

## IP Header

Version	IHL	TOS	Total Length
Identification			Flags
TTL	Protocol	Fragment offset	
Header Checksum			
Source address			
Destination address			
Options			
Data			

### Packets explanation for Fig 1.1

- Frame 32...  
An ethernet frame, a data link layer protocol data that uses Ethernet physical layer transport mechanisms
- Ethernet II...  
The version number, start location and end destination. Used to determine where to send the data packet to and where it originated from.
- Internet Protocol Version 4...  
The IP version, start IP address, destination IP address and the length of the data, plus any flags it might have. Details the elements of the IP Header and determines where the data originated from, the destination, the version of IP and flags contained in the data.
- Internet group management protocol  
IGMP is a communications protocol used on IPv4 networks. It allows the network to direct multicast transmissions only to the hosts that have requested them.

### 5) Major differences between fragments

- there is no ICMP protocol
- the IP address is a testing IP
- It has data on the fragments contained
- Each packet is numbered and has a comment associated with it

### 6) Games and their technical / design elements.

#### - Final Fantasy XIV online

- large scale mmo with multiple data centres and servers
- A 'mentor' system where new players have access to a text channel where they can ask for help from mentors (veterans)
- Easy to learn but hard to master classes
- Optional high-tier raids with better rewards
- A guild (Free Company) system that makes it easier for new players to meet people and to ask for help.

#### - Nier automata

- Very deep story and narrative, played across several playthroughs where each one you play a different character in the story.
- Rewards that scale with your character level, therefore nothing is worthless
- An intuitive combat system where each weapon has a unique playstyle



- Super Mario Galaxy

- Easy to pick up and play
- Playable by all ages thanks to its simple controls and playstyle
- Brilliant level design that uses gravity manipulation to create puzzles and interesting levels

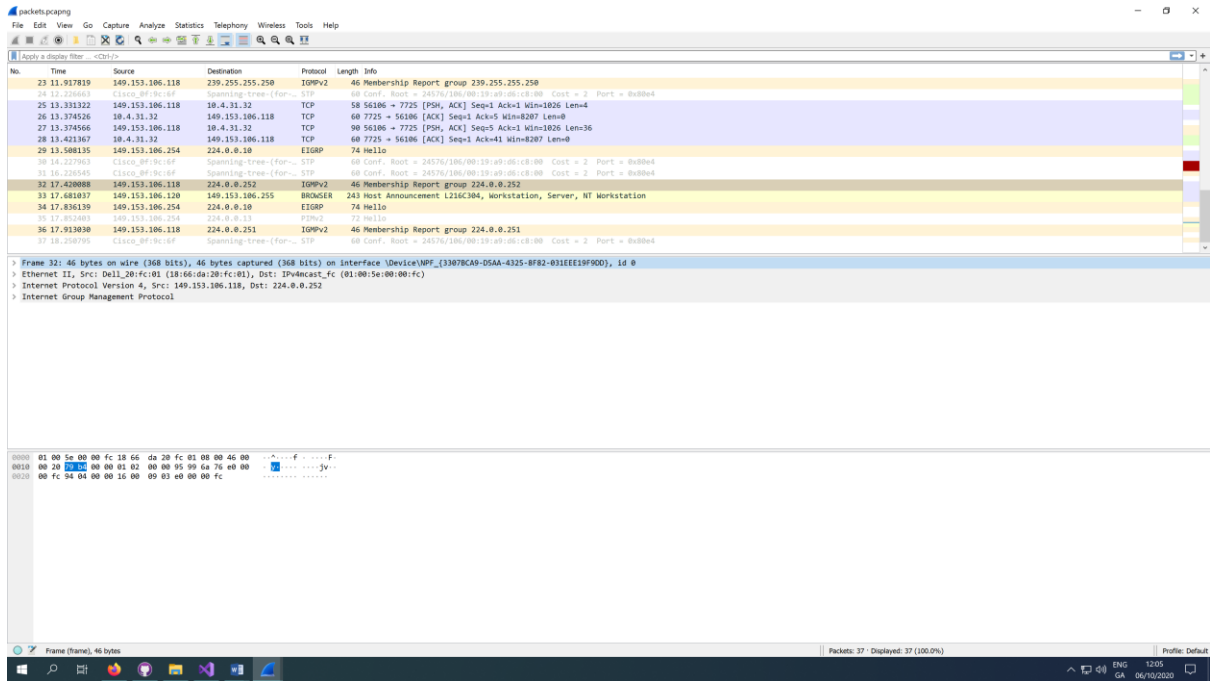


Fig 1.1