School of Computing Science and Engineering

Program: B.Tech.

Course Code: CSCN 4024
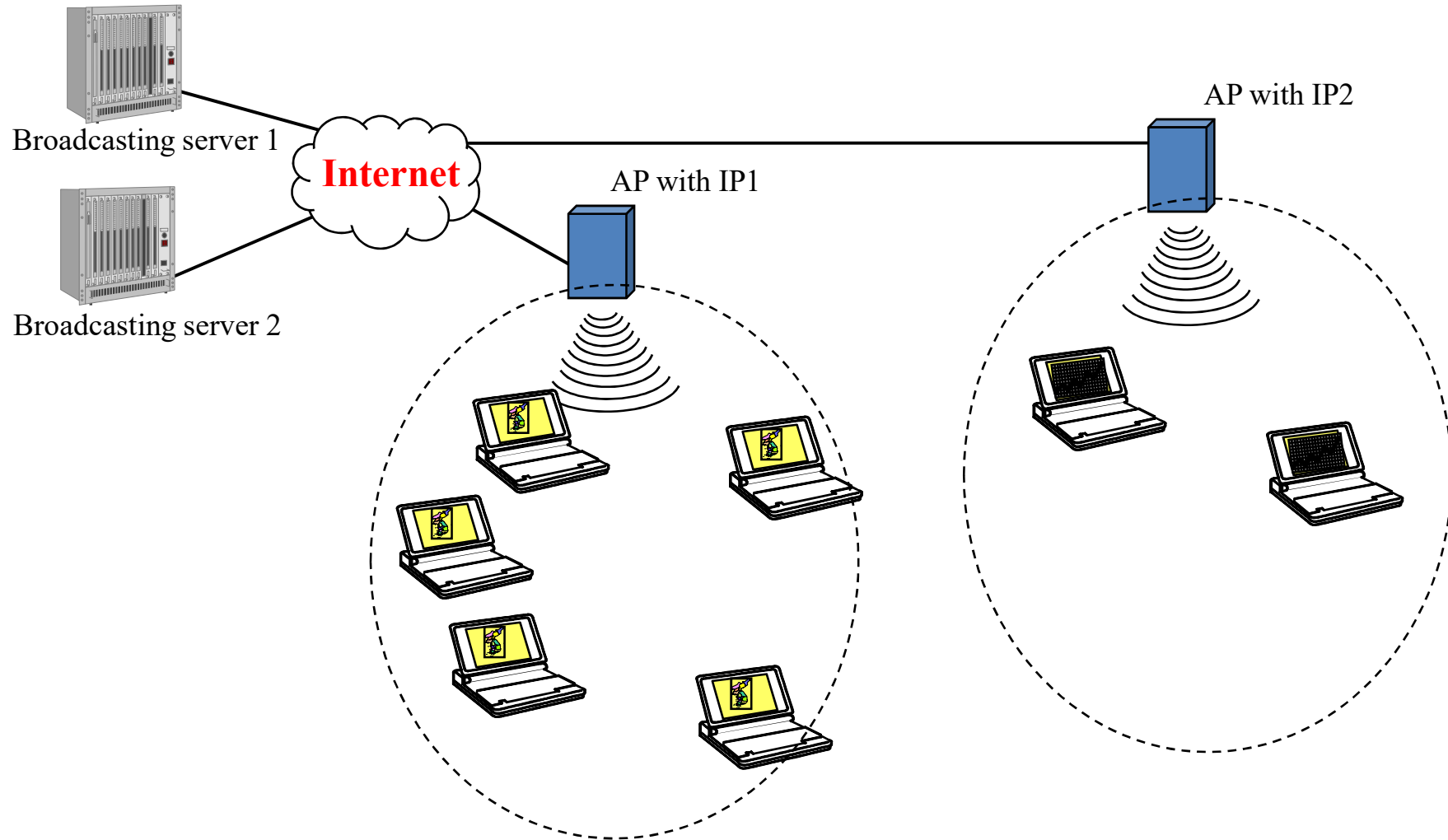
Course Name: Wireless and Mobile Security

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Basic Limitations of Internet Services

