

8th Annual BIND Forum

July 25, 2010

IETF 78, Maastricht, the Netherlands



Agenda

- State of the BIND Forum
 - Larissa Shapiro, ISC Product Manager
- BIND 9 Development: How do we get there from here?
 - Michael Graff, BIND 9 Engineering Manager
- BIND 10 and You
 - Shane Kerr, BIND 10 Programme Manager

State of the BIND Forum 2010

Larissa Shapiro
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BIND Forum 2009-2010

- BIND Forum grew 5% this year
- BIND Forum supported 30% of BIND 9 software development (the balance comes from custom development contracts and grants)
- Releases and accomplishments this year
 - ESV product launch
 - new website

Training and Custom Development

Learn from the BIND experts

- Classroom & Hands On Labs
- Discounted for Forum Members and Support Customers
- Quote from recent graduate:

"The DNSSEC Workshop exceeded my expectations. I highly recommend this workshop to anyone wanting to learn the ins-and-outs of DNSSEC in a BIND environment."

New BIND Forum Benefits

- Knowledge Base: ISC is actively developing a knowledge base for BIND 9 and our other products. This project is anticipated to be customer ready by the end of 2010.

New Benefit: Web Seminars

- Web Seminars: ISC has started a series of web seminars for forum members on topics of interest
- Our first seminar on DNSSEC had 75 attendees at two sessions.
- Upcoming seminars: Key Management, SIE, DHCP, and more

