

What we've been up to in the last two months

ccNSO, ICANN San Juan Meetings, June 2007

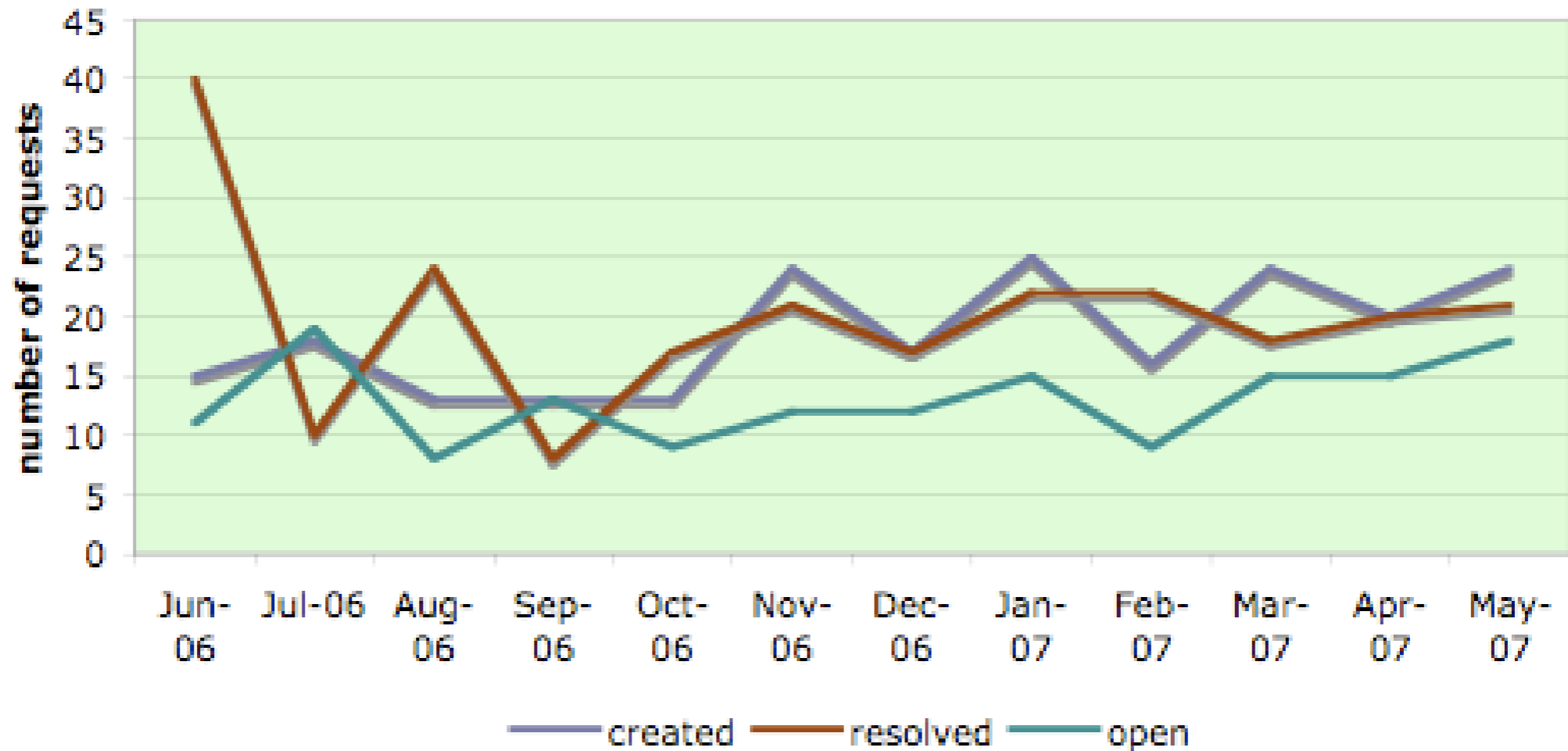
Kim Davies

Internet Assigned Numbers Authority



Working 9 to 5.. 6.. 7..

