



YADIFA

A true name server alternative

ICANN 44 Prague – ccNSO TechDay – 25/06/2012

Peter Janssen
EURid vzw/asbl

Y:A:D:I:F:A



GOALS

- USE CASE 1 : ALTERNATIVE FOR BIND AND NSD ON PUBLIC TLD SLAVES
 - Clean implementation
 - High query rate and portable
 - RFC compliant
 - Authoritative
 - DNSSEC support
 - AXFR/IXFR (master and slave)
- USE CASE 2 : DYNAMIC UPDATED HIDDEN MASTER + DNSSEC
 - Dynamic updates (including continuous DNSSEC signing)
 - “Generic, extensible storage backend”
- USE CASE 3 : ZONE MANAGEMENT
 - Dynamic zone provisioning
- USE CASE 4 : RECURSIVE NAME SERVER
 - Recursion
 - Validation

RELEASE 1.0

- AUTHORITATIVE
- ZONE FILES
 - Include, *, /
 - SOA, A, AAAA, NS, CNAME, PTR, DNAME, HINFO, MX, TXT, DNSKEY, DS, RRSIG, NSEC, NSEC3, NSECPARAM, NAPTR, SRV, SSHFP
- ZONE TRANSFERS, MASTER, SLAVE, NOTIFY
- TSIG, ACLS
- NSUPDATE
- DNSSEC
 - RSASHA1 (5,7)
 - Online resigning



4

RELEASE 1.0

Packages

- CENTOS/DEBIAN/UBUNTU (32 & 64 BIT)
- FREEBSD (64 BIT)
- MAC OS X (64 BIT)

Source code

- BSD 3-CLAUSE LICENSE
- DOWNLOAD FROM [HTTP://YADIFA.EU/DOWNLOAD](http://YADIFA.EU/DOWNLOAD)

(NEAR) FUTURE WORK

Functionality

- DSA/SHA1, DSA-NSEC3-SHA1, RSASHA256, RSASHA512
- KEY ROLL OVER MECHANISM
- DYNAMIC PROVISIONING/CONFIGURATION

Conformance / Performance / General

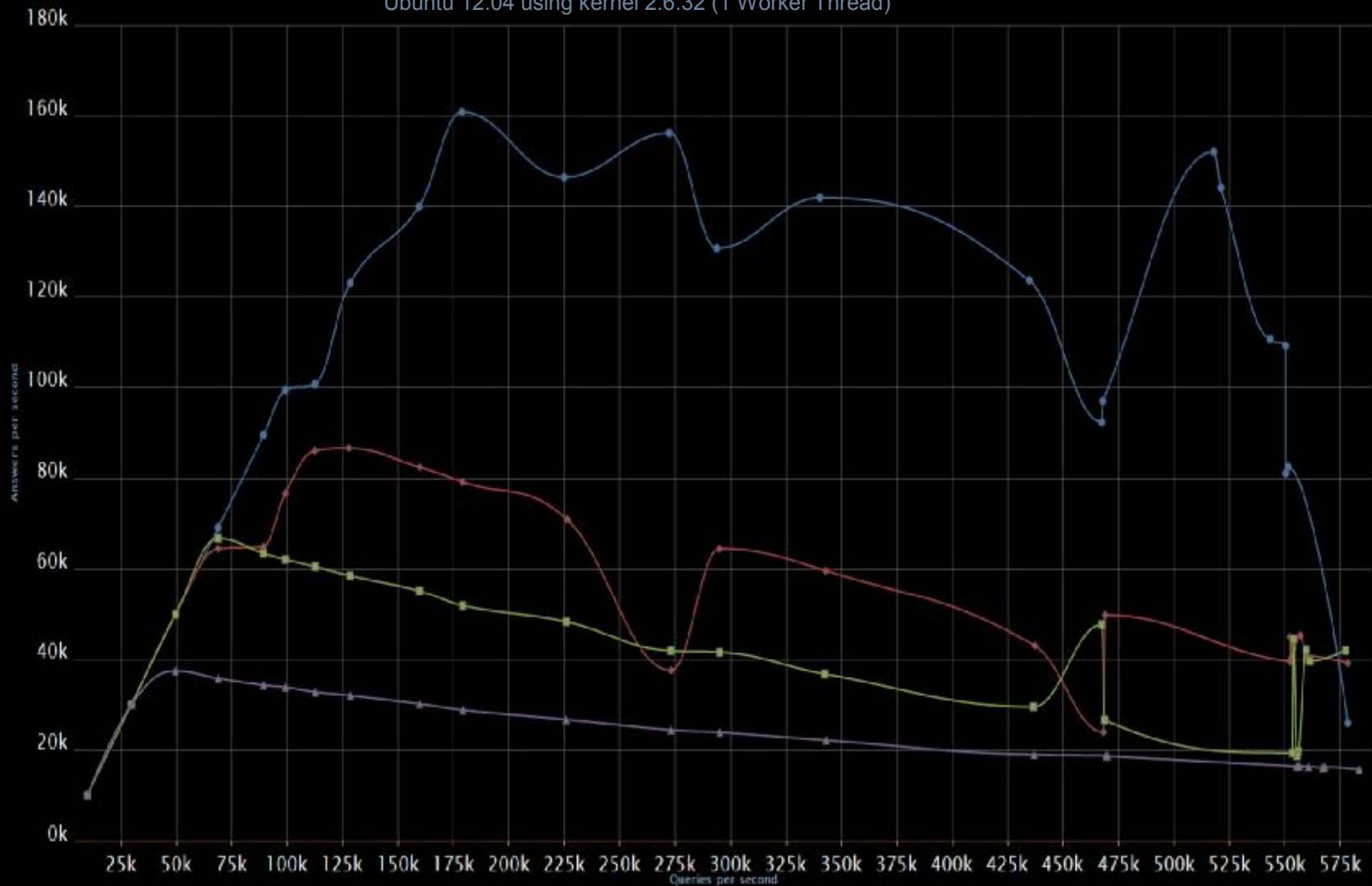
- WORKER THREADS (PERFORMANCE)
- STABILITY/BUGFIXES (CONFORMANCE)
- DOCUMENTATION
- PLATFORM SUPPORT (SOLARIS, OPENBSD)