- Necessity of unique IP address
    - Lack of IP addresses to be assigned
    - Difficulty of managing IP addresses, especially for mobile unit
- Client-server model : server access & request
    - Necessity of pre-knowledge of web site address
    - Every time click is needed to request information.
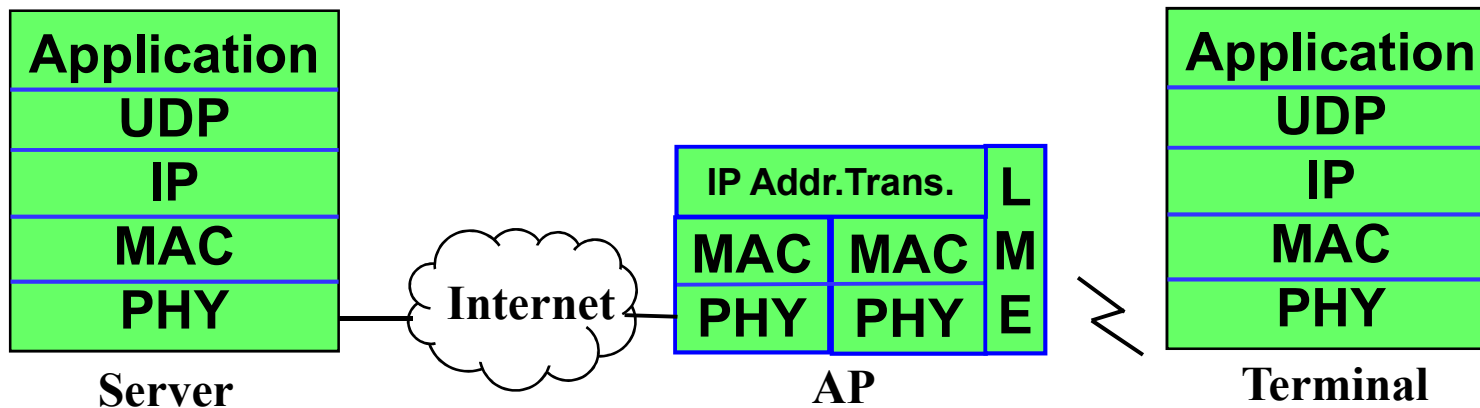   - So much load to server as increasing number of users

Network Configuration for IP Broadcasting

Broadcasting server 1

Broadcasting server 2

Internet

AP with IP1

AP with IP2

Datagram Format & Protocol Stack

Protocol ID	Dest. IP addr	Source IP addr	UDP port No.	UDP data

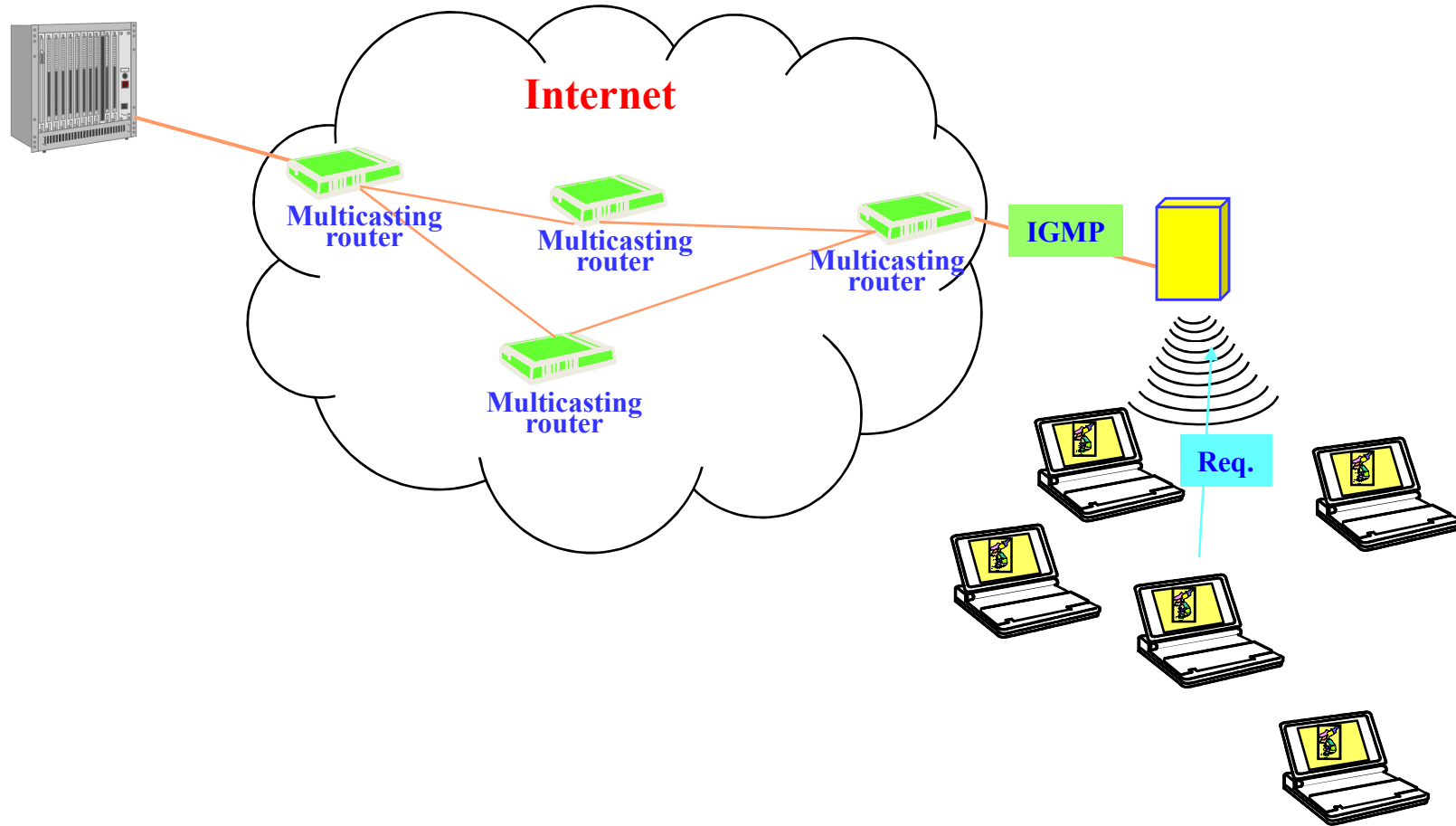Internet Datagram Format

Protocol Stack

Header Format

- Controls broadcasting parameters of AP
  - Repetition period & duration
  - Priority control, scrambling, etc.

