OpenDNSSEC

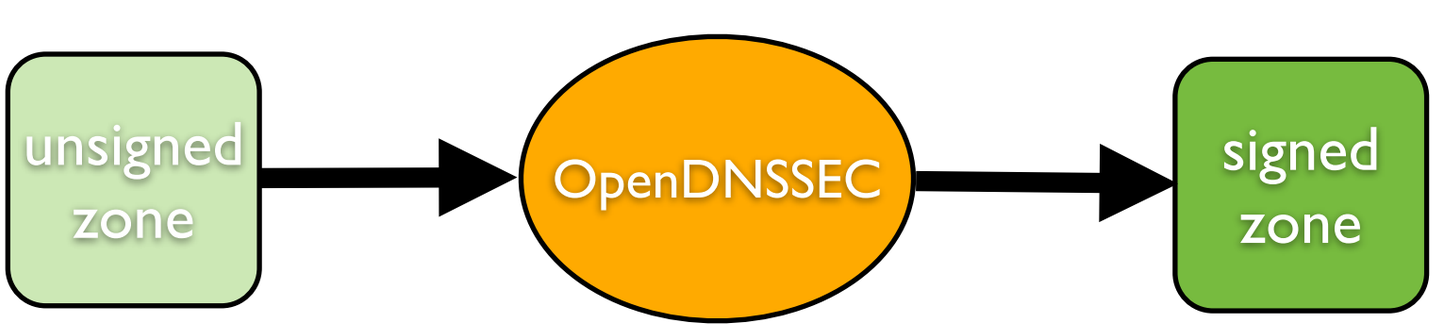
DNS Working Group @ RIPE 66

Sara Dickinson - sara@opendnssec.org

What is OpenDNSSEC?

OpenDNSSEC

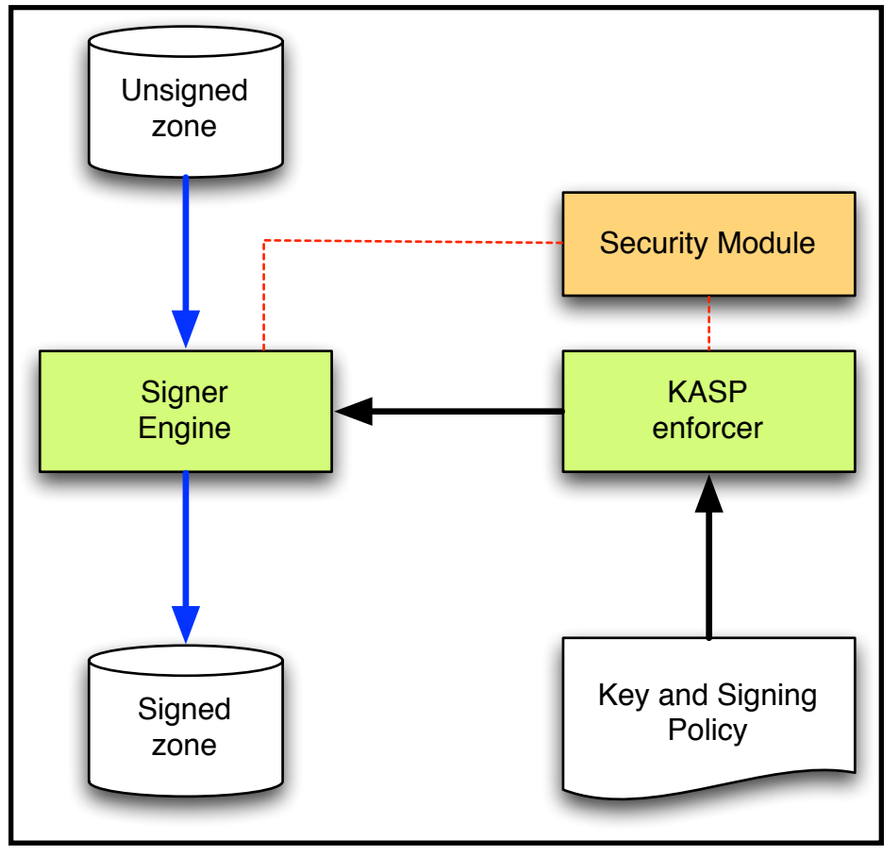
- Turn-key solution for DNSSEC
- Automates zone & key management



