

Which of the following describe the DHCP Discover message?

1. It