# ARP Poisoning

Time required: 30 minutes

## Lab Description

Attackers frequently modify the Address Resolution Protocol (ARP) table to redirect communications away from a valid device to an attacker’s computer. In this project, you will view the ARP table on your computer and make modifications to it.

**NOTE:** This will disrupt internet access. You can do this in bridged or NAT. If you do this in bridged, it will stop your internet.

1. Start **Kali**, start a **Terminal** prompt.
2. To view your current ARP table, type **sudo arp** press Enter. The Address is the IP address of another device on the network while the HWaddress is the MAC address of that device.  
   **NOTE:** Help for the arp command: **sudo arp -?**
3. To determine your local network address, type **ip a** and then press Enter.
4. **Insert a screenshot:**

Click or tap here to enter text.

1. To determine your DNS servers, type **sudo cat /etc/resolv.conf**
2. **Insert a screenshot:**

Click or tap here to enter text.

1. To determine your gateway IP address, type **sudo route -n**
2. Record the IP address of the default gateway.
3. **Insert a screenshot:**

Click or tap here to enter text.

1. Change the ARP table entry of the default gateway by typing  
   **sudo arp -s gatewayaddress madeupmacaddress  
   Example in D1: sudo arp -s 10.0.1.1 14:10:12:10:00:00**
2. Verify that you can no longer ping the gateway or access the internet.
3. **Insert a screenshot:**

Click or tap here to enter text.

1. Delete the spoofed entry by typing: **sudo arp -d 10.0.1.1** (Substitute your gateway address)
2. Ping your gateway address to re populate your arp table. Use CTRL C to break the ping command after a few successful replies.
3. Type **sudo arp** to see that the gateway no longer has the fake mac address.
4. **Insert a screenshot:**

Click or tap here to enter text.

1. Ping the gateway. Verify internet access.
2. Verify that the correct entry is in your arp table: type **sudo** **arp**
3. **Insert a screenshot:**

Click or tap here to enter text.

1. **Reflect on what you learned in this assignment.**

Click or tap here to enter text.

## Assignment Submission

Attach this completed document to the assignment in Blackboard.