6

PERFORMANCE BENCHMARK

Ubuntu 12.04 using kernel 2.6.32 (1 Worker Thread)

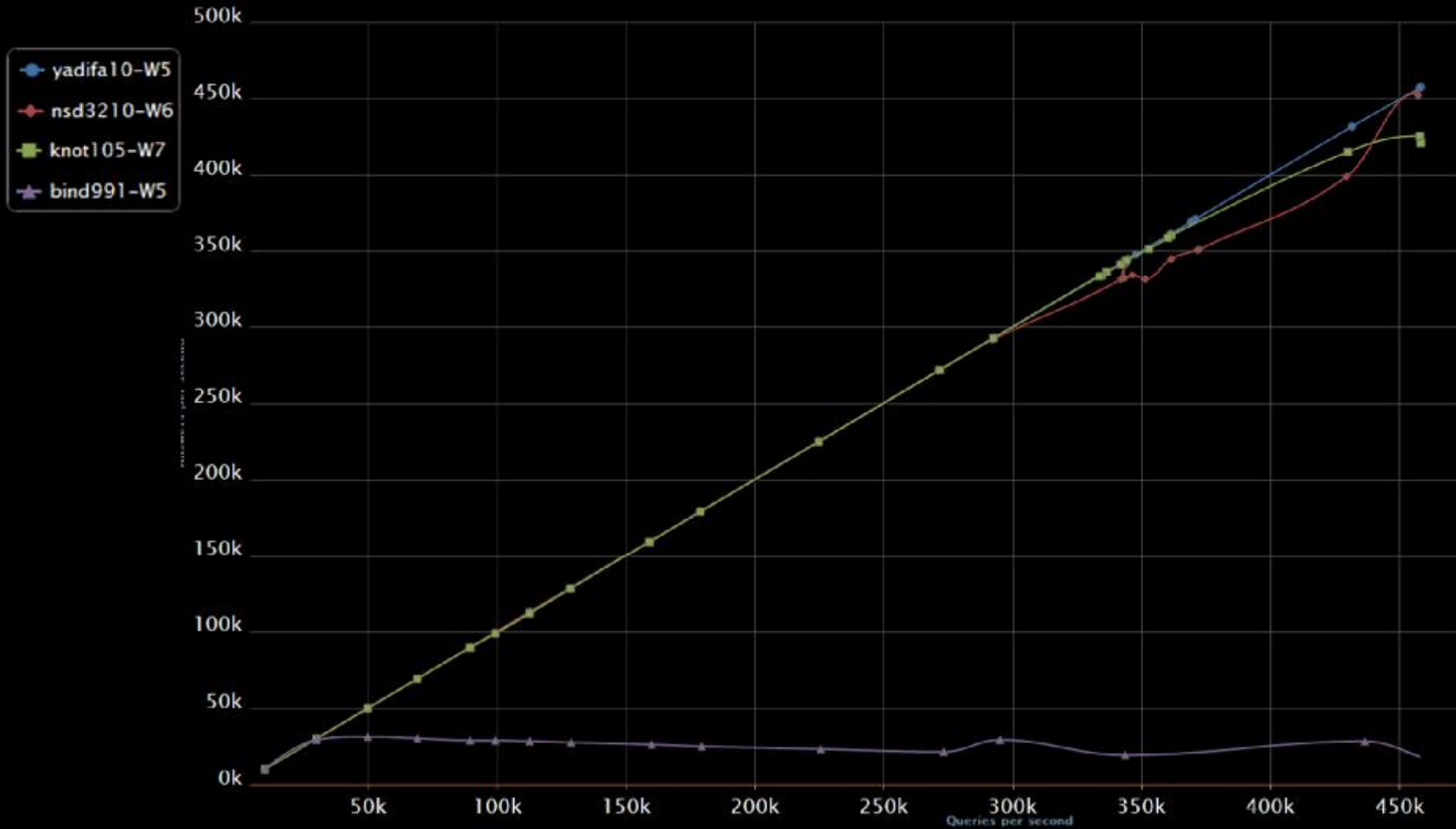
- yadifa10
- nsd3210
- knot105
- bind991





PERFORMANCE BENCHMARK

Ubuntu 12.04 using kernel 3.2 (Optimal Worker Threads)





WEBSITE

- [HTTP://YADIFA.EU](http://YADIFA.EU)

EMAIL

- INFO@YADIFA.EU

MAILINGLISTS

- YADIFA-ANNOUNCE
- YADIFA-USERS