Technical Quarterly Report – Nov 2018 - Dec 2018

BASIC PROGRAMMATIC DATA

Performer: CAIDA, UCSD
Project: cooperative agreement FA8750-19-2-0004
    Mapping Domain DNS DDoS Vulnerabilities to Improve Protection and Prevention
Period of Performance (base): November 1, 2018 – October 31, 2022
Total Award Value: $250,000

PROJECT PROGRESS

Progress Against Planned Objectives:

UCSD reviewed background research on DNS vulnerabilities in preparation for the Report Deliverable.
UCSD helped create a poster for the DHS Showcase meeting (now postponed).
UCSD held a conference call with Twente collaborators and established a schedule for calls going forward.

Technical Accomplishments this Period:
We created a project web site to track progress and deliverables: http://www.caida.org/funding/usnl-maddvipr/

Improvements to Prototypes this Period: none

Significant Changes to Technical Approach to Date: none

Deliverables: none

Technology Transition and Transfer this Period: none

Publications this Period: none

Meetings and Presentations this Period: none

Issues or Concerns: none

PROJECT PLANS

Planned Activities for Year I:
- UCSD will provide feedback to the Ph. D. student (U. Twente) on his background research on DNS vulnerabilities, and on characterizing existing single points of failure in current DNS setups

Specific Objectives for Next Period:
UCSD will assist Twente with performing a systematic analysis of vulnerabilities in the current DNS using comprehensive active DNS measurement data from the OpenINTEL project that covers 60% of the global DNS name space, and provide feedback to the student working on the project.