# ICMPv6 Packet Analysis

## Frame Number

27

## IPv6 Header

- Version: 6 (Indicates the version of the IP protocol)  
- Traffic Class: 0x00 (Default Service)  
- Flow Label: 0x2dbac (Flow identifier)  
- Payload Length: 120 (Length of the ICMPv6 message in bytes)  
- Next Header: 58 (Refers to ICMPv6)  
- Hop Limit: 255 (Maximum hops a packet can take)  
- Source Address: fe80::fad2:acff:fe78:b83f (Source IPv6 address)  
- Destination Address: ff02::1 (Destination IPv6 address)

## ICMPv6 Header

- Type: 134 (Router Advertisement)  
- Code: 0 (Additional context for the message type)  
- Checksum: 0xc677 (Checksum for error checking)  
- Flags: 0xc0 (Managed address configuration and Other configuration are set)  
- Router Lifetime: 180 (Router's lifetime in seconds)  
- Reachable Time: 0 (Reachable time in milliseconds)  
- Retrans Timer: 0 (Retransmission timer in milliseconds)

## Additional Packet Information

- ICMPv6 Option (Recursive DNS Servers): Lists recursive DNS servers for IPv6 addresses, such as 2001:558:feed::1 and 2001:558:feed::2.  
- ICMPv6 Option (Prefix Information): Provides prefix-related details like length (32 bytes), prefix (2601:155:400:ca50::/64), and flags for on-link and autonomous address configuration.  
- ICMPv6 Option (Route Information): Contains routing information with route lifetime (180 seconds) and route preference.  
- ICMPv6 Option (Source Link-Layer Address): Provides the MAC address of the source, such as f8:d2:ac:78:b8:3f.