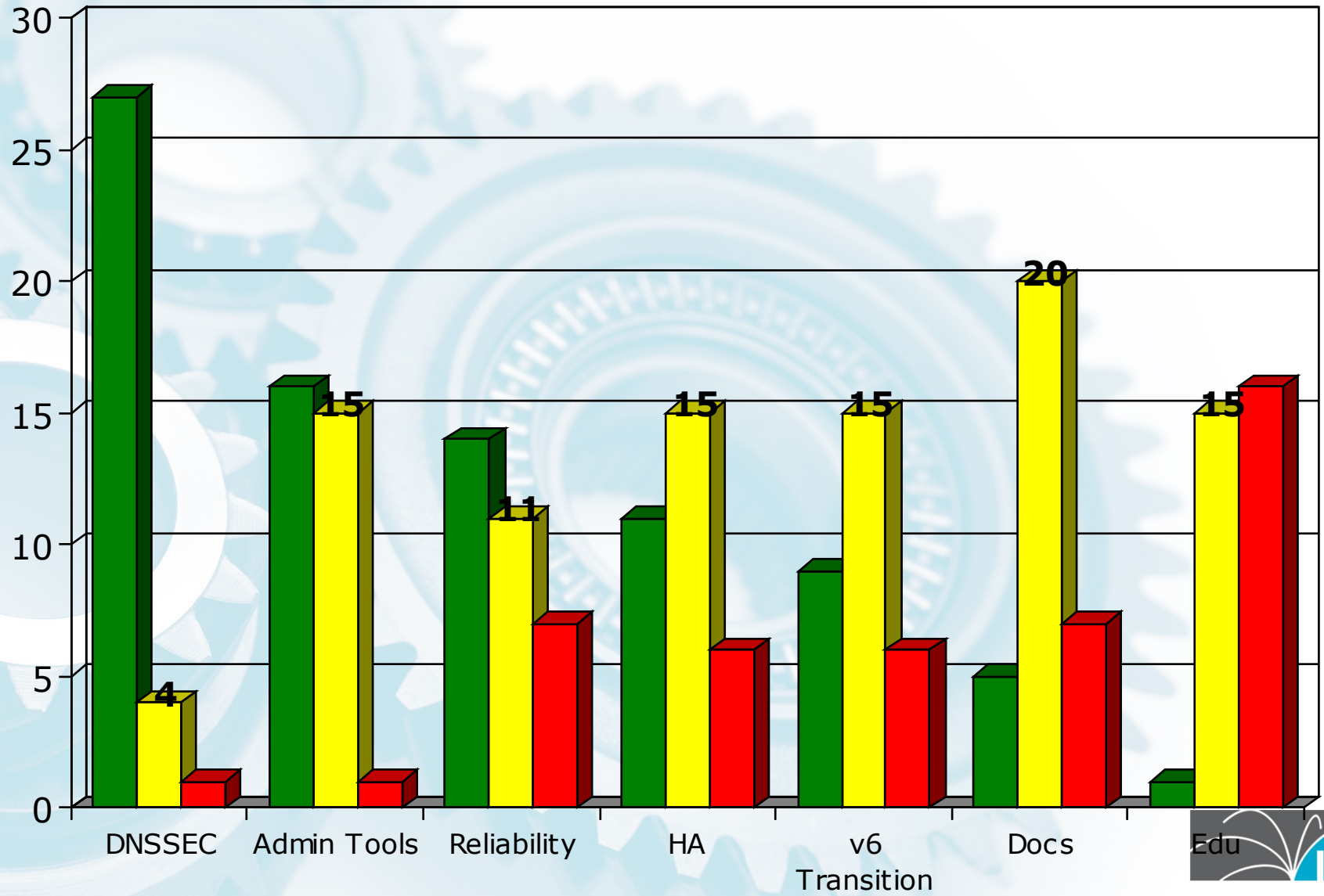
BIND Releases This Year

- 9.4-ESV
- 9.6-ESV
- 9.6.2
- 9.7.0
- 9.7.1
- BIND 10 releases

Looking Forward With You

- We are now doing periodic polling of the BIND and DHCP Forum members.
- The first poll occurred in June 2010, to determine our next development priorities for BIND 9.
- The data showed...

Results: More DNSSEC Tools



BIND Forum and BIND 10

- BIND Forum currently supports BIND 9 development
- BIND Forum will begin supporting BIND 10 in Summer 2012
(end of 3rd year for BIND 10 development)



BIND 9 Development

How we're getting there from here.

Michael Graff

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Topics

- Changes in BIND 9 development
- BIND 9.7 topics
- BIND 9.7.2 roadmap
- BIND 9.7.3 (and beyond)
- BIND 9 to 10 plans

Changes in BIND 9 Development

- New manager: Michael Graff
- Release dates are planned. No, really.
 - Some features are “must haves.”
 - Some are “may have.”
 - “Must haves” more likely to cause timeline slip, “may have” less likely.
- Release notes. No, really.
- Repository conversion

We want to work with you

- Progressive feature refinement.
- Frequent Forum member feedback (and polling.)

BIND 9.7.0 - 9.7.2

The Bad

- Many new, heavy DNSSEC users
 - We had some emergency fixes.
- The first release of DNSSEC for Superhumans.
 - Fell short of the “for Human” goal.
- Compatibility issues
 - Caused 9.7.1-P1 emergency release.
- Release timeline
 - Slipped later than we intended

BIND 9.7.0 - 9.7.2

The Good

- Improved DNSSEC tools
 - No longer need to be a DNSSEC \$diety
 - Expect more in the future
- Built-in DNSSEC signing support
- Simplified DDNS configuration
- RFC-5011 key tracking
- PKCS#11 and Keyper support
- Easier DLV configuration

BIND 9.7.2

- Release date: Sep 7, 2010.
- Features include:
 - Filter AAAA ACL support (Yahoo!)
 - dynamic add/remove zones (DynDNS)
 - Windows compatibility (Samba project)
 - Progressive ZSK auto-sign rollover
- Various bug fixes included

BIND 9.7.3 Plans

- Release date TBD, January 2011
- Primary features include
 - Improved DNSSEC tools and usability
 - DNS64
- Secondary “features” include
 - Reliability and performance improvements
 - Documentation (including logging messages)
 - Operational tools for working with the signed root
 - GOST algorithm support

