



BIND 10



BIND 10: Two Years On

IEPG @ IETF 80, Prague

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BIND 10's Cotton Anniversary



- The BIND 10 project will have its 2nd anniversary on Friday (2011-04-01)
- The traditional anniversary gift for the 2nd year is cotton - so please consider wearing something cotton on Friday to celebrate.



Where *Does* the Time Go?



- Two years is a long time, what do we have to show for it?
- A working DNS server!
 - Authoritative
 - Recursive



Really? That's all?



- Yes and no.
- Yes:
 - BIND 10 today offers only a few features not found in BIND 9
- No:
 - BIND 10 provides an architecture - and hopefully a way of working - that will allow us to meet our ambitious goals



A bit like early Mozilla



- BIND 10 is not intended to be a single piece of software delivered by a company and then managed as a product, but rather an entire ecosystem, with a community of developers and users, nurtured by an organization with the necessary background and approach..
- The seed has not yet taken root, but the software is just about ready for the next stage.
- In the next 6 to 12 months, early adopters will come on board, and if we do things right, an example of the best type of open source/Internet project will bloom...



What I Want from You



- If you are feeling curious (or brave), then download the latest tarball and give it a whirl.
<ftp://ftp.isc.org/isc/bind10/devel-20110322/>
- If you think you might be interested later, please sign up for the development list. We're going to be putting features in every release from here out, which will happen every 6 weeks or so.
<https://lists.isc.org/mailman/listinfo/bind10-announce>
- We build and test on Linux, OS X, Solaris, and BSD, so it should work on anything Unixy.
- Let us know how it went!
- Please don't use in production yet.



Bundy ->



- You may have noticed the colorful guy on these slides.
- We had a contest for BIND 10 where we accepted submissions.
- ISC and volunteers from the BIND 10 steering committee picked finalists.
- The community picked Bundy, by Stefan Kohlase, by a wide margin in a vote!

<http://bind10.isc.org/wiki/Mascot>



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Multi-Process Model



```
shane@madras:~$ ps ax|egrep 'b(ind)?10'|grep -v grep
 2324 pts/5      S1          0:00 b10-xfrout
25461 pts/5      S+         0:00 /opt/bind10/sbin/bind10
25464 pts/5      S          0:03 b10-msgq
25465 pts/5      S          0:01 b10-cfgmgr
25466 pts/5      S          0:04 b10-auth -p 53 -a 85.17.60
25468 pts/5      S          0:10 b10-xfrin
25469 pts/5      S1         0:02 b10-zonemgr
25470 pts/5      S          0:00 b10-stats
25472 pts/5      S1         0:00 b10-cmdctl
```



Why Multi-Process?



- Customization
 - Only run the code you need to run
 - Ability to add functionality
- Fault isolation
 - Errors do not affect all component
- Scaling
 - Locks and shared memory limit system scaling
 - We'll need to support 10's or 100's of cores



Moet ik meer dan een taal?



- BIND 10 is written in C++ and Python
 - C++ for the high performance components
 - Python wrapper for C++ libraries
 - Python for... the rest
- Want system administrators to be able to customize BIND 10 by writing simple scripts
- You will have problems we cannot imagine, and should be able to scratch your own itch



Next Steps



- Features
 - TSIG, ACL, IXFR, hooks/plugins, MySQL/PostgreSQL, DDNS, DNSSEC validation, views
- Hardening
 - We have comprehensive unit tests and builds
 - Need system tests
 - Inter-operation tests
 - Starting to eat our own dogfood



BIND 10 Needs Sponsors

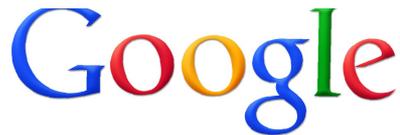


- ISC is a small, non-profit company
- New sponsors would be great
- We need money!
- Varied types of sponsors also needed

More information at
www.isc.org/bind10 or bind10.isc.org



Thank You to our Generous Sponsors



BIND 10



Questions?

