OWASP
Open Web Application Security Project

The OWASP Amass Project

DNS Enumeration written in Go

September 6, 2018

Presented by Jeff Foley

Introduction

- Jeff Foley (a.k.a caffix), Project Lead for OWASP Amass
- US Manager, Penetration Testing & Red Teaming at National Grid

- https://github.com/caffix
- https://twitter.com/jeff_foley

What is Amass?

- DNS enumeration and network mapping to aid in understanding an organization's attack surface on the Internet
- The project provides a suite of tools that employ active and passive techniques:
  - Traditional subdomain enumerator
  - Maltego local transform
  - TLS certificate subdomain name grabber
  - More coming soon

- Amass also supports the visualization of findings to better understand the networks being investigated.

Getting Amass

- On Linux, Amass is easy to get with Snapcraft:

  $ sudo snap install amass

- Use docker:

  $ sudo docker build −t amass https://github.com/OWASP/Amass.git

  $ sudo docker run amass −v −ip −freq 480 −d owasp.org

- Use Go to install Amass:

  $ go get −u github.com/OWASP/Amass/…

Collaboration / Current Goals

- Keeping up with new data sources and possibly add services that require API keys
- Add support for additional package managers
- Continue turning Amass functionalities into smaller suite tools.

Lessons Learned

- One of largest Amass contributions is the “Alt & Sweep” technique
  - Alterations & permutations of names (AltDNS)
  - Reverse DNS sweeps around discovered IP addresses
  - In a cyclic relationship, additional network infrastructure is revealed

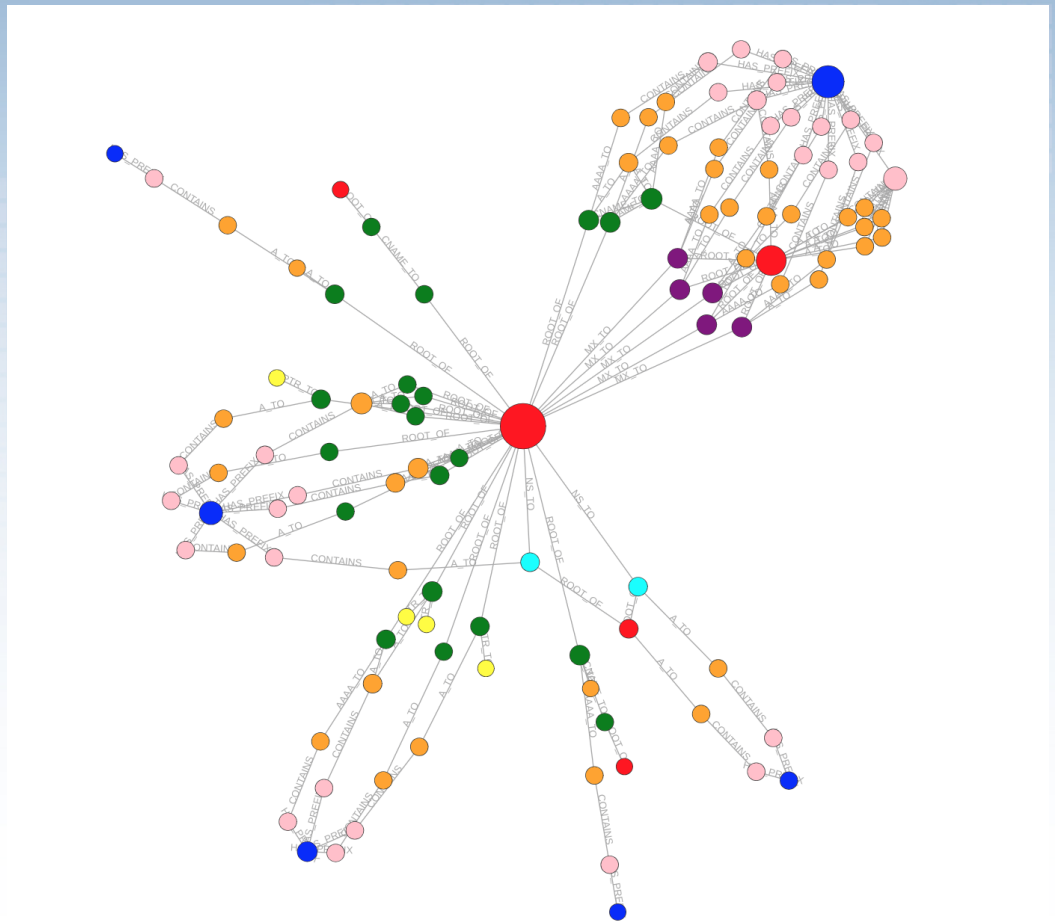
- During the life of the project, many data sources have increased the number of names provided.

