

MALICIOUS DOMAIN DETECTION

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Speaker: *Gopinath Palaniappan*

Outline

- Common uses of maliciously registered domains
- Approaches to detect malicious domains
- Datasets for research

Common uses of maliciously registered domains

1.

- ❖ Manipulate to webpage similar to a reputed website

2.

- ❖ Data Exfiltration

3.

- ❖ Download malware

4.

- ❖ Redirect to other malware hosts

5.

- ❖ Remote control your network resources

6.

- ❖ Crash infrastructures

Approaches to detect malicious domains

Blacklist

- ❖ Reputation based on history

Lexical Features

- ❖ Length
- ❖ Characters ratio, continuity rate
- ❖ Phrases

Global ranking

- ❖ Alexa
- ❖ DomCop
- ❖ Majestic
- ❖ Google Page-ranking

Registration data

- ❖ RDAP
- ❖ IPWhois
- ❖ DomainWhois

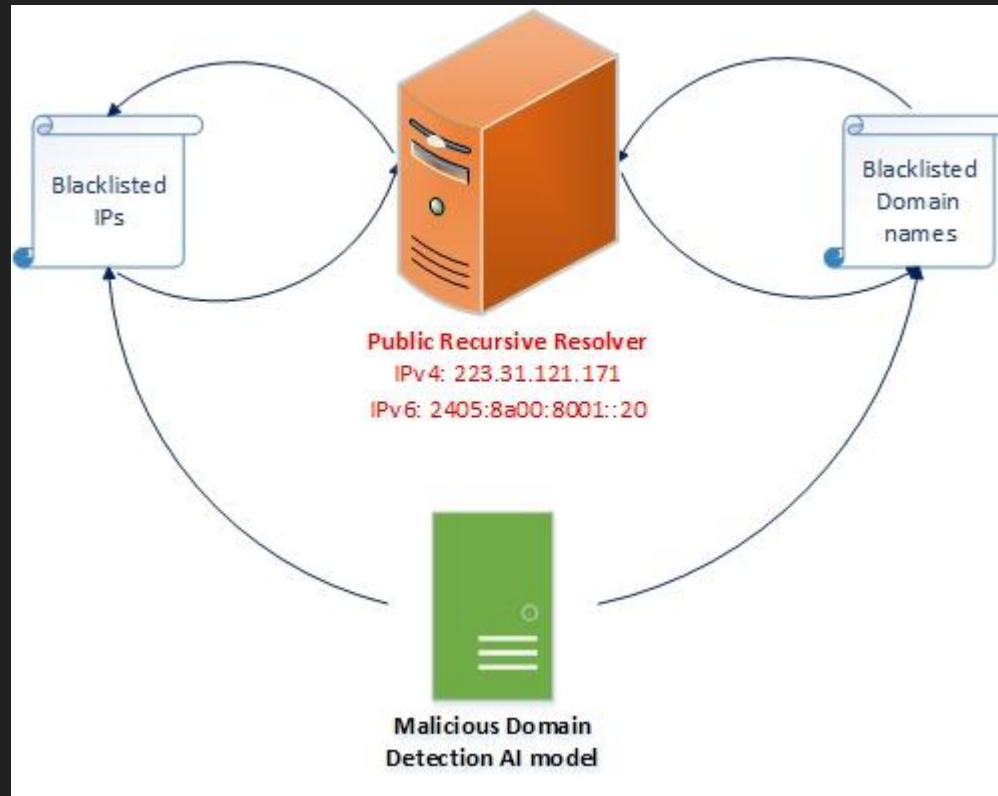
Web Traffic

- ❖ Visitors count
- ❖ Stay time
- ❖ Web referrals

Category & Content

- ❖ Type of website
- ❖ Number of pages
- ❖ Broken links

Deployment of the Malicious Domain Detection



Datasets for research

- Spamhaus DBL
- SURBL
- IANA
- ICANN
- Our own datasets

Thank You