Course Introduction:

Three main parts:

1. Network Basics.

2. Cracking WEP encryption (using 3 methods).

3. Cracking WPA encryption (using 4 methods).

There are three main encryption types:

1. WEP: Very easy to crack.

2. WPA: More challenging than WEP.

3. WPA2: Similar to WPA but uses a stronger encryption algorithm.

We will discuss each one of these encryptions in more detail later in the course.

- A network is a number of devices connected together.
- Use: to transfer data or share resources between the connected devices.
- All networks (wifi or wired) achieve this using the same principle.
- One device acts as a server , the server contains the data that is shared between the connected devices.
- In most wi-fi networks , the server is the router , and the shared data is the internet.

Conclusion:

- The only device in the network that has access to the shared data (internet in most cases) is the server.

- All the connected devices have no direct access to the internet.
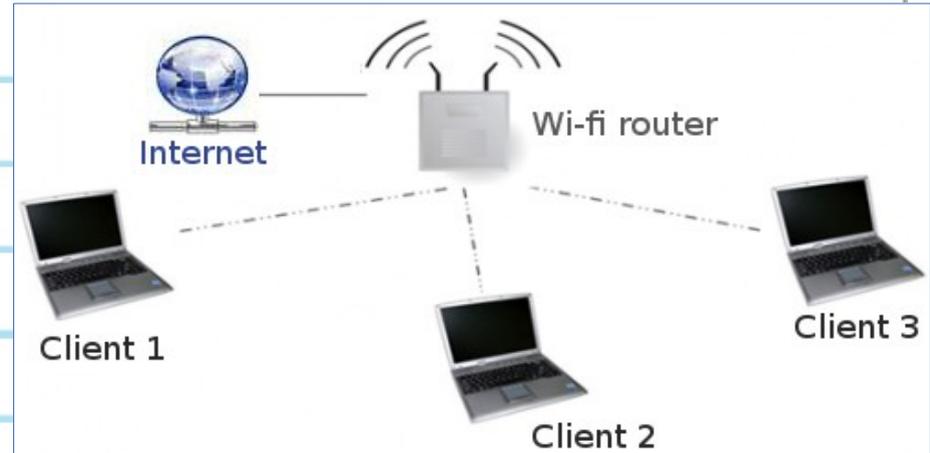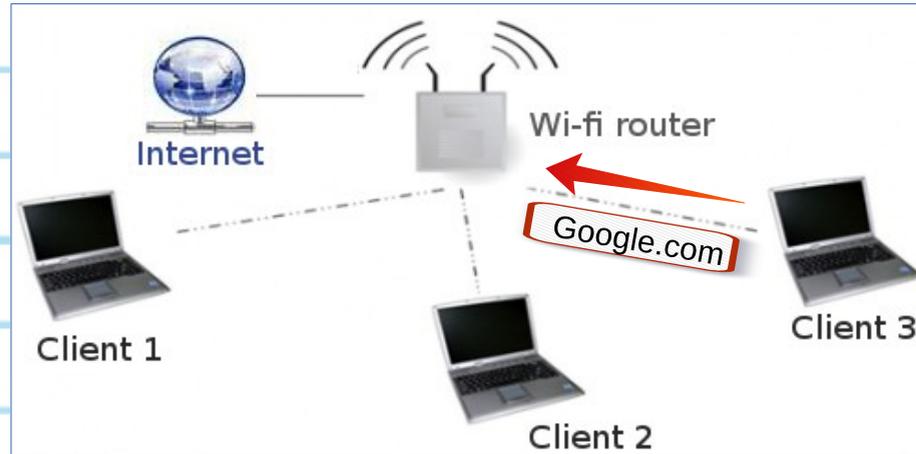
Question:

Then how come all the devices in the network can access the internet ???

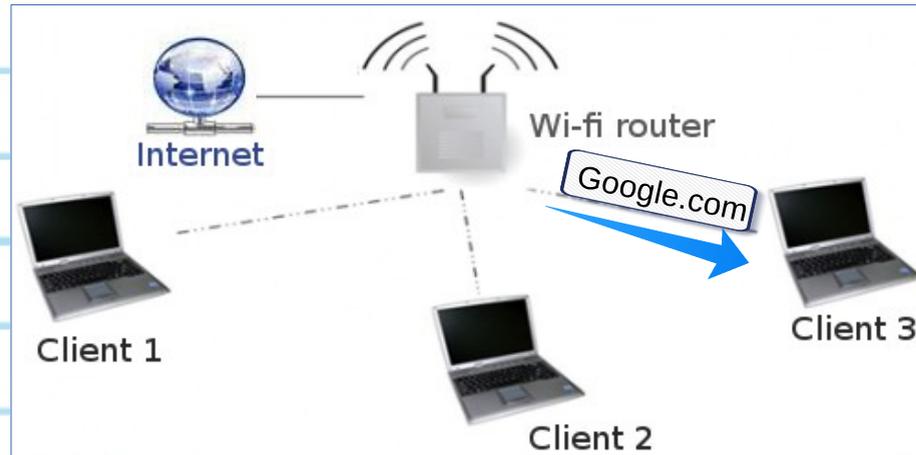When a device in the network needs to access the shared resource (internet), It sends a request to there server (router).

The router then processes the request.

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- All of this data (requests and responses) is transferred as packets .in wi-fi networks , these packets are sent in the air between the devices.

Question: So can we just capture all of these packets and analyse them ?

Answer: Yes we can , and this is what's called sniffing.