



ISC Community Update

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Who is ISC?

- Headquartered in Redwood City, California, USA.
- Started by Paul Vixie (President) & Rick Adams (Chairman of the Board) as a vehicle to maintain and oversee BIND Development.
- 30+ employees; 60% telecommute, 30% reside outside the US.
- Structured as a US 501(c)3 non-profit.

What does ISC do?

- **Internet Reference Software** (BIND (DNS), DHCP (DHCP))
- **Software Protocol Development** (Carrier Grade NAT, BIND/NSEC3)
- **Software Development Hosting** (INN (NNTP), NTP)
- **DNS Operations** (f.root-servers.net, SNS@ISC and DLV Registry)
- **Public Benefit Hosting** (archive.org, Mozilla, FreeBSD, kernel.org)
- **Others** (Security Information Exchange (SIE), DNS-OARC)

f.root-servers.net (F-Root)

- One of the 13 root-servers.
- Over 53 nodes worldwide via anycast; three in the SANOG region (Chennai, Dhaka and Karachi) courtesy of APNIC and local sponsors.
- Which F-Root node are you using?
 - `dig @f.root-servers.net CH TXT hostname.bind`
 - If the result starts with “maa1” then you are using the node in Chennai (NIXI)
 - If the result starts with “dac1” then you are using the node in Dhaka (BDIX)
 - If the result starts with “khi1” then you are using the node in Karachi (Cybernet)
- No need to change your DNS config to take advantage of this.

BIND 9: Where did it come from?

- Designed to solve BIND 8 problems
- Heavy emphasis on security
- Reference implementation for DNS
- Multi-threaded model for scalability

BIND Roadmap for 9.7.x & 9.8.x

- 9.7.x
 - "DNSSEC for Humans": simpler interface to DNSSEC tools
 - "Smart" signing (a.k.a. "key metadata")
 - Simplification of online re-signing/DDNS configuration
 - Automatic online signing Trust anchor management
 - Built-in DLV key, and easy DLV configuration DNSSEC-aware libdns API & DNSSEC logging improvements
 - Usability improvements to PKCS#11 Interface for use with the Sun and the AEP KeyPer

BIND Roadmap for 9.7.x and 9.8.x

- 9.8.x
 - "real" database back end (no more DLZ)
 - MultiMaster
 - expanded PKCS#11 for more HSMs

BIND 10: Why?

- BIND 9 is almost 10 years old
- Computing world has changed, many decisions need to be re-visited
- DNS "marketplace" has changed, lots to learn from other products
- Need BIND architecture for the next 10+ years

BIND 10: What?

- Modularity
- Well-documented & defined APIs and libraries
- Customization
- Clusterization
- Resilience to failures
- Full runtime control

BIND 10 Current Status

- Project officially began 2009-04-01
- Funded by sponsors, initial set of generous TLDs:
- <https://www.isc.org/bind10/sponsors>
- 5-year lifetime
- Y1 deliverable: authority-only server
- Public Trac site for interested developers or users: <https://bind10.isc.org>

Fin.



Internet Systems Consortium