



## **NSD 4 Plan**

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# Overview

- General characteristics of NSD
- Main features of NSD Versions
  - Version numbering 1.2.3
- NSD 4 plans
- Initial speed results

# NSD Characteristics

- Authoritative only
  - Geared towards root servers and TLDs
- Just enough Documentation
  - Users technical competent
- Simplicity
  - No creeping features
- Software independence
- Resilience against high loads

# NSD 1.0

- Just a server
  - Answers in pre-compiled database
  - Server Ignorant about the servings
- Spartan User Interface
  - No configuration
- Little to no XFR support
- RFC 103[345], 2181, 2308

# NSD 2.0

- DNSSEC ready
  - RFC 403[345]
  - Internal database structure changed
    - Less compilation possible, less ignorant
- NSD AXFR module
  - TSIG
- Configuration file

# NSD 3.0

- AXFR & IXFR (in) support
  - Notify
  - Use timers in SOA
- Full DNSSEC
  - NSEC3
- More DNS meta support
  - RFC 4635 (HMAC SHA TSIG)
  - DNAME



- Vaporware logo!
- Lots of zones (x00K)
- Zone Configuration templates
- Internal database change
  - Speed-up server
- More preprocessing
  - NSEC3 hashes stored



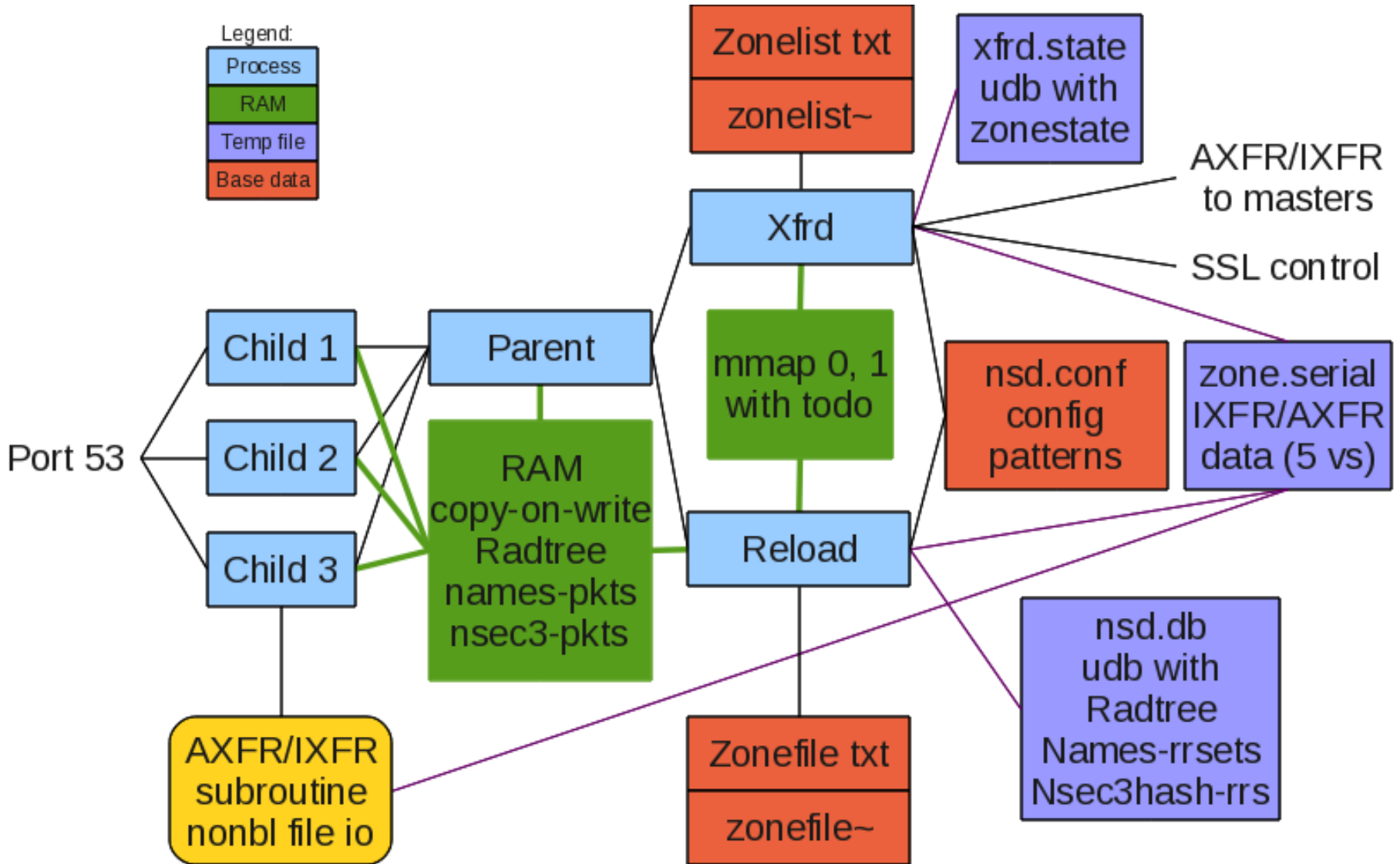
- Internal complexity grows
  - Complexity moves to compiler subsystem
- NSD control (via port [TBD])
  - hides complexity
- More dynamic behavior
  - Reconfiguration
  - Reloading zones





