

CONTRACTOR'S QUARTERLY PROGRESS, STATUS AND MANAGEMENT REPORT
1 July - 30 September 2010

DOMAIN NAME SYSTEM SECURITY (DNSSEC)
DEPLOYMENT COORDINATION

Contract No: FA 8750-10-C-0020

Data Item A001, CLIN 0002

Submitted by:

Shinkuro, Inc.
Bethesda, MD

Stephen D. Crocker
Principal Investigator

Jeffrey Dewhurst
Financial and Contract Administration

October 2010

Progress Against Planned Objectives (3.1.1)

- Roadmap continued to evolve as a combination of the web site content and some static documents. Still being evaluated by the coordination team in consultation with the Program Manager.
- Shinkuro developing a dynamic map of TLD adoption to use in presentations and as a feature of the website.
- Shinkuro is preparing a package on the technical and policy issues of the process required to transfer a signed zone from one registrar to another, without loss of service.
- Key rollover testbed work complete and a brief report is being prepared on its results
- Shinkuro has been working with .org to measure the uptake of DNSSEC across the resolvers.
- A paper on algorithm rollover co-authored by Steve Crocker is being cleared through the IETF process for distribution.

Technical Accomplishments This Period (3.1.2)

- Developed a database scheme for recording the status of ccTLD DNSSEC deployment.
- Begun development of software to analyze DNS queries at TLD authoritative servers to measure the uptake of DNSSEC validation.
- Concluded testing of transfer of registration and DNS operation for domains under .org.
- Initiated regular monitoring of the .gov domain to measure uptake of DNSSEC. The monitoring was interrupted because of a hardware failure, but is working again. A user interface still needs to be built.

Improvements to Prototypes This Period (3.1.3)

None this period

Deliverables This Period (3.1.5)

- Initial Protocols for TLD Adoption.
- Initial best practice proposals for registrar transfer, name server changes, and unanticipated effects of caching.
- TAR Guidelines (Note: TAR concept has been overtaken by events. The timely signing of the root has made this largely moot).

Publications This Period (3.1.7)

None this period

Meetings and Presentations This Period (3.1.8)

- DNSSEC Deployment Coordination Meetings were held at Shinkuro's offices on July 6th, August 3rd, and September 7th.

- Shinkuro largely coordinated the content of a two day meeting in Rome, Italy held June 30th and July 1st to work with European TLD and ccTLD policy makers on deployment of DNSSEC. The meeting was attended by Steve Crocker and Olafur Gudmundsson of Shinkuro.
- Shinkuro assisted in the preparation and presentation of a DNSSEC workshop at the IETF meeting in Maastricht, Netherlands, July 26 – 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 October 8th, and November 23rd, at Shinkuro.
- The next IETF meeting will take place in Beijing, PRC, and a DNSSEC workshop is scheduled. Steve Crocker and Olafur Gudmundsson of Shinkuro will attend.
- The next ICANN Meeting will take place in Cartagena, Columbia and a DNSSEC workshop is scheduled. Steve Crocker, Olafur Gudmundsson, and Andrew Sullivan of Shinkuro will attend