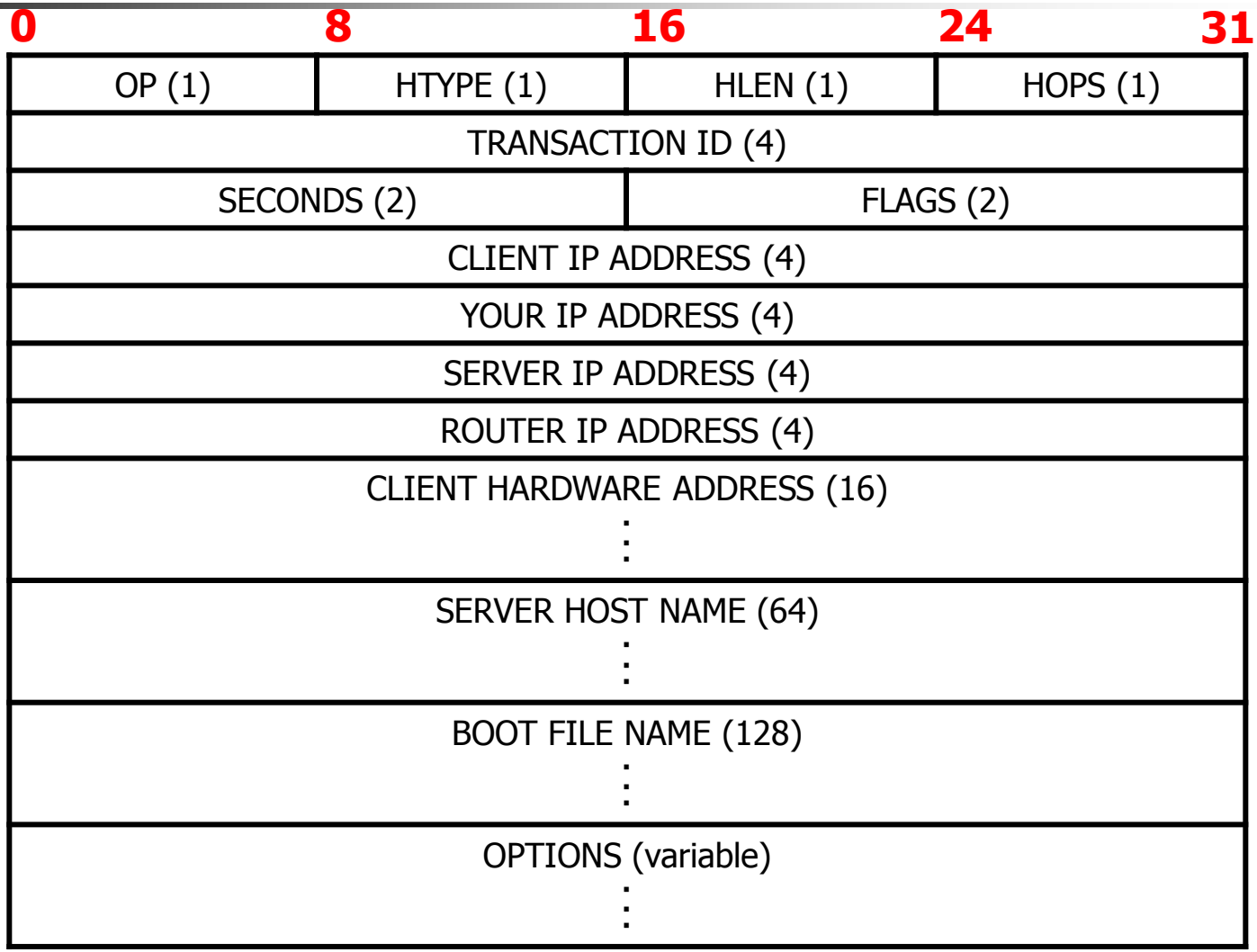
DHCP Basics

BUPT/QMUL

2010-11-2

DHCP Message Format



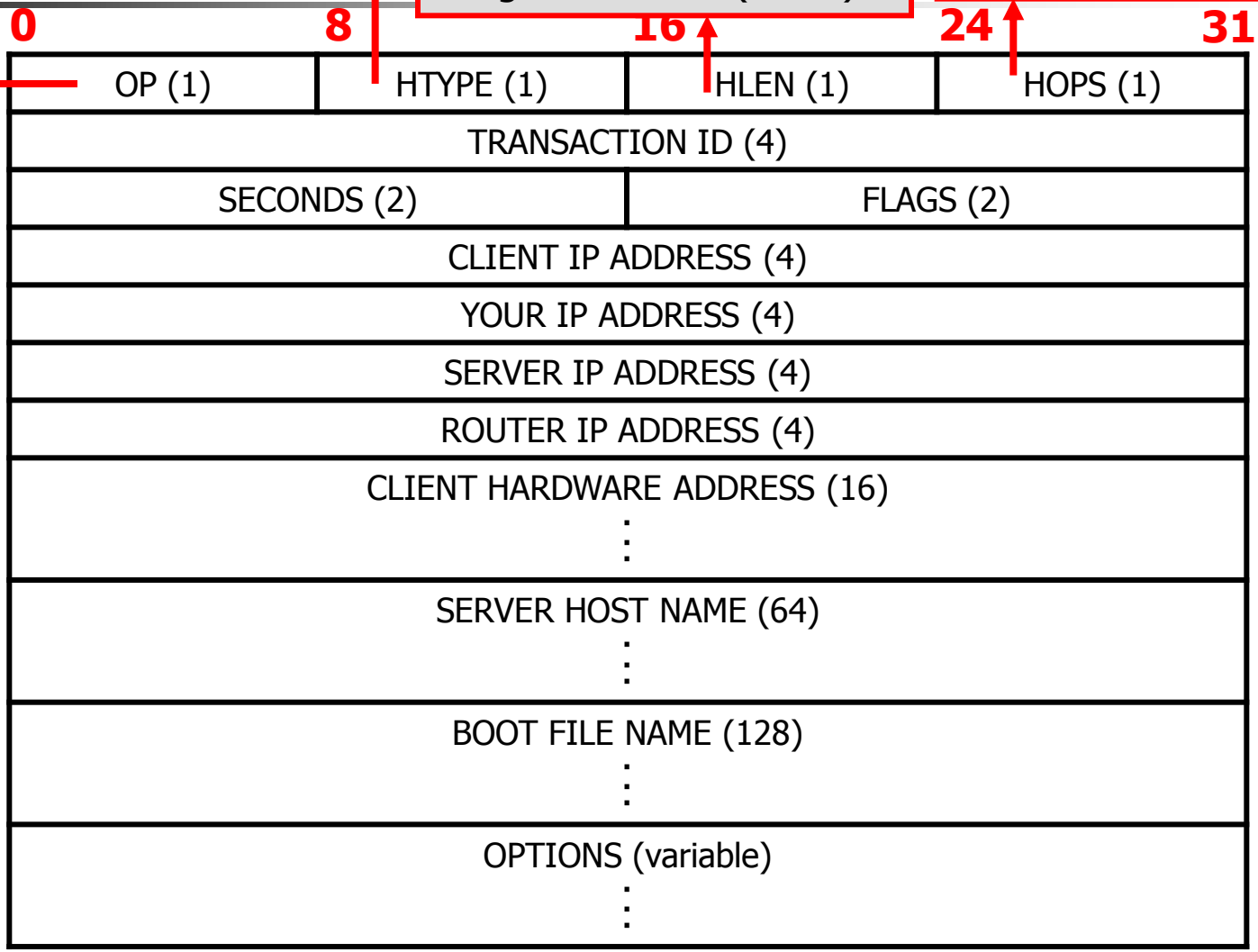
DHCP Message Format

- Hardware Address Type
- Defined in the ARP section in the Assigned Numbers RFC
- E.g. 1-Ethernet (10Mb)

- Hardware Address Length
- E.g. 6-Ethernet (10Mb)