- RFC compliant
- Open Source Software – BSD License

Key Features

- Flexible: policy driven (KASP)
- Scalable
  - many zones, many records
  - key sharing between zones
- Secure: PKCS#11 support
- SoftHSM



Organisation

- Contributors
- Architecture Board
  - Joe Abley (ICANN)
  - Olaf Kolkman (NLNetLabs)
  - Jacques Latour (CIRA)
  - Sion Lloyd (Nominet)
  - Roland van Rijswijk (SURFnet)
  - Jakob Schlyter (Kirei)
  - Ondřej Surý (CZ.NIC)
  - Patrik Wallström (.SE) (corporate liaison)
- OpenDNSSEC
- Project Team
  - Design & Architecture
  - Software Development
  - System Testing
  - Support and Maintanance
- OpenDNSSEC AB (svb)
  - Non-profit company
  - Secure Funding for future development
  - Long term software support
  - Training classes
  - Consultancy

Current status

OpenDNSSEC releases

- Stable releases:
  - 1.3.14 (1.3 is a Long Term Support Release)
  - 1.4.0 (Standard Release - April 2013)

'Ubuntu' style support model

- Development release:
  - 2.0 ("enforcer-ng" - Alpha available)

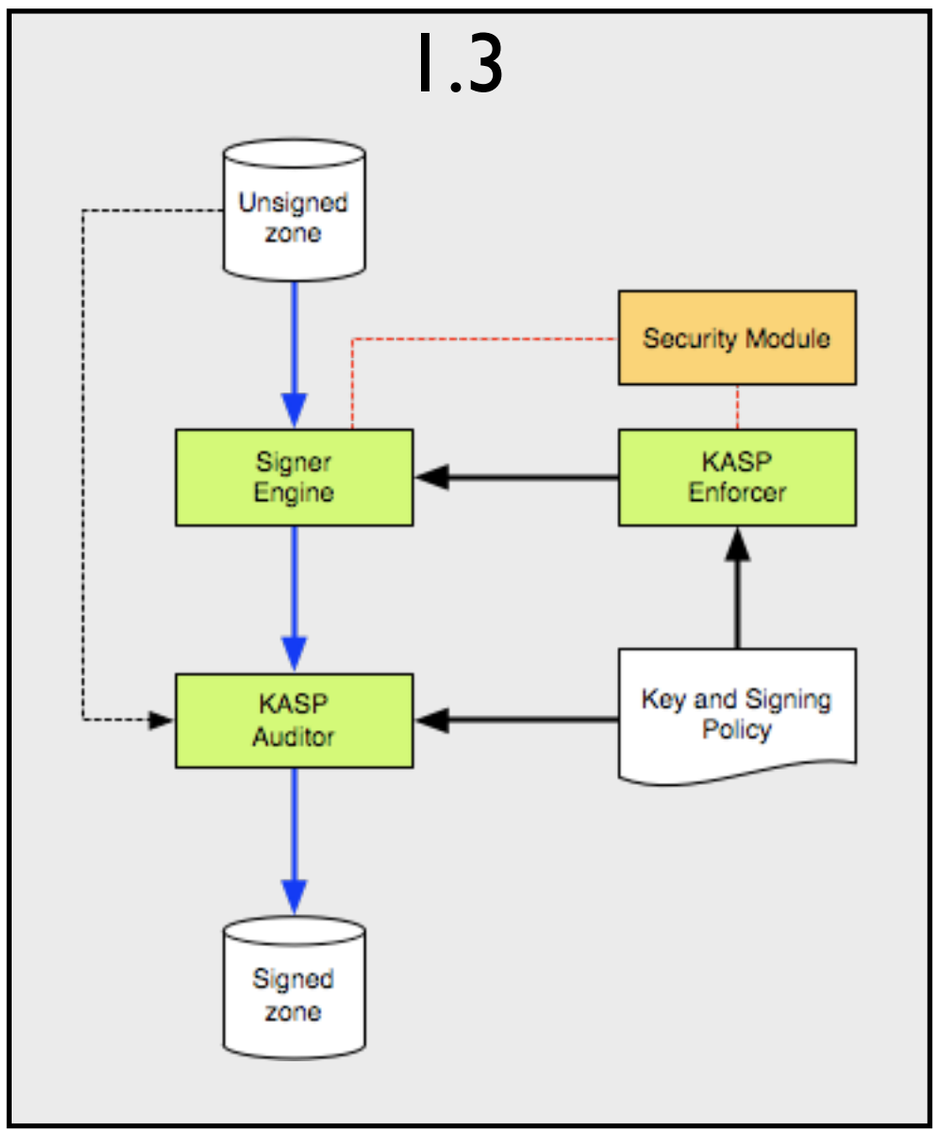
OpenDNSSEC 1.4

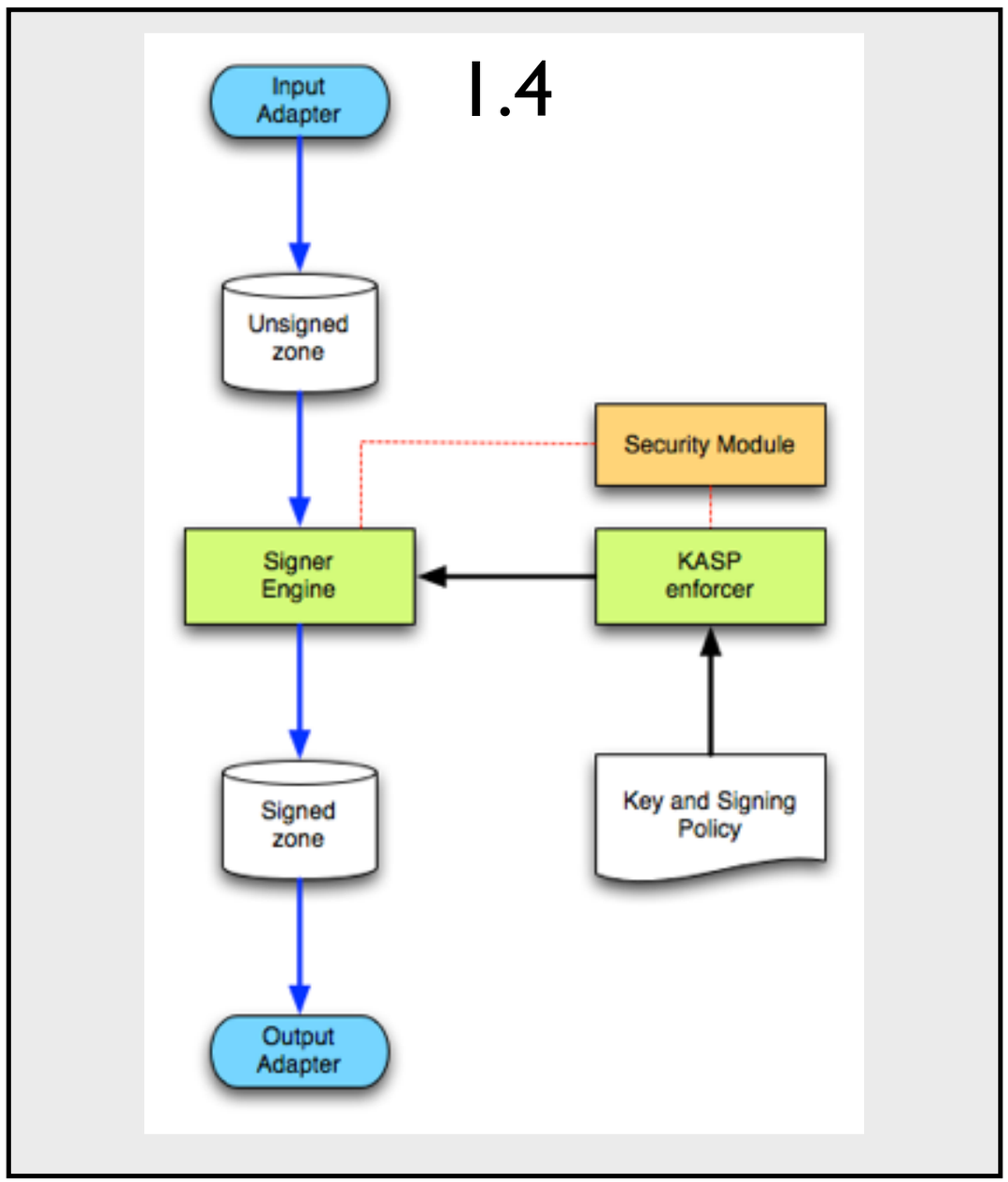
- Re-factor of signer: input & output adaptors
  - Zone file
  - AXFR/IXFR NEW!
    - [NOTE: changes to configuration files]