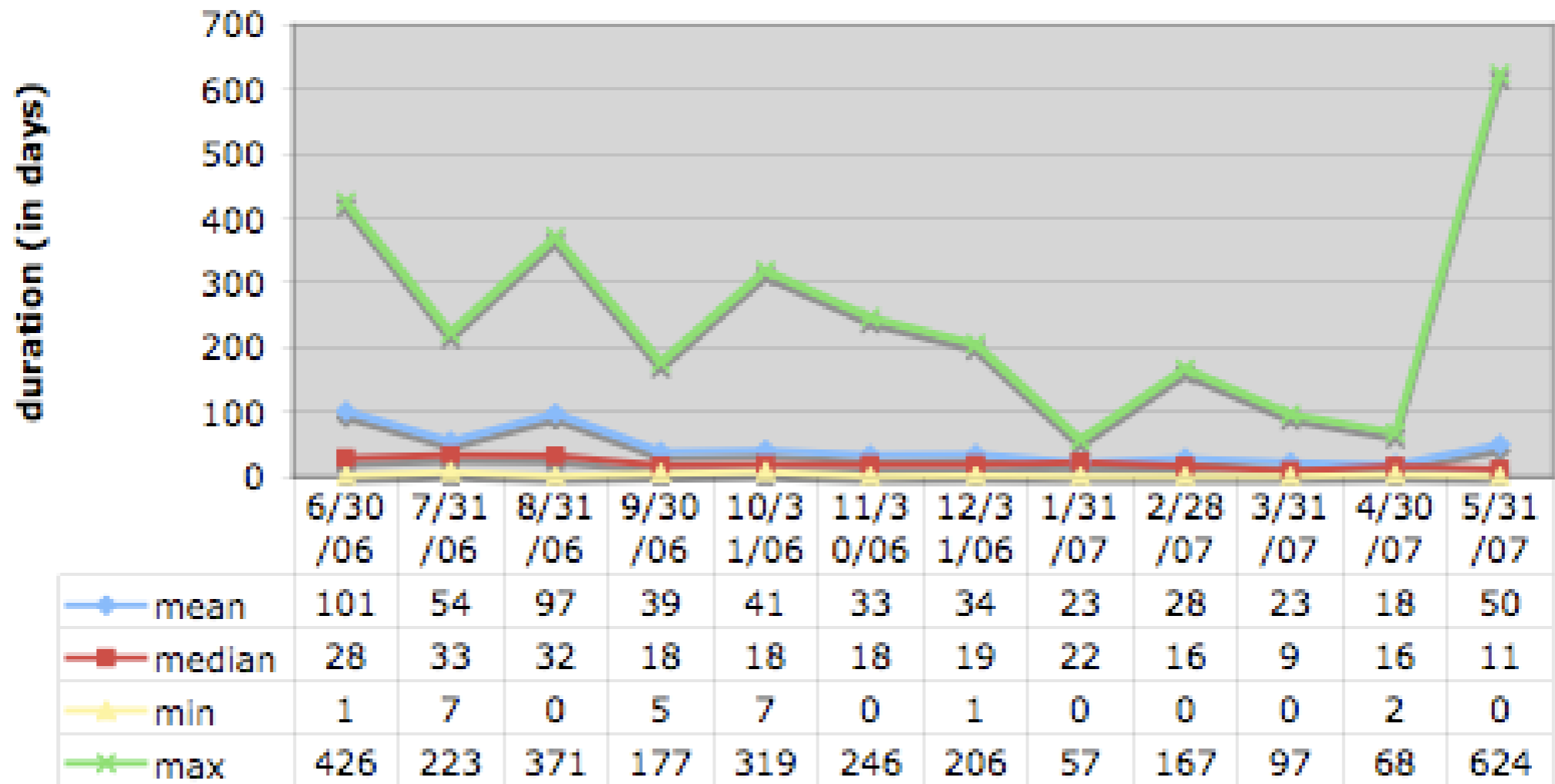
Root Zone Change Requests queue size June 2006-May 2007



Request load.

- ▶ Slowly rising
- ▶ Opens (blue) and closures (red) roughly meet = steady state

Root Zone Change Requests processing times



Processing Times.

- ▶ One ticket skews our beautiful trend

<h1>Writing <abbr>HTML</abbr></h1>



Internet Assigned Numbers Authority

The Internet Assigned Numbers Authority (IANA) is responsible for the global coordination of the DNS Root, IP addressing, and other Internet protocol resources. [Learn more about what we do »](#)

Domain Names

IANA manages the DNS Root Zone (assignments of ccTLDs and gTLDs), as well as the .int registry, and the .arpa zone.

- [Root Zone Management](#)
- [.int Registry](#)
- [.arpa Registry](#)
- [IDN Practices Repository](#)

Number Resources

IANA coordinates the global IP and AS number space, and allocates these to Regional Internet Registries.

