# Agenda

► Packet Sniffing and Spoofing - Background Information

# Address Resolution Protocol (ARP)

Determine MAC address for an IP address, within the same network.

#### Router

Connects different networks; decides how to move packets from one network to another network.

### Subnet

IP address (ipv4, 32bits) consists of two parts.

- network section (aka routing prefix, or network id, or network address)
- host section (aka host id, or host address)

To split an address into the two sections: subnet mask (aka netmask): bitwise AND operation between an IP address and the netmask, yields the network address.

## Acronym

- MAC (address): Media Access Control
- ► TCP: Transmission Control Protocol
- ▶ IP: Internet Protocol
- ► ICMP: Internet Control Message Protocol
- ► ARP: Address Resolution Protocol
- TTL: Time To Live.
- OSI Model: Open System Interconnection Model

### Reference

A large portion of the material is adapted/copied from:

- Computer Security A Hands-on Approach by Wenliang Du
- ► Understanding Networks and TCP/IP by Gregory White