Demonstration

- The owasp.org enumeration: https://asciinema.org/a/P2kuxzy164LgCfc8uL2YtCMoM

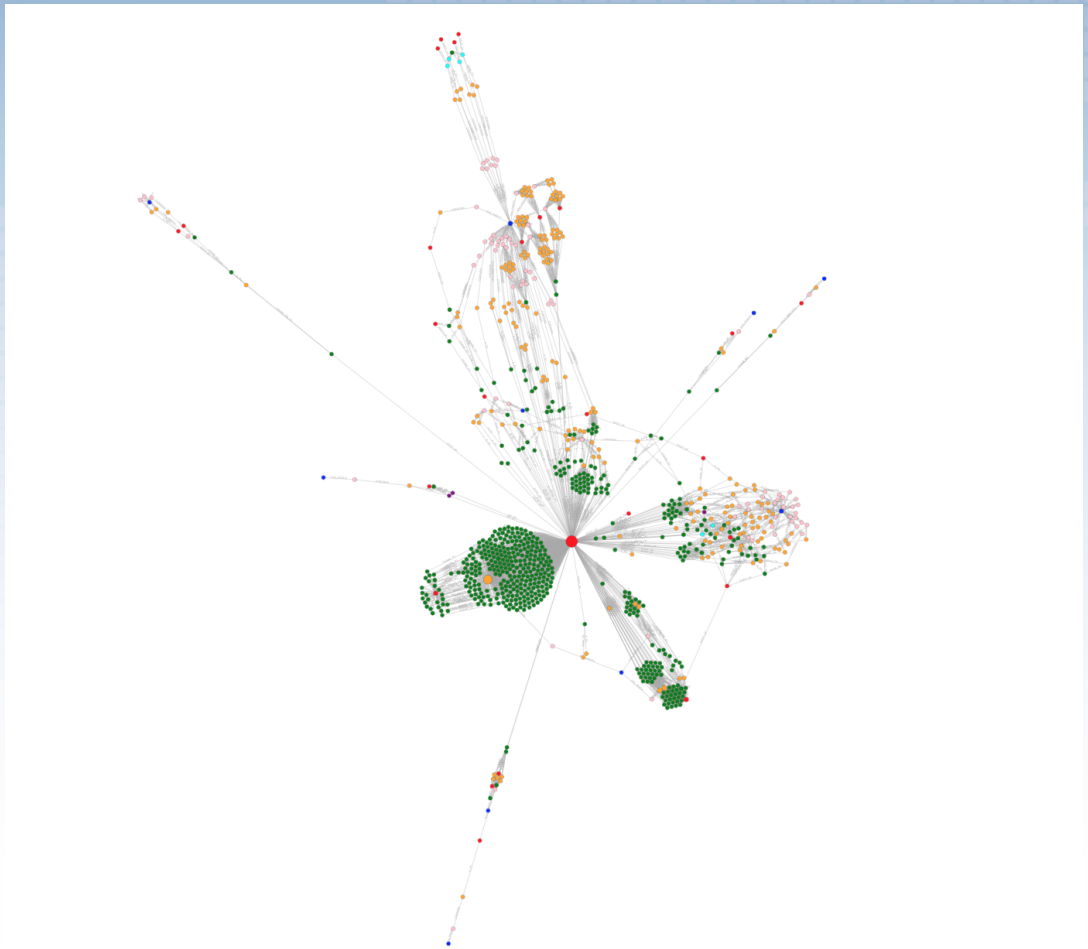
- The fb.com enumeration: https://asciinema.org/a/v6B1qdMRILRUflpkwRPhvCTaY

Demonstration Cont.



