

DNS Spoofing Application

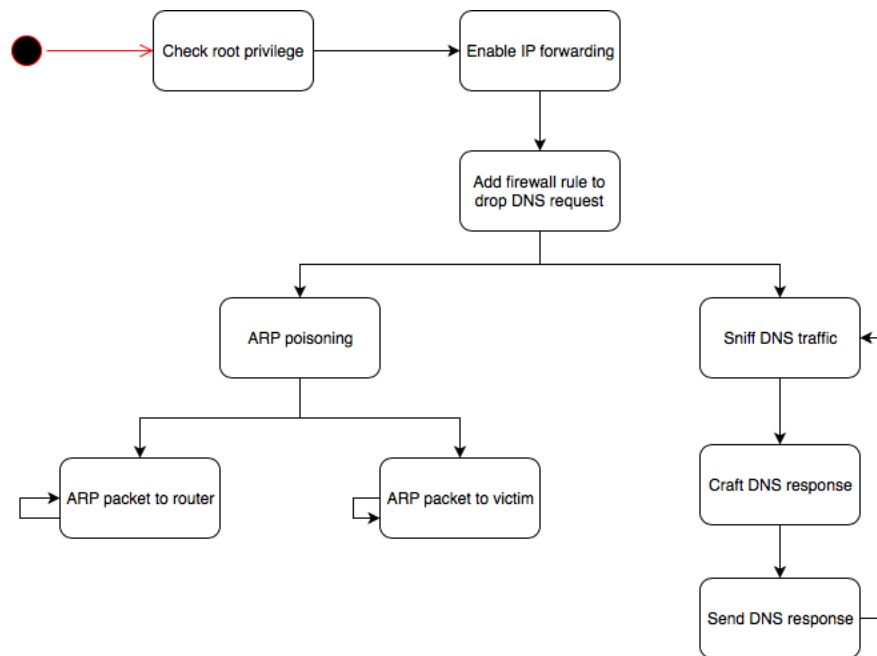
DESIGN WORK

DANNY LIEU

Table of Contents

<i>Diagram</i>	2
<i>Description</i>	2
<i>Pseudocode</i>	2

Diagram



Description

- Check root privilege: check if the user is the root user
- Enable IP forwarding: enable IP forwarding to act as a router
- Add firewall rule to drop DNS request: drop any DNS packet to prevent DNS lookup
- ARP poisoning: start a new thread and do ARP poisoning
- ARP packet to router: send ARP packet which pretend to be the victim machine to router
- ARP packet to victim: send ARP packet which pretend to be the router to victim
- Sniff DNS traffic: sniff for any UDP traffic to port 53 (DNS)
- Craft DNS response: craft a new DNS packet which will be sent back to victim
- Send DNS response: send the new DNS packet to the victim

Pseudocode

DNS Spoofing

Check if user is root user

Enable IP forwarding

Add firewall rule to drop DNS request to port 53

Start ARP poisoning thread:

While True

Send ARP packet to router

Send ARP packet to victim

Endwhile

Start sniffing thread:

While True

Receive DNS request from the victim machine

```
        Craft a new DNS response to match DNS request
        Send back DNS response to the victim
    Endwhile
```