

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

April 2010

Progress Against Planned Objectives (3.1.1)

- Progress was made on modeling the response size for queries to the root.
- Important work was done on the potential DNSSEC implications of the “Variant Work” issue. With Internationalized Domain Names, there is the problem that linguistic communities sometimes use two different ways to represent "the same word". An example of this is the Traditional Chinese way of spelling "China", and the Simplified Chinese way of spelling "China". When these "words" are used as DNS labels, people want them to "work the same". For the DNS, this turns out to be very complicated, because in the DNS they're just different labels. The differences, and the efforts to make them work "the same", have implications for the deployment of DNSSEC. Shinkuro's goal is to make sure that no technology is adopted such that the "variants" of one another are implemented by making DNSSEC impossible to deploy.
- 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.
- A key rollover testbed is up and running and is continuing to collect data
- Shinkuro has been working with .org to measure the uptake of DNSSEC across the resolvers.

Technical Accomplishments This Period (3.1.2)

Completed basic model for “ripple free transfer” of a signed zone from one operator to another. This model will be tested and documented in the next period.

Improvements to Prototypes This Period (3.1.3)

None this period

Deliverables This Period (3.1.5)

None this period

Publications This Period (3.1.7)

All of the Presentations for the DNSSEC Session at the 2010 FOSE Conference and Trade Show have been posted on the DNSSEC Deployment website <https://www.dnssec-deployment.org/index.php/learning-center/dnssec-at-fose-2010/>.

Meetings and Presentations This Period (3.1.8)

DNSSEC Deployment Coordination Meetings were held at Shinkuro's offices on January 10th, and March 10. The March 10 meeting was preceded by a principals meeting to discuss the future of the DNSSEC Roadmap. Also, Shinkuro planned, organized, and executed an all-day DNSSEC session, and a DNSSEC vendor pavilion at the 2010 FOSE Conference and Trade Show, held at the Washington DC Convention Center. The Session, which was very well attended, featured

speakers from the government and the private sector, as well as a vendor panel discussion. The theme was "What's Next in DNSSEC: Securing the Domain Name System."

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 22, May 27, and June 24 at Shinkuro.
- The next ICANN meeting will take place in Brussels, and a DNSSEC workshop is scheduled.
- A DNSSEC Deployment team will go to Italy on June 30 to have a two day training session with the operators of .it and other European ccTLD operators.