- [IP Addresses & AS Numbers](#)
- [Think we're attacking you?](#)

Protocol Assignments

IANA is the central repository for protocol assignments registries, used in many Internet protocols.

- [Protocol Registries](#)
- [Apply for an assignment](#)

A new website.

Root Zone Database

The Root Zone Database represents the delegation details of top-level domains, including gTLDs such as ".COM", and country-code TLDs such as ".UK". As the manager of the DNS root zone, IANA is responsible for coordinating these delegations in accordance with its [policies and procedures](#).

Much of this data is also available via the WHOIS protocol at whois.iana.org.

Domain	Type	Purpose / Sponsoring Organisation
.AC	country-code	Ascension Island Network Information Center (AC Domain Registry) c/o Cable and Wireless (Ascension Island)
.AD	country-code	Andorra STA Servei de Telecomunicacions d'Andorra
.AE	country-code	United Arab Emirates Emirates Telecommunications Corporation
.AERO	sponsored	Reserved for members of the air-transport industry Societe Internationale de Telecommunications Aeronautique S.C. (SITA SC)

Reorganised Root Zone Database

Some other notable things.

- ▶ List of major IANA projects.
- ▶ Clearer arrangement of ccTLD procedures and materials.
- ▶ All presentations we've given in last 18 months.
- ▶ IDN Repository improved.
- ▶ Information about what IANA is.
- ▶ A good foundation to grow the website into the future.

Available now.

beta.iana.org



**Working out how the
Internet is going to break.**

IDNs in the root

- ▶ Plan to insert evaluative IDNs in the root as precursor to production launch
- ▶ What if the Internet breaks?
- ▶ Emergency revocation procedure for evaluative IDNs.
 - ▶ Threshold based or manual
 - ▶ Pull test delegations quickly, perform a post mortem
- ▶ Been open for public comment.
- ▶ Procedure before the Board on Friday for approval



Phone calls at weird
times of the night.

Root Zone Automation

- ▶ We're ready to start public testing!
- ▶ Simon Raveh, our chief developer, is here to talk to you about it.
 - ▶ We will arrange some demonstrations to small groups over the next few days.

Where we are

- ▶ “Alpha” code complete
 - ▶ Does all tasks except name server changes (technical checking functionality still being finalised)
 - ▶ End-user interface is maturing
- ▶ Over next few months moving toward functional completeness
 - ▶ Will ask testers to run requests in parallel with system and our existing process
 - ▶ Will seek approvals for deployment

Request detail

Reference	Domain	Lodged	Created By	Current Status	Last Change
1111	int	25 Jun, 2007	kim-ac1	Pending manual Review	25 Jun, 2007

Modify Administrative Contact - Internet Assigned Numbers Authority

1. Add a Contact Job Title with value jobTitle
2. Update Contact Address from 4676 Admiralty WaySuite 330Marina del Rey CaliforniaUnited States
 to 4676 Admiralty Way Suite 330 Marina del Rey California, 90292
3. Add a Contact Country with value US
4. Update Contact Role from false to true

Confirmations

Confirmations received

- Technical Contact - Internet Assigned Numbers Authority
- Administrative Contact - Internet Assigned Numbers Authority

Request History

State	Start	End	Approve By
Pending Contact Confirmation	25 Jun, 2007	25 Jun, 2007	AC/TC

Status View

- ▶ Provides new exposure to status of requests without needing to ask IANA

Review a Domain

[Back to Overview >](#)**int** (Top Level Domain)

Sponsoring Organisation

This represents the delegated authority responsible for operations of the domain.

Sponsoring Organization**Address Routing and Parameters Area (ARPA) DomainInternet Assigned Numbers Authority**
Address Routing and Parameters Area (ARPA) DomainInternet Assigned Numbers Authority
4676 Admiralty WaySuite 330Marina del Rey CaliforniaUnited States

simon.raveh@icann.org

[Edit Record >](#)

27 Sep, 2006

Contacts

Contacts authorised to speak for the operator of the domain. A technical and administrative contact must confirm any changes to details associated with this domain.