- No integrated auditor No ruby!
  - Use e.g. validns through credns to verify the zone after signing

OpenDNSSEC 1.4

Architecture





OpenDNSSEC 1.4

- PIN storage facility. No longer have to have HSM PIN in clear text in conf.xml
- Number of enhancements to 'ods-ksmutil'
  - more information in 'key list', 'rollover list', 'key generate'
  - CKA_ID can be included in DSSubmit
  - one step key backup deprecated
- Script to enable migration between SQLite and MySQL backend (recommend MySQL for production)

SoftHSM

- Stable release
  - 1.3.4 (LTS)

- Development release: 2.0
  - “Plug-able” crypto libraries (Botan & OpenSSL)
  - Improved security
  - Beta release planned in next month or two

Other news

- Versioning will reflect API changes rather than component changes
- Using jenkins for regression testing:
  - https://jenkins.opendnssec.org/
- Continuing to add to online documentation
  - https://wiki.opendnssec.org/display/DOCS
  - Quick guides & user contributions
  - Usability

Jenkins

search | log in

Jenkins ▸ ENABLE AUTO REFRESH

People

Build History

configure

1.3 | 1.3-mysql | 1.4 | 1.4-mysql | All | **dashboard** | enforcer-ng | sandboxes | softhsm2-trunk-botan | trunk | trunk-mysql

Build Queue

No builds in the queue.

Build Executor Status

#	Status
	master
1	Idle
2	Idle
	centos32-ods13
1	Idle
	debian64-ods01
1	Idle
	freebsd32-ods15
1	Idle
	freebsd64-ods06
1	Idle
	netbsd64-ods09
1	Idle
	openbsd64-ods10
1	Idle
	opensuse32-ods14
1	Idle
	opensuse64-ods05
1	Idle
	redhat64-ods08
1	Idle
	sl64-ods04
1	Idle
	solaris-ods07
1	Idle
	solaris-t2000-sparc64-ods16
1	Idle
	suse64-ods11
1	Idle

Jobs Grid

build-botan-softhsm2-trunk-botan	build-ldns-1.3	build-ldns-1.3-mysql
build-ldns-1.4	build-ldns-1.4-mysql	build-ldns-enforcer-ng
build-ldns-trunk	build-ldns-trunk-mysql	build-opendnssec-1.3
build-opendnssec-1.3-mysql	build-opendnssec-1.4	build-opendnssec-1.4-mysql
build-opendnssec-enforcer-ng	build-opendnssec-trunk	build-opendnssec-trunk-mysql
build-softhsm-1.3	build-softhsm-1.3-mysql	build-softhsm-1.4
build-softhsm-1.4-mysql	build-softhsm-enforcer-ng	build-softhsm-trunk
build-softhsm-trunk-mysql	build-softhsm2-trunk-botan	clean-1.3
clean-1.3-mysql	clean-1.4	clean-1.4-mysql
clean-enforcer-ng	clean-trunk	clean-trunk-mysql
test-daily-opendnssec-1.3	test-daily-opendnssec-1.3-mysql	test-daily-opendnssec-1.4
test-daily-opendnssec-1.4-mysql	test-daily-opendnssec-trunk	test-daily-opendnssec-trunk-mysql
test-opendnssec-1.3	test-opendnssec-1.3-mysql	test-opendnssec-1.4
test-opendnssec-1.4-mysql	test-opendnssec-enforcer-ng	test-opendnssec-sandbox
test-opendnssec-sandbox-1.3	test-opendnssec-trunk	test-opendnssec-trunk-mysql

