Technical Quarterly Report –Jan 2021 - Mar 2021

BASIC PROGRAMMATIC DATA

Performer: University of Twente
Project: 628.001.031(NWO)
Mapping Domain DNS DDoS Vulnerabilities to Improve Protection and Prevention
Period of Performance (base): December 1, 2018 – November 30, 2022

PROJECT PROGRESS

Progress Against Planned Objectives:
Paper "Characterization of Anycast Adoption in the DNS Authoritative Infrastructure" submitted at TMA2021.
Monthly conference calls between UT and CAIDA are taking place to discuss the project progress.

Technical Accomplishments this Period:

1. We performed a new anycast census using Manycast2.
2. We published the data in open access on: https://github.com/ut-dacs/Anycast-Census
3. We use the data of anycast census to characterize the adoption of anycast in DNS Authoritative infrastructure.
4. Deliverable: Describe actionable information to be provided as output

Improvements to Prototypes this Period: none
Significant Changes to Technical Approach to Date: none
Deliverables: **Describe actionable information to be provided as output**
Technology Transition and Transfer this Period: none
Publications this Period:

- **Characterization of Anycast Adoption in the DNS Authoritative Infrastructure (TMA2021) - Submitted**

Meetings and Presentations this Period: none
Issues or Concerns: none

PROJECT PLANS

Planned Activities for Year 3:

- Using the data provided by OpenINTEL and combining it with other sources UT will identify the impact of DDoS attacks against DNS.
- UT and CAIDA will design and implement MADDVIPR Framework.

Specific Objectives for Next Period:
UT and CAIDA will work on designing the MADDVIPR Framework.
UT and CAIDA will work on studying the DNS Orphan Traffic