Administrative
(this is you)**Internet Assigned Numbers Authority**
Internet Assigned Numbers Authority
4676 Admiralty WaySuite 330Marina del Rey CaliforniaUnited Statessimon.raveh@icann.org
+1 310 823-9358(v)
+1 310 823-8649(f)[Edit Record >](#)

31 Dec, 1984

Technical**Internet Assigned Numbers Authority**
Internet Assigned Numbers Authority
4676 Admiralty WaySuite 330Marina del Rey CaliforniaUnited Statessimon.raveh@icann.org
+1 310 823-9358(v)
+1 310 823-8649(f)[Edit Record >](#)

31 Dec, 1984

Workflow Automation

- ▶ Lodge and view details online through responsive interface

Demonstrations

- ▶ We will be giving demos and explanations to smaller groups (based on demand)
 - ▶ Today at 1pm in Conference Room 8&9

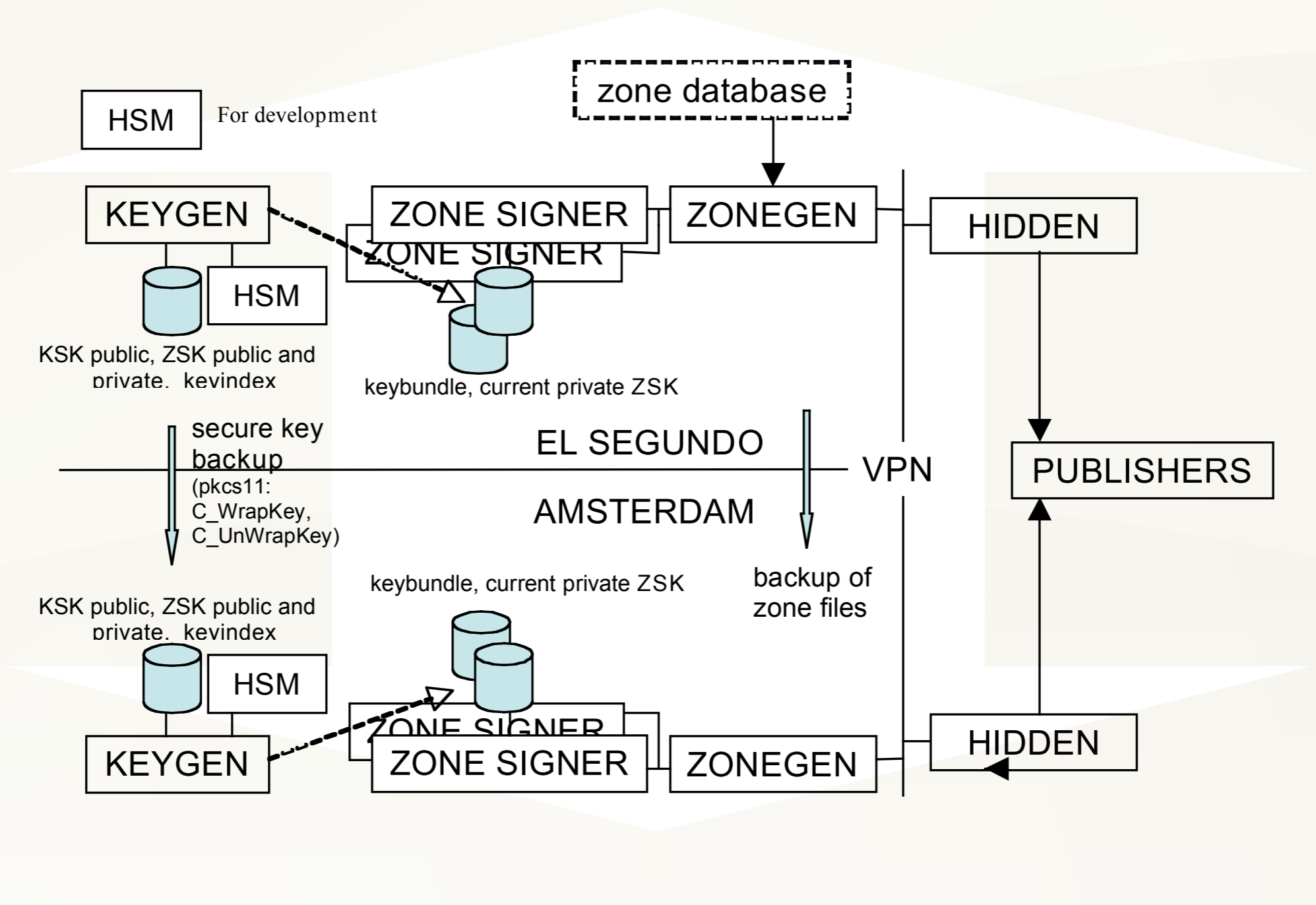
Testing

- ▶ Accepting expressions of interest from testers.
 - ▶ Please provide me with your business card

**Generating more keys
than a locksmith.**

Is IANA going to do DNSSEC?

