BIND 9
The Past, The Present and The Future

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BIND 9.0: The Past

- First released in 2000
- Other things from 2000:
  - gcc 2.95.2
  - Linux kernel 2.4.0
  - GNOME 1.2
  - Qt 2.0
  - Window 2000
  - First camera phone
  - Playstation 2 launched
  - New century started (only in pop-culture and US)
BIND 9
Past Releases
BIND 9.12: The Present

- NSEC Aggressive Use
- Serve Stale (TTL Stretching)
- Response Policy Interface
- Major Refactoring [1]
- Speedup factor: 1.25-6
- CDS/CDNSKEY tools
- EDDSA Support (when available in OpenSSL)

BIND 9: The Future

- Open Development
- Faster Release Cycle
- Reduce Supported Platforms
- New Features
- More Refactoring
Open Development

- Open (By Default) Issue Tracker
- Public Merge Requests
- Public Wiki
- Public Continuous Integration
- (Future) Public Web Forum to discuss BIND and DNS
ISC GitLab

- Work In Progress
- Self-hosted Instance
- https://gitlab.isc.org/isc-projects/bind9
Faster Release Cycle

- Odd Numbers — Development Release
  - 9.13.x, 9.15.x, 9.17.x
  - Releases as we go
  - Best Effort Support

- Even Numbers — Stable Release
  - When Development Release stabilise
  - Supported until next Stable Release = ~ 1 year

- Every Second Stable Release — Extended Support Version
  - Supported until next ESV Release with overlap = 4 years
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**BIND 9**

Future Releases
Supported platforms

- At every release cycle we evaluate the life-cycle:
  - Major Linux distributions
  - FreeBSD, OpenBSD, NetBSD
  - Selected proprietary operating systems (Mac OS X, Windows, Solaris)
- Create a list of operating systems and distributions still supported by vendors
- Support the list for the life-cycle of each major release (9.14, 9.16, 9.18)
- There will be several Tiers:
  - Supported Tier (We will patch it)
  - Best Effort Tier (Send us the patch)
  - Non-supported Tier (Don’t even bother sending a patch)
Modernise

• The new list of supported platforms will allow us:
  • Fully utilise modern C language standards
  • Depend on standard libraries (POSIX, etc…)
  • Use C11 language constructs (probably stick with the VC11++ subset)
  • Use external libraries when appropriate
  • Reduce the code we have to maintain in BIND9
Planned Features

• Local Root Zone Copy (RFC7706-like implementation)

• Modules & Hooks
  • Ability to load dynamic module and hook into query-response processing
  • Refactor non-core functionality into modules
Introducing BINDCoin!

- Every DNS Server as a Mining Node
- DNS Smart Contracts
- DNS Caches as permanent storage[1]
- ICO Resource Record
- Stocks will skyrocket!!!

1. https://blog.apnic.net/2016/04/04/dns-zombies/
Refactoring

“In anything at all, perfection is finally attained not when there is no longer anything to add, but when there is no longer anything to take away, when a body has been stripped down to its nakedness.”

– Antoine de Saint Exupéry
BIND’s not yet dead, baby,
BIND’s not yet dead!
Thank you!