- Improved TCP support
- Added features should not hamper original target audience
- NSD 3.0 might need longer support
- Non vaporware: end 2011
- Wishes: speak to me

# Architecture Sketch

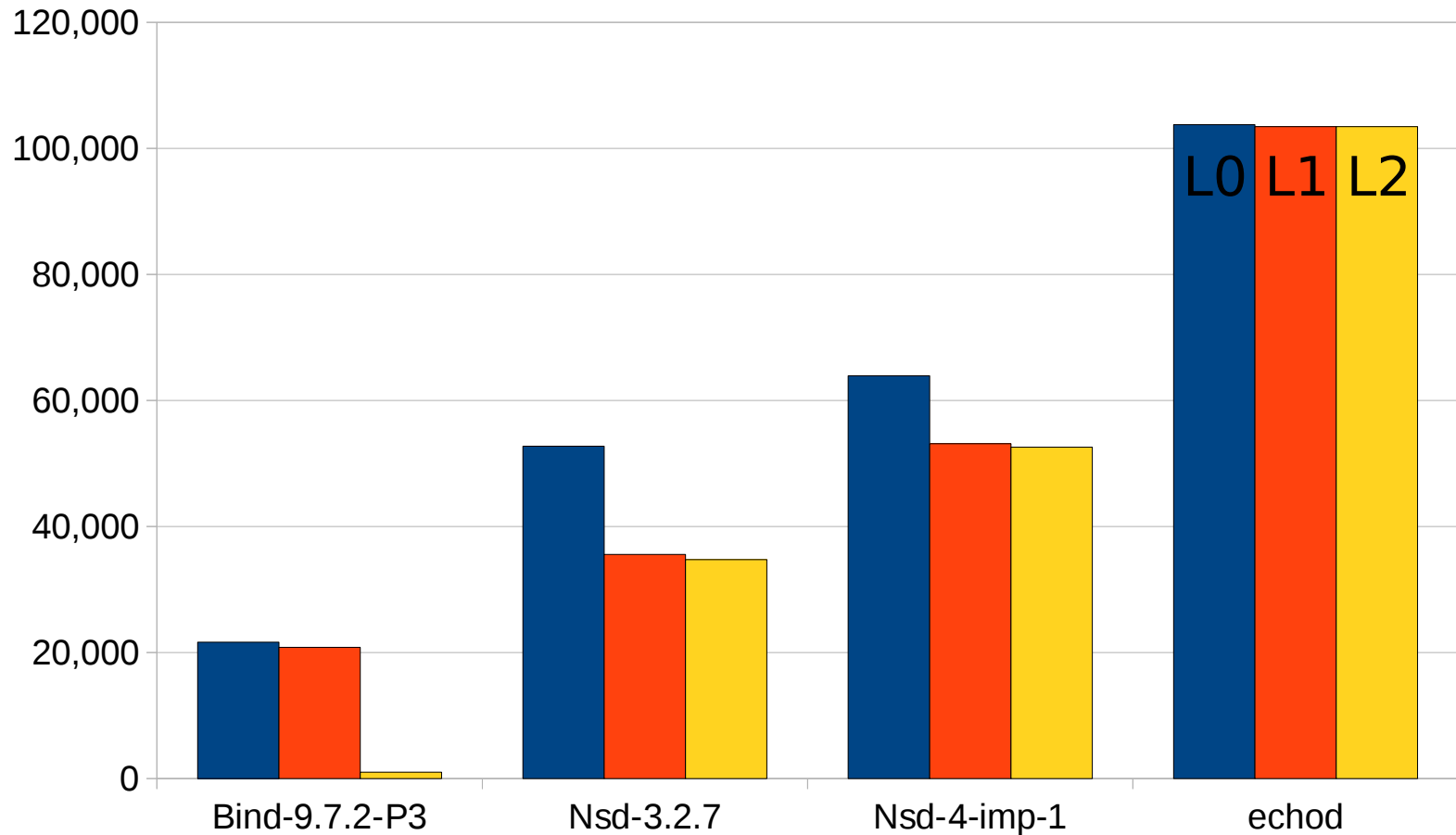


# Implementation Plan

- Milestones,
  - Result in working server
  - With test phase
    - Test of new functionality
    - Regression tests
    - Portability tests
- Test phase at end of project
- Beta Testers that use the new software

# Initial speed results

## 95% returns



# Question time

???

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