BIND 9.8 Wishlist

- ISC is focusing on the 9.7.x train
- Major features such as
 - High availability
 - Other clustering-style features
 - Major overhauls of internals

BIND 9 to 10

- Do not want to repeat 8 -> 9
- New BIND 9 features are examined with an eye to the future
- Progressive enhancement of features
 - Some new BIND 9 features may be a less complete solution to keep options open for BIND 10
- Even with careful feature planning, there will be transition issues

DLV and a Signed Root

- DLV is a transition mechanism
 - So are TARs
- DLV currently imports several TARs
 - Of primary interest here is the ITAR
 - Not all of the ITAR zones are in the root
- We want to remove the duplicates
 - Doing this will mean older resolvers will lose some DLV functionality.
 - TLDs will still work, just not be validated.

Removing the Duplicates

- It's about the algorithms.
 - 9.6.2 is the first
- Timeline
 - Removal planned for October 4th, 2010
 - Will continue to track the ITAR
 - We will evaluate TAR situations as needed



BIND 10 and You

Shane Kerr
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Motivation for BIND 10

- BIND 9 is almost 10 years old
- The computing world has changed
- The networking world has changed
- DNS software “marketplace” evolved
- A new architecture for the next 10+ years



BIND 10 Project

- ISC sought funders for BIND 10
- Generous sponsors provided initial funding:
 - <https://www.isc.org/bind10/sponsors>
- Initial sponsors formed:
 - *BIND 10 Steering Committee*
- Official kick-off date 2009-04-01

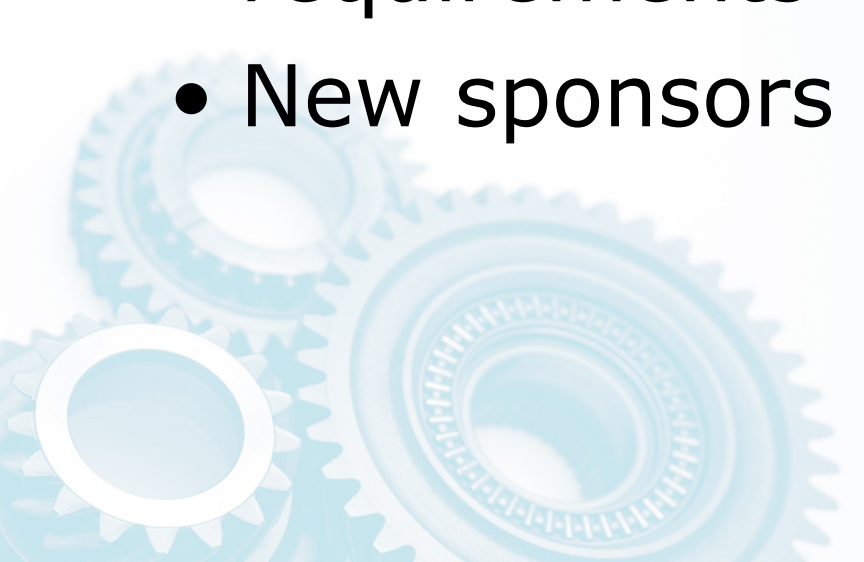
(Rough) BIND 10 Timeline

- ✓ Year 1: Authoritative-only server
- Year 2: Recursive server
- Year 3: Production-quality server
- Year 4: Drop-in BIND 9 replacement
- Year 5: *Really* fun stuff



Call for Support

- ISC is a non-profit, open source company
- BIND 10 needs your support!
- All contributions – code, testing, requirements – welcome
- New sponsors very welcome



