

Update on .GOV

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DNSSEC Workshop, ICANN 45, 17 October 2012



Background

- .GOV used by U.S. federal, state and local governments
- Verisign operates .GOV registry on behalf of the U.S. General Services Agency (GSA) since early 2011
 - FIPS 199 High
- DNSSEC an important feature of .GOV
 - Signed since early 2009
 - Move to Verisign was first transfer of signed TLD
 - Office of Management and Budget (OMB) mandate for DNSSEC
 - Applies to federal agencies only
- Verisign will offer cloud signing service
 - For .GOV registrants
 - Included with registration fee

OMB Mandate – M0823

Mandate:

Apply DNSSEC to 2nd level .gov names by Dec. 2009

- <http://www.whitehouse.gov/sites/default/files/omb/memoranda/fy2008/m08-23.pdf>
- Approximately 70% compliance

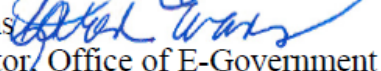


EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

August 22, 2008

M-08-23

MEMORANDUM FOR CHIEF INFORMATION OFFICERS

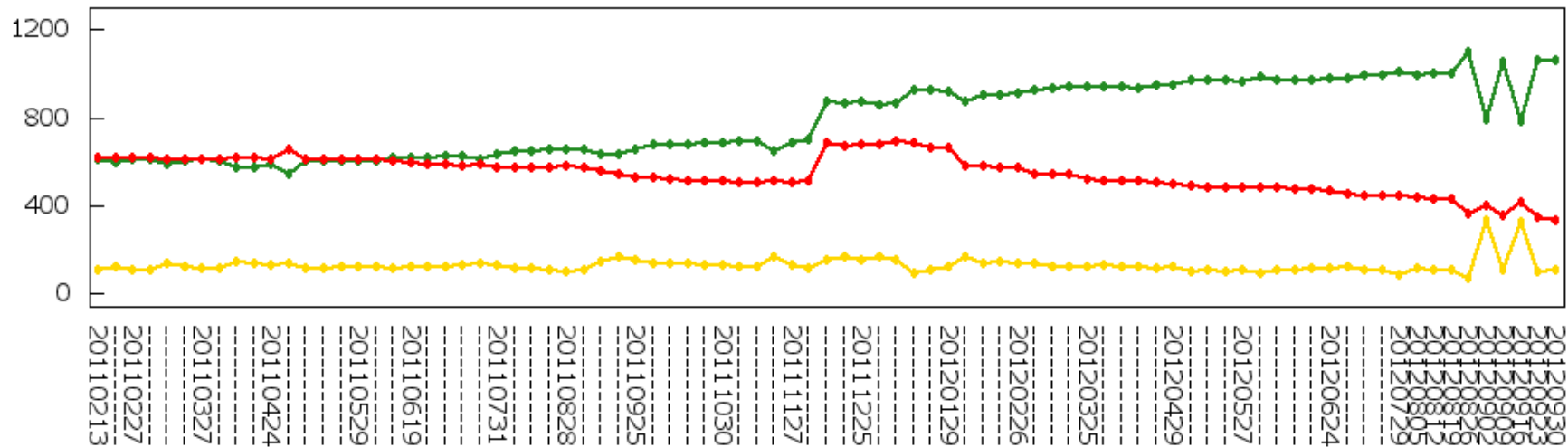
FROM: Karen Evans 
Administrator, Office of E-Government and Information Technology

SUBJECT: Securing the Federal Government's Domain Name System Infrastructure
(Submission of Draft Agency Plans Due by September 5, 2008)

The efficient and effective use of our networks is important to promote a more citizen centered and results oriented government. The Government's reliance on the Internet to disseminate and provide access to information has increased significantly over the years, as have the risks associated with potential unauthorized use, compromise, and loss of the .gov domain space.