Latest builds

Job	Build	Time
test-daily-opendnssec-1.4-mysql	#19	May 15, 2013 5:01:20 AM
test-daily-opendnssec-1.3	#115	May 15, 2013 5:01:20 AM
test-daily-opendnssec-1.3-mysql	#116	May 15, 2013 5:01:20 AM
test-daily-opendnssec-1.4	#19	May 15, 2013 5:01:20 AM
test-daily-opendnssec-trunk-mysql	#190	May 15, 2013 4:01:20 AM
test-daily-opendnssec-trunk	#204	May 15, 2013 4:01:20 AM
test-daily-opendnssec-1.3	#114	May 14, 2013 5:01:20 AM

OpenDNSSEC Project Wiki

Links

OpenDNSSEC Developer Wiki
OpenDNSSEC Documentation
SoftHSM Developer Wiki
SoftHSM Documentation

OpenDNSSEC Home

All Versions

OpenDNSSEC v1.4
OpenDNSSEC v1.3
OpenDNSSEC v1.2.0
OpenDNSSEC v1.1.1
OpenDNSSEC v1.1.0
OpenDNSSEC v1.0.0

Current location:

OpenDNSSEC Documentation 1.4

Search

- New in OpenDNSSEC 1.4
- Getting Started
- Overview of OpenDNSSEC
- Installation
- Configuration
- Running OpenDNSSEC
- Command Utilities
- Getting Help
- Reference Material

OpenDNSSEC Documentation Home

Tools

Added by Sara Dickinson, last edited by Sara Dickinson on 2013-04-22 (view change)

Welcome

About

The **OpenDNSSEC documentation** gives information on how to install, configure, and run OpenDNSSEC. There might still remain some questions, so we try to reflect them in our a growing list of frequently asked questions.

Remember that you also need an HSM, which uses the PKCS#11 interface. We do provide the SoftHSM, a software-only implementation of an HSM. Read the HSM Buyer's Guide for more information and consult the list of HSM vendors.

The latest version of OpenDNSSEC is 1.4

See what is new in 1.4 - note that due to changes in the database schema a migration is required when upgrading to 1.4 from earlier versions of OpenDNSSEC.

Scope

The goal of OpenDNSSEC is to have a complete DNSSEC zone signing system which maintains stability and security of signed domains. DNSSEC adds many cryptographic concerns to DNS; OpenDNSSEC automates those to allow current DNS administrators to adopt DNSSEC. This document provides DNS administrators with the necessary information to get the system up and running with a basic configuration.