WE ALREADY DO!*



DNSSEC.

DNSSEC work at IANA

- ▶ Richard Lamb on staff this year working full time on systems development
- ▶ Internally signing IANA managed zones since March
- ▶ Software production ready for .ARPA by Chicago IETF (July)
- ▶ Deployment of signed .ARPA depends on implementation confirmed with various parties
 - ▶ Including shifting .ARPA zone to IANA (currently with VRSN)
 - ▶ Does .ARPA still stay with the root servers?

Some DNSSEC design decisions

- ▶ Model is based primarily on Swedish experience
 - ▶ Keys generated offline
 - ▶ Currently using smartcards for KSK; moving to HSMs
- ▶ We will share our procedures and experience publicly
 - ▶ Including custom code we have developed
- ▶ DNSSEC mechanisms will be in a dedicated cage in our colocation facilities

... but what about the root?

- ▶ IANA will wait for policy folks to tell us what to do.
- ▶ Until then, building our internal skill-set and systems with the other zones we control.



(DEMO) DNSSEC STATUS

Note: This data, including the signed zones, are purely for test purposes and are not to be used in any production capacity. We do not guarantee their availability, and they may not otherwise function from time-to-time.

ZONE (serial)	STATE / LAST UPDATED	VALIDITY PERIODS (keyid)	EFFECTIVITY PERIODS (keyid)	TRUST ANCHORS
root (2007062601)	Ok 2007-JUN-26 18:27:32	2007-JUN-26 2007-JUL-15 (45622 KSK)	2006-JAN-01 2007-DEC-31 (45622 KSK)	-----BEGIN PGP SIGNED MESSAGE----- Hash: SHA1 \$ORIGIN . @ 86400 IN DNSKEY 257 3 5 (AwEAAbqxqzQRnvkvj4refIMWXfFBfbvAlH5 xThDkIs0a36kayqz2LbJ0KgAs8EjgXxAg3W akfvsmw0ZA8KdBbgHow2lQ1Yk2mtdARYqh6 LuomiX2mOY2qOw2G/BVXnkOHfmGb9m+OOPn o2VSprkXb52KkE8U74WlHRv3eeLnsy/mtiw jln70YDr9Ltk0pxgJW5cM3I+wy2LUY0jNxm uGvsiI4qpBSOtI4wmIkKxgH/BBYFwUGSTGA sKh9EtVVYInxmckF9qCb3VVqUG6nJnLu3lq wlKMS6WogNGHqNQqTtNnnC/Zx3VhB29cDDR XAckAn9jTbH1+Lr6FIwWE7c=) ; key id = 45622 86400 IN DNSKEY 257 3 5 (AwEAAadmz/QYil3nLbhgeclfbjdYNYe8f7d QnL6Yj3VWVlfiUk2d/3yAk2J7zchOu7o0Iv hsQZYj/gK/rZpTNPxu8sn7oWsaKvmQ/iXa2 /X7p0SopU2JBL8cCVoLD90x3Mh/+I8XOHnp npgAOiY2HVX/qxcbJ6qsP+cS/gS2jwvTODW QSK0zBRgdTnlG8kitKPqqboynB3KE03FTsI -----END PGP SIGNED MESSAGE-----
		2007-JUN-26 2007-JUL-15 (48076 KSK)	2007-JAN-01 2008-DEC-31 (48076 KSK)	
		2007-JUN-26 2007-JUL-02 (59571 ZSK)	2007-JUN-01 2007-JUL-15 (59571 ZSK)	

Test zones

- ▶ <https://ns.iana.org/dnssec/status.html>



Speaking in tongues.

IDN Repository Updates

- ▶ Improvements to the IDN Repository on the new website <http://beta.iana.org/domains/idn-tables/>
- ▶ First script registration last month (.CL — Latin)
- ▶ We would like to invite you to submit your IDN tables
 - ▶ Just information sharing.
 - ▶ Language or script based.

**Standing in front
of the firing squads.**

Service Level Targets

- ▶ Spoke with APTLD and CENTR about IANA service level agreements
- ▶ Discussed current process, and current service level obligations
- ▶ Noted problems we face (particularly third party reliance)
- ▶ Service Level Targets to be set by the community?
 - ▶ Consensual review?
- ▶ Happy to speak with other communities

Thank you for your attention!
(fire away)

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