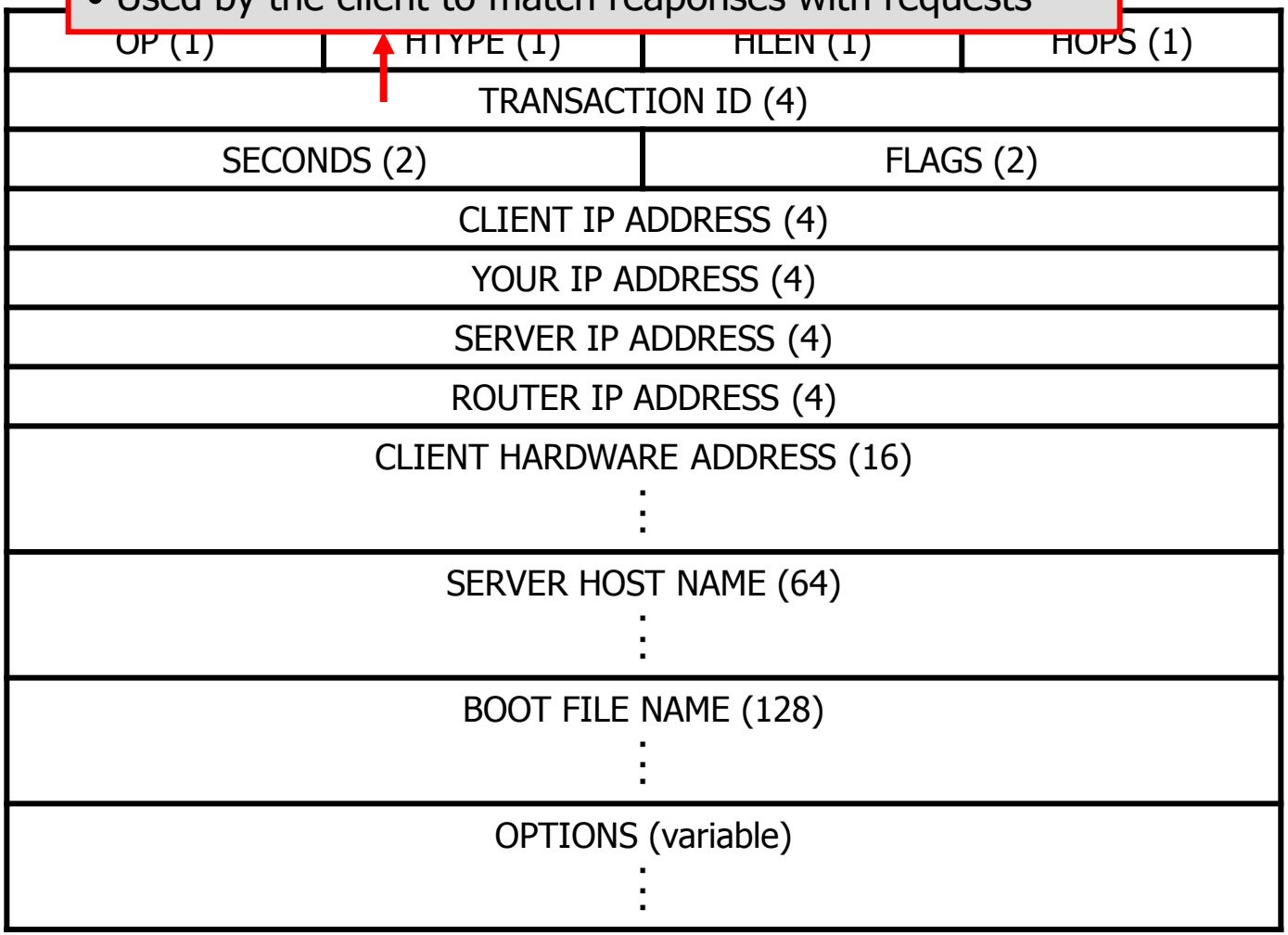
- Client sets to zero
- optionally used by relay agents when booting via a relay agent