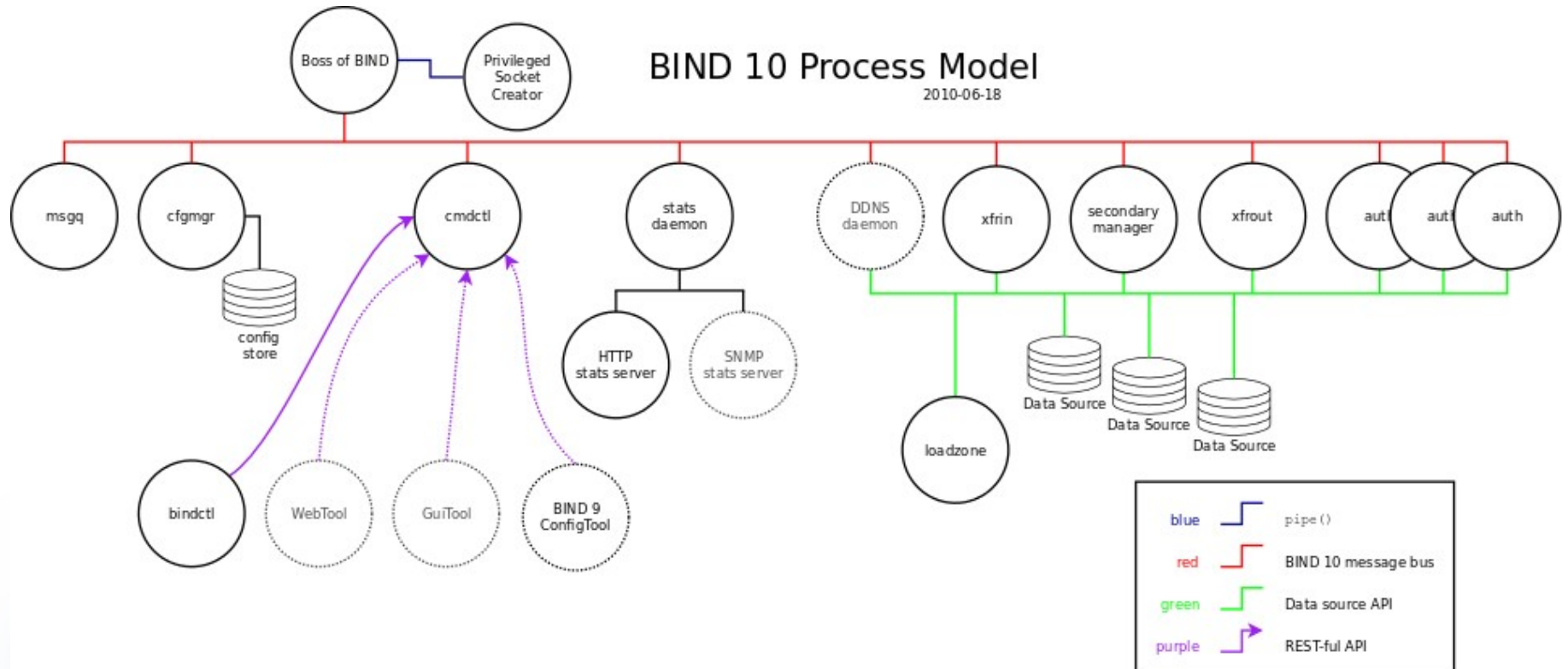
Development

- BIND 10 development is *public*
 - <https://bind10.isc.org>
 - bind10-dev@lists.isc.org
 - Public Subversion repository
- BIND 10 team coding away
 - 6 ISC staff
 - 2 JPRS staff
 - 4 CNNIC staff

BIND 10 Technologies

- Architecture & Design:
- Modularity
- Well-defined APIs and libraries
- Full runtime control
- Features:
 - Customization
 - Resilience to failures
 - Cluster support

BIND 10 Process Model



Status

- Prototype authoritative server done
- Releases every 4-6 weeks
- Recursive server in 9 months



Your turn...

Questions?

If you have further questions after the meeting,
please do not hesitate to contact us.

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<http://www.isc.org>