  - Part of RS
  - Mandatory in FENIX
  - Changing next-hop to IP with MAC that is L2 filtered



## **Thank You!**



# **Questions?**

http://bird.network.cz/?support