1 – request
2 – reply



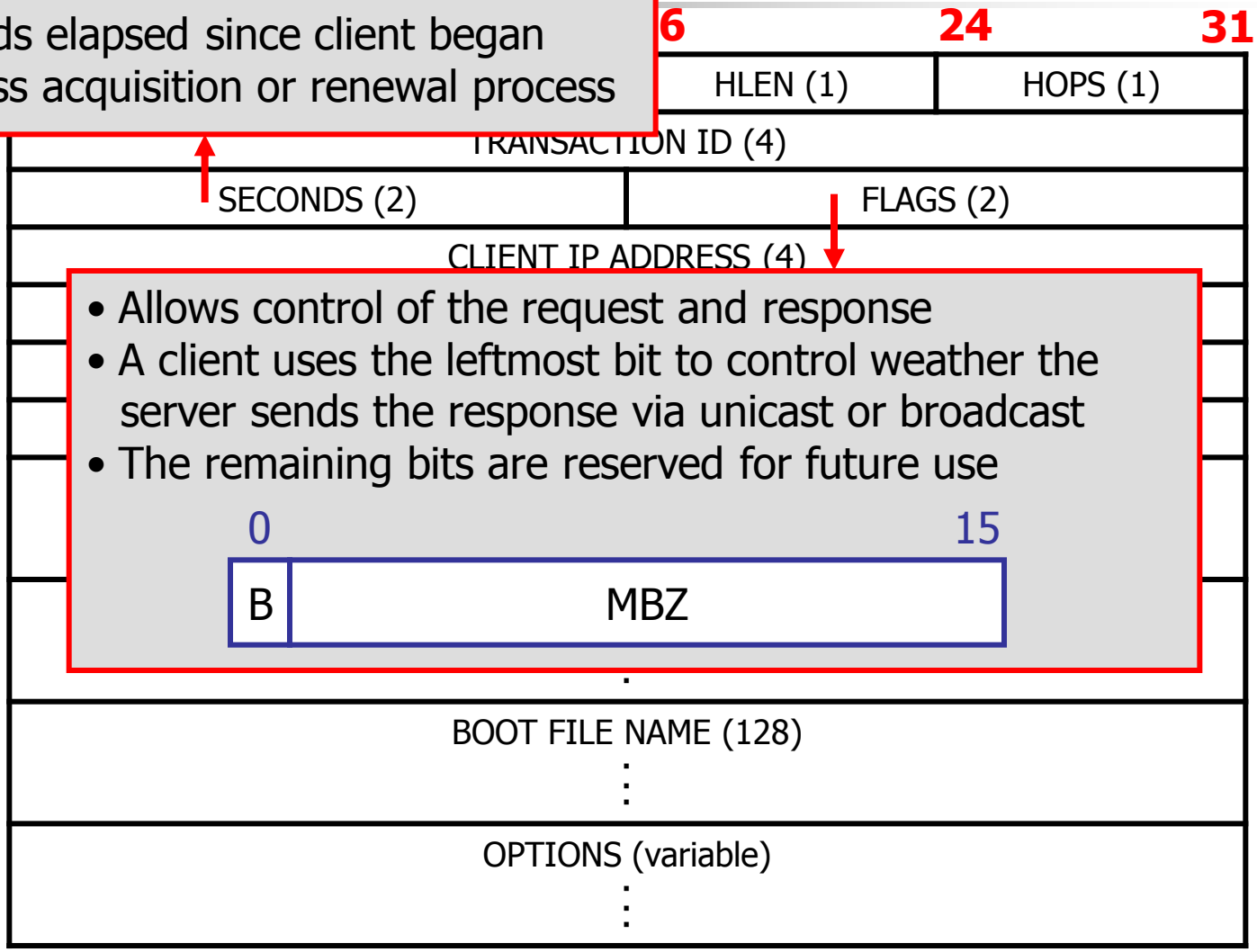
DHCP Message Format

- an integer
- Used by the client to match reaponses with requests



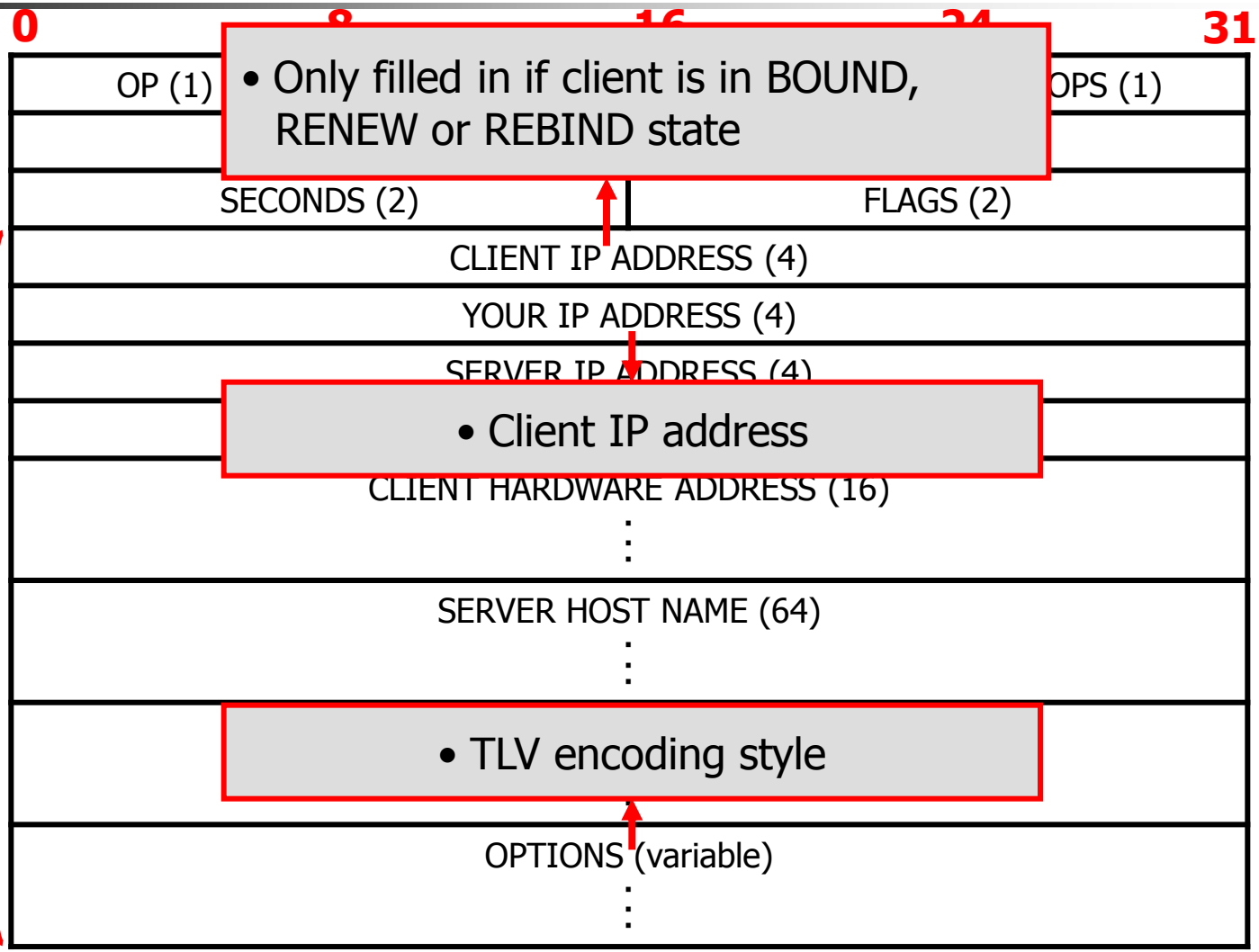
DHCP Message Format

- seconds elapsed since client began address acquisition or renewal process



- Allows control of the request and response
- A client uses the leftmost bit to control weather the server sends the response via unicast or broadcast
- The remaining bits are reserved for future use