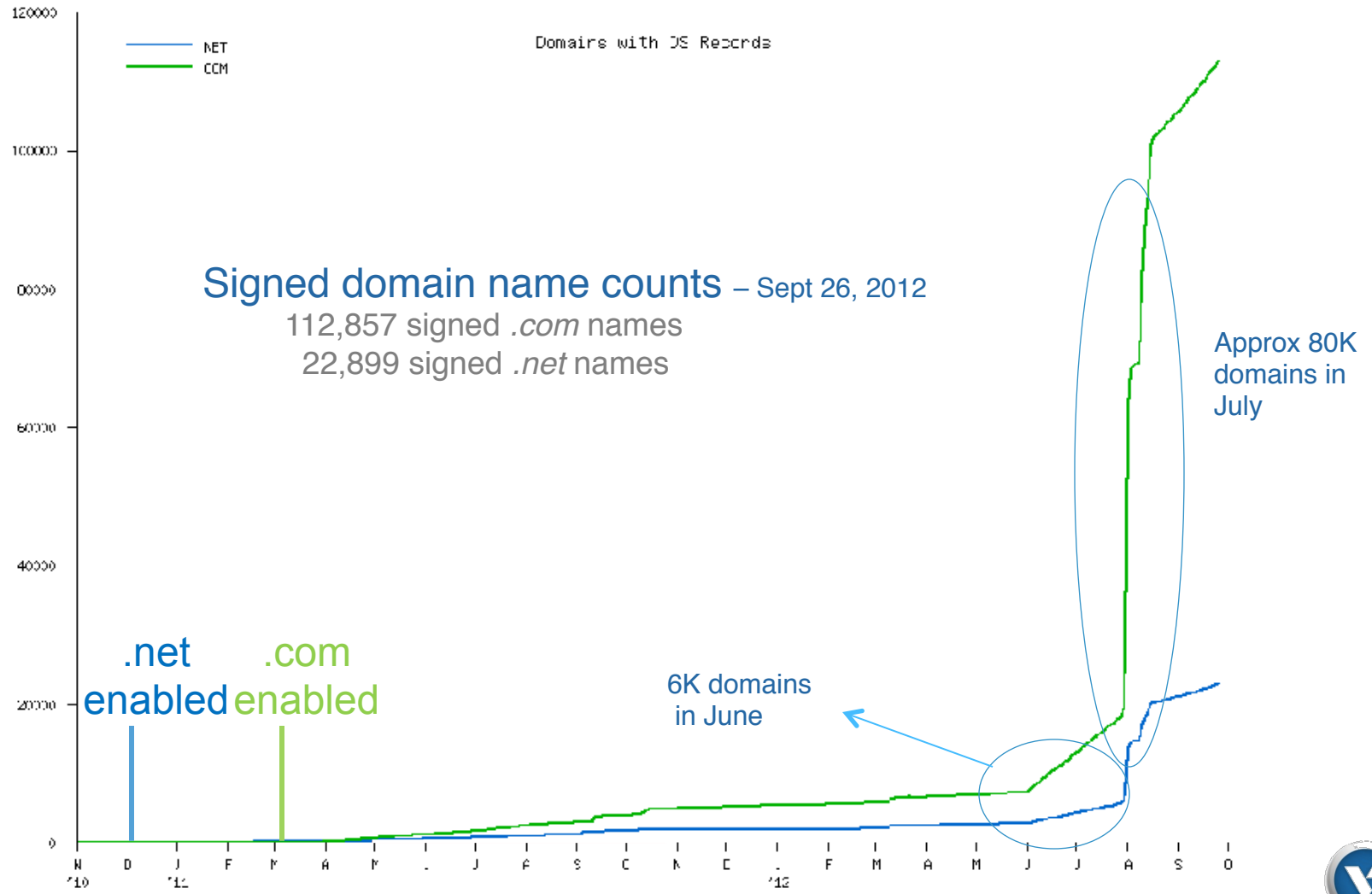
Signed USG Domains

USG DNSSEC Enabled Domains Over Time



Reference: <http://usgv6-deploymon.antd.nist.gov/cgi-bin/generate-gov>

DNSSEC Adoption in .com and .net



Source: <http://scoreboard.verisignlabs.com/count-trace.png>
Source: <http://scoreboard.verisignlabs.com/>



DNSSEC Analyzer Tool



Domain Name:

Detail: [more\(+\)](#) / [less\(-\)](#)

Analyzing DNSSEC problems for [omb.gov](#)

.	<ul style="list-style-type: none"> ✓ Found 2 DNSKEY records for . ✓ DS=19036/SHA1 verifies DNSKEY=19036/SEP ✓ Found 1 RRSIGs over DNSKEY RRset ✓ RRSIG=19036 and DNSKEY=19036/SEP verifies the DNSKEY RRset
gov	<ul style="list-style-type: none"> ✓ Found 2 DS records for gov in the . zone ✓ Found 1 RRSIGs over DS RRset ✓ RRSIG=39283 and DNSKEY=39283 verifies the DS RRset ✓ Found 4 DNSKEY records for gov ✓ DS=53138/SHA1 verifies DNSKEY=53138/SEP ✓ Found 1 RRSIGs over DNSKEY RRset ✓ RRSIG=53138 and DNSKEY=53138/SEP verifies the DNSKEY RRset
omb.gov	<ul style="list-style-type: none"> ✓ Found 2 DS records for omb.gov in the gov zone ✓ Found 1 RRSIGs over DS RRset ✓ RRSIG=31336 and DNSKEY=31336 verifies the DS RRset ✓ Found 3 DNSKEY records for omb.gov ✓ DS=48357/SHA1 verifies DNSKEY=48357/SEP ✓ Found 1 RRSIGs over DNSKEY RRset ✓ RRSIG=48357 and DNSKEY=48357/SEP verifies the DNSKEY RRset ✓ omb.gov A RR has value 61.213.189.17 ✓ omb.gov A RR has value 61.213.189.35 ✓ Found 1 RRSIGs over A RRset ✓ RRSIG=44222 and DNSKEY=44222 verifies the A RRset

Tool Available at:
<http://dnssec-debugger.verisignlabs.com>

Also a Mobile version:
<http://itunes.apple.com/us/app/dnssec-analyzer/id410032288?mt=8>



Questions?



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