

CONTRACTOR'S QUARTERLY PROGRESS, STATUS AND MANAGEMENT REPORT
1 January 2012 - 31 March 2012

DOMAIN NAME SYSTEM SECURITY (DNSSEC)
DEPLOYMENT COORDINATION

Contract No: FA 8750-10-C-0020

Data Item A001, CLIN 0002

Submitted by:

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April 2012

Progress Against Planned Objectives (3.1.1)

- Finished planning and preparations for FOSE 2012 Conference and Exposition April 3-5, 2012
- Steve Crocker continued work as Chairman of an FCC Working Group on DNSSEC Deployment
 - The final report on phase 1 was submitted March 22, and was accepted. Work on phase 2 will begin in Q2
- Continued work on new Roadmap
- Updated maps on the deployment of DNSSEC in ccTLDs, completed first phase of update of database and map generation system.

Technical Accomplishments This Period (3.1.2)

1. Wrote a Python binding to Sparta's validation library libval so that libval methods are accessible from a Python program. Delivered the Python bindings, a test library, and a demo app to DNSSEC Initiative partner Sparta. Tested these on Linux (Ubuntu) and Windows x86 and x64 (using the libraries developed in 2.) (attached)
2. Created Windows x86 and x64 versions of Sparta's validation library (libval.dll and libsres.dll) using Microsoft Visual C development environment. This required making changes to the source code. Delivered the source, the build environments and the built libraries to DNSSEC Initiative partner Sparta. (attached)
3. Wrote vsResolver, a Python DNSSEC Validating Stub Resolver, and made the source code available at <https://sourceforge.net/projects/vsresolver/>.
4. Wrote patches to the Python Twisted framework (www.twistedmatrix.com) to implement EDNS0, DO, and OPT, RRSIG, DS, DNSKEY, NSEC, NSEC3 and NSEC3Param records and behavior. These are in review by Twisted.

Improvements to Prototypes This Period (3.1.3)

None this period

Deliverables This Period (3.1.5)

(See Technical accomplishments, above)

Publications This Period (3.1.7)

None this period

Meetings and Presentations This Period (3.1.8)

- Steve Crocker chaired meetings of the FCC Working Group on DNSSEC Deployment, meetings were held February 2, February 5, February 10, February 17, February 21, March 2, and March 5. Steve Crocker and Jeffrey Dewhurst attended a meeting at the FCC on March 22th.
- DNSSEC Deployment Coordination Meetings were held at Shinkuro's offices on January 3, January 31, and February 28.
- FOSE Planning call were held every Thursday in January and February and the first two Thursdays in March
- Steve Crocker attended the ICANN Meeting in San Jose, Costa Rica, March 11 -16. There was an extensive DNSSEC session with several presentations on DNSSEC on March 14. Briefings are at the ICANN site.
- Steve Crocker and Olafur Gudmundsson attended the IETF Meeting in Paris, France March 25 - 30.

Issues or Concerns (3.1.9)

None at this time.

Planned Activities (3.2.1), Information Covering the Next Three Months

- Coordination meetings are scheduled for April 9, May 1, and June 5 at Shinkuro.
- ICANN Meeting in Prague, Czech Republic, June 24 – 29 with DNSSEC session on June 27.
- Final Roadmap delivered

Attachments (4)

- ValidateWrapper.zip
- Test ValidateWrapper distro.zip
- Valw.zip
- Include.zip