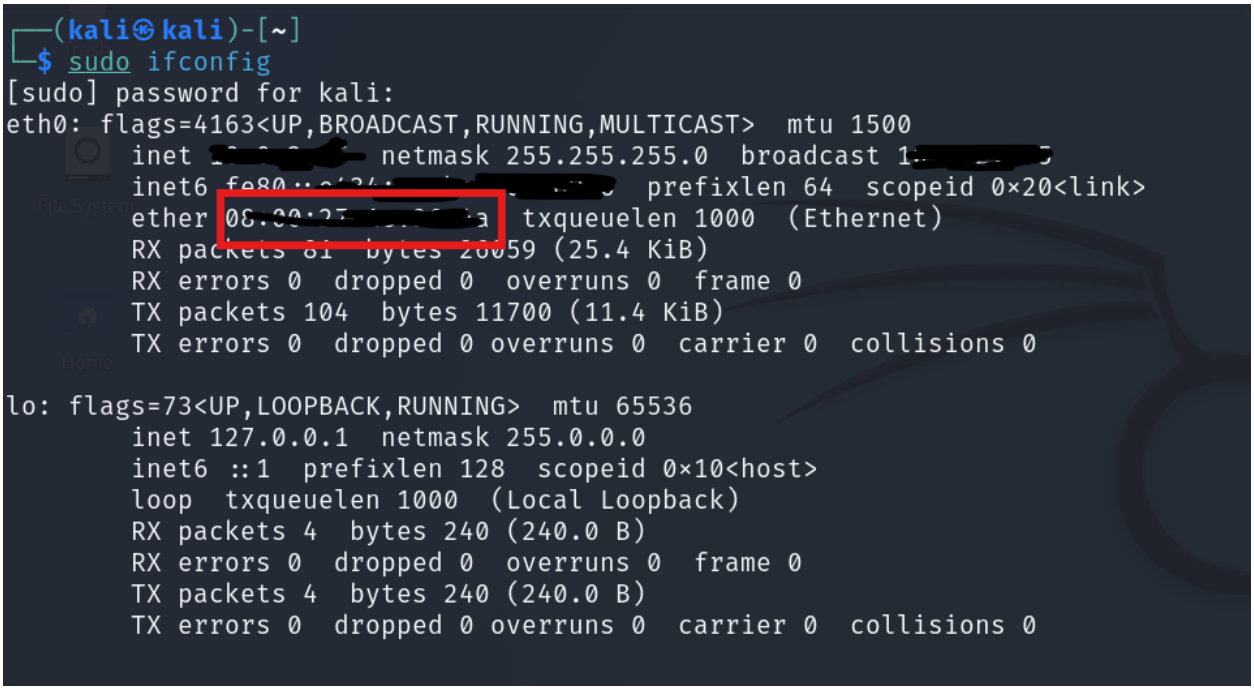
Macchanger

A Media Access Control (MAC) address is a unique identifier assigned to a network interface controller (NIC) for use as a network address in communications within a network segment. MAC addresses are used in the data link layer of the OSI model and are most often assigned by the manufacturer of the NIC.

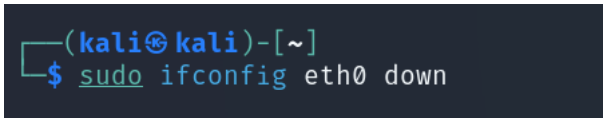
`macchanger` is a Linux utility that allows users to view and manipulate the MAC address of their network interfaces. This tool is particularly useful for enhancing privacy and anonymity, as it can change the MAC address to a randomly generated one or a user-specified value, making it harder for network tracking and monitoring. Network administrators and security professionals often use `macchanger` to test network configurations and security measures, as well as to bypass network restrictions that are based on MAC addresses. The changes made by `macchanger` are temporary and will be reset after a reboot unless scripted to persist. This tool is commonly installed via package managers, such as `apt` on Debian-based systems or `dnf` on Red Hat-based systems. The basic commands include viewing the current MAC address with `sudo macchanger -s [interface]`, changing it randomly with `sudo macchanger -r [interface]`, or setting it to a specific value with `sudo macchanger -m [new_mac] [interface]`

Example: -

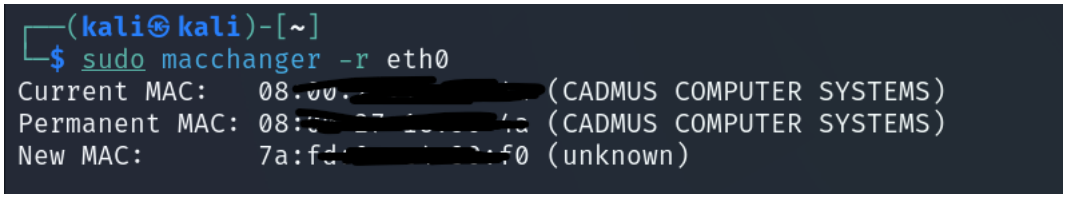
1. To check the current MAC address use ifconfig command.



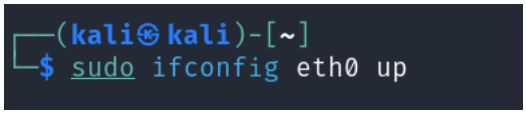
2. We have to disable the interface before changing the MAC address. To do so use down command along with the interface.



3. Now to change the MAC address use -r flag.



4. Now we can enable the interface again by using up command.



5. Now to check whether the MAC is changed or not use the ifconfig command.