- Type of data
  - Users can see interesting data only by filtering.
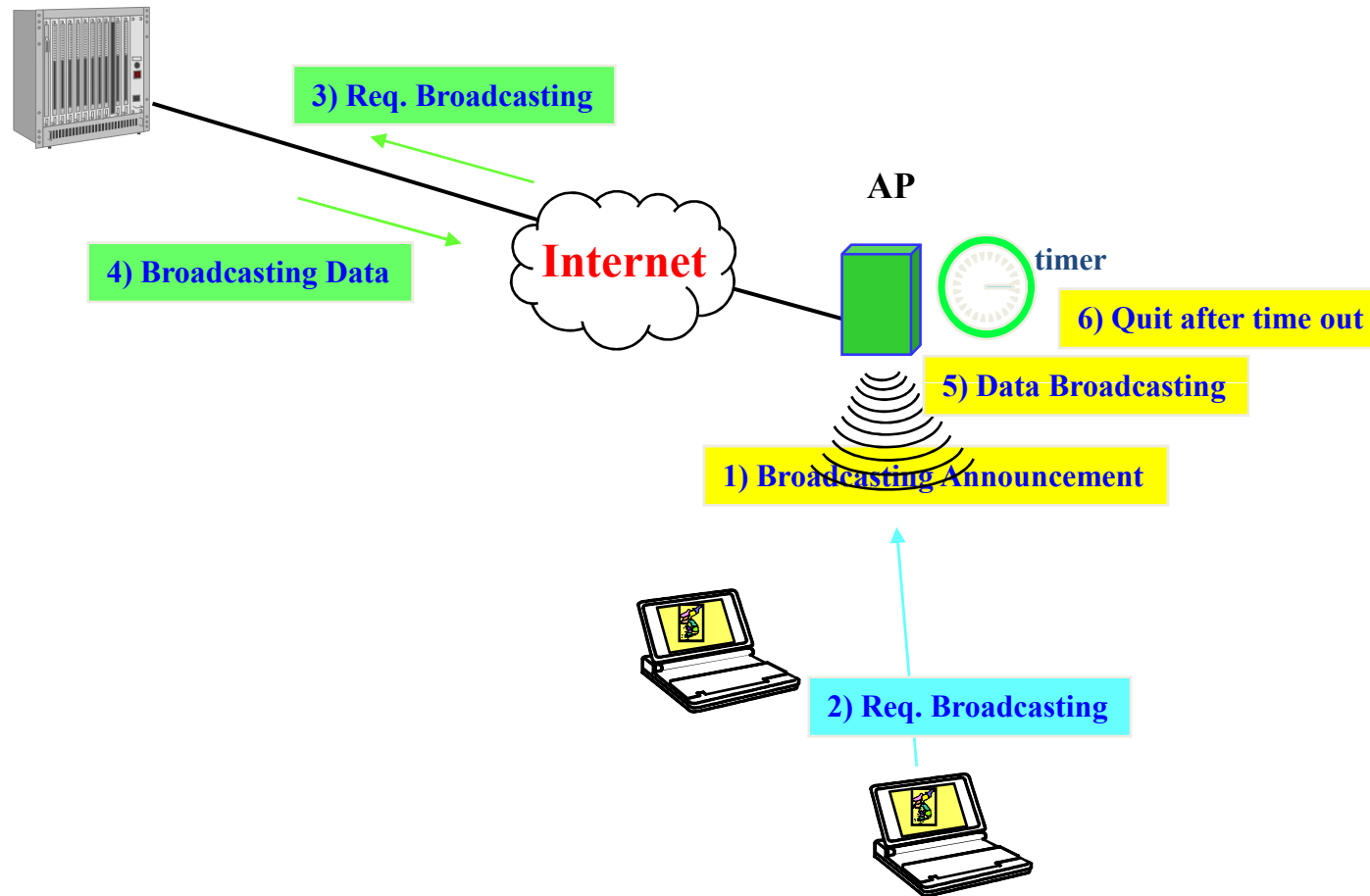 - Terminals can use for their own purposes.

Control flags	type of data field	broadcast data

Simplified Payload Format for IP Broadcasting

Multicasting + Local Broadcasting

Broadcasting initiation by terminal

3) Req. Broadcasting

4) Broadcasting Data

Internet

AP

timer

6) Quit after time out

5) Data Broadcasting

1) Broadcasting Announcement

2) Req. Broadcasting

Multicasting along with Local Broadcasting

Internet

Multicasting router

Multicasting router

Multicasting router

Multicasting router

AP with multicasting IP addr

IGMP

Req.

Thank You