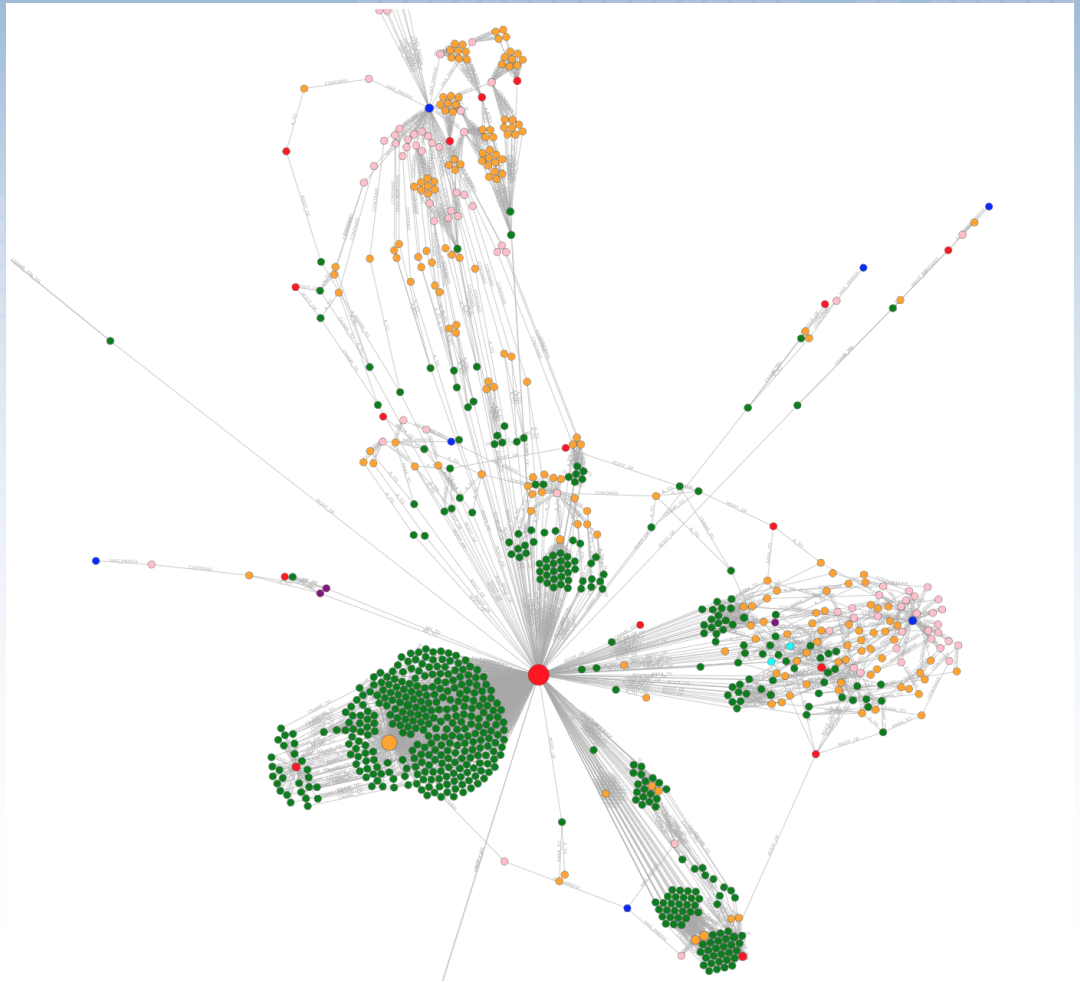
OWASP
Open Web Application Security Project

Demonstration Cont.



OWASP
Open Web Application Security Project

Demonstration Cont.



OWASP
Open Web Application Security Project

Thank you!

Questions?