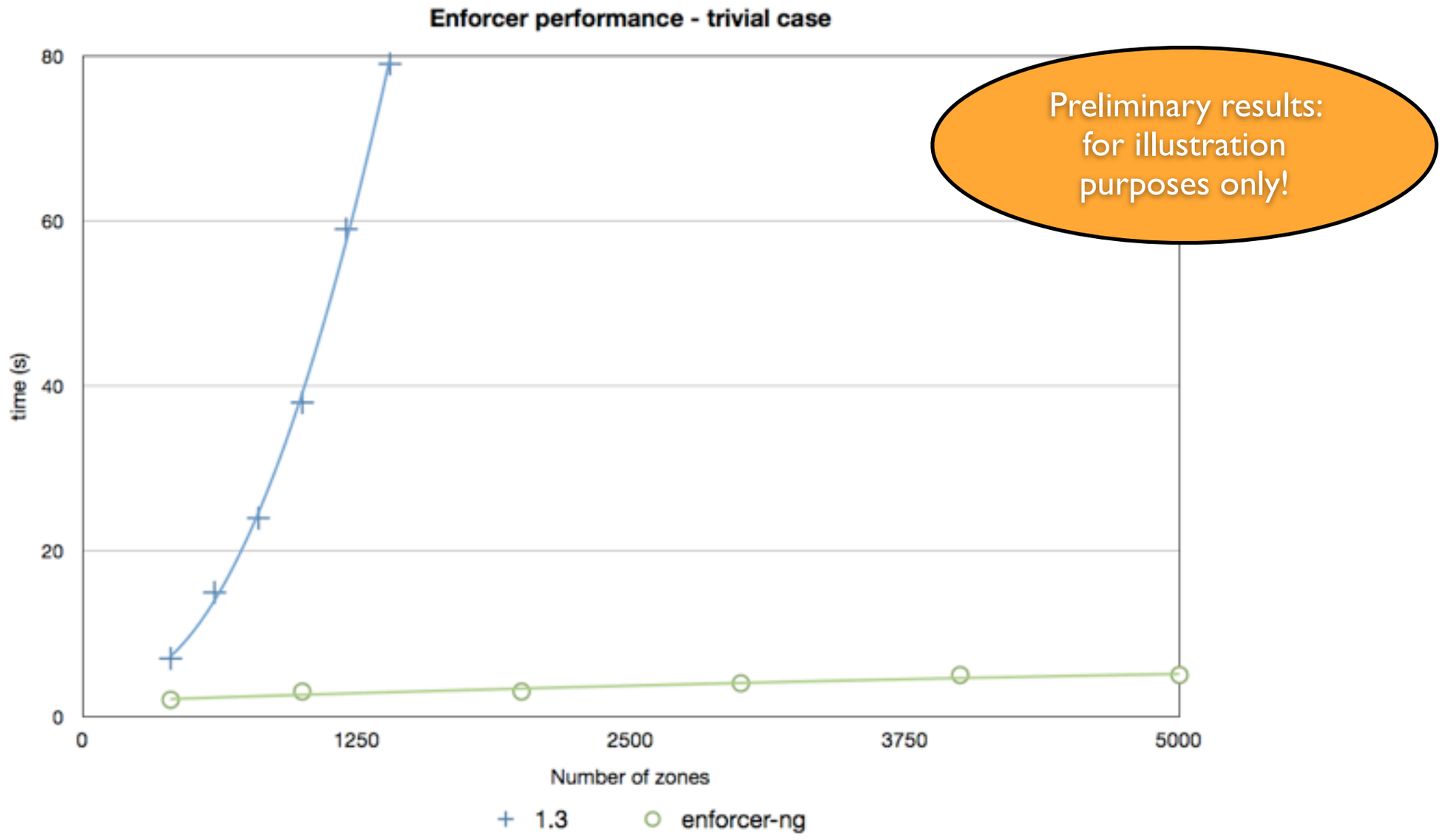
OpenDNSSEC Documentation

Roadmap

OpenDNSSEC 2.0

'enforcer-ng'

- Refactoring the 'enforcer': Performance



OpenDNSSEC 2.0

- Refactoring the ‘enforcer’: Functionality

  - Support for multiple key rollover mechanisms
  - Support for algorithm rollover
  - Support for CSK – Combined Signing Key
  - Support for unsigned zones

Beyond 2.0...

- More adapters:
  - Dynamic updates
  - Database input/output
- Common API for system integration
- Offline keys…

OpenDNSSEC

- Find us:
  - Web: www.opendnssec.org
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  - Twitter: https://twitter.com/opendnssec
  - In the bar (Bellini's): 6pm tonight

Meet the OpenDNSSEC team!

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