DHCP Message Format



DHCP Message Format

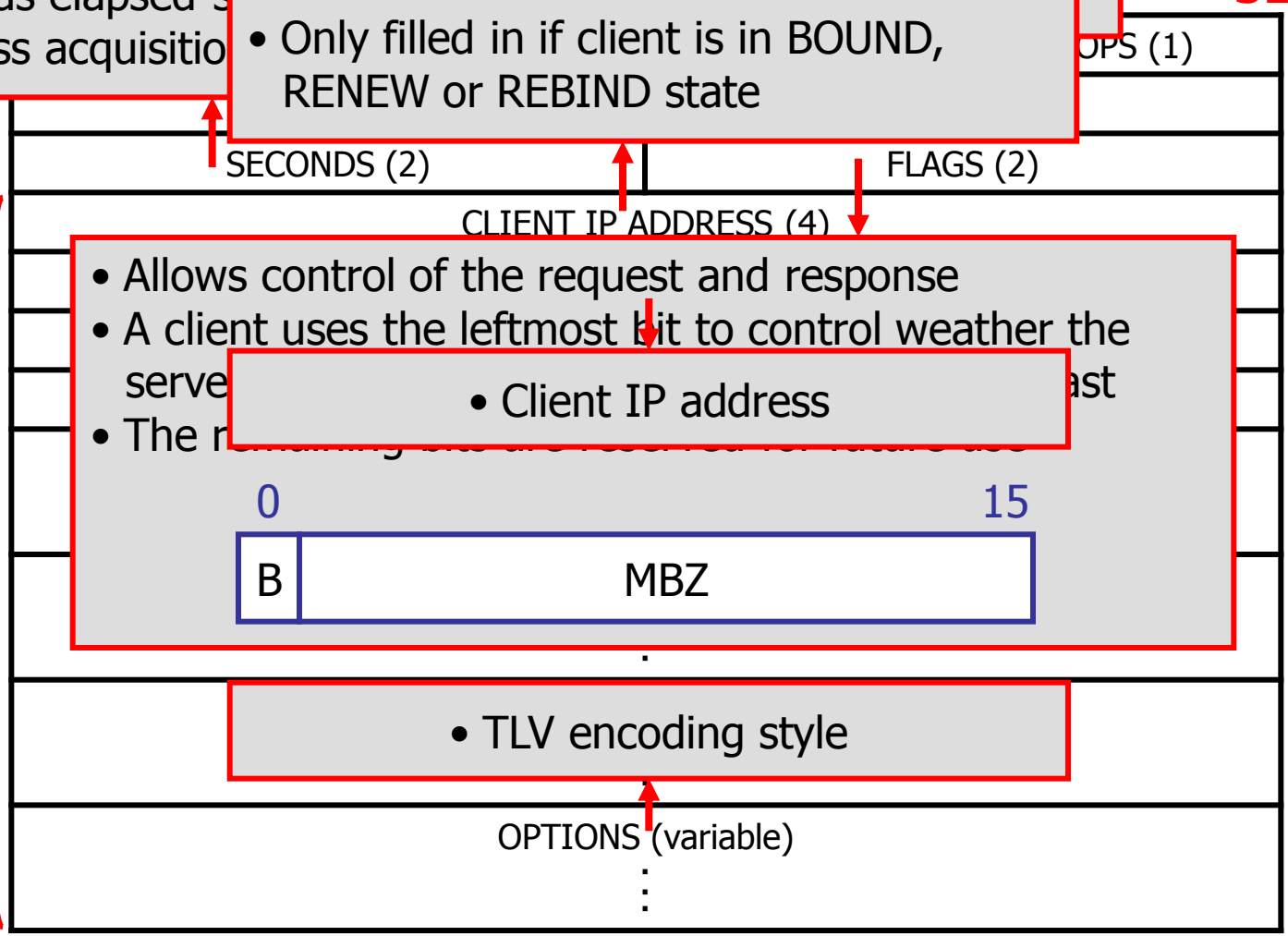
- Hardware Address Type
- Defined in the ARP section in the Assigned Numbers RFC
- E.g. 1-Ethernet (10Mb)

- Hardware Address Length

- Client sets to zero
- optionally used by relay agents when booting via a relay agent

- seconds elapsed since client began address acquisition

- Only filled in if client is in BOUND, RENEW or REBIND state



- Allows control of the request and response
- A client uses the leftmost bit to control weather the server
- The r

- Client IP address

- TLV encoding style

Clients fill in as much as they know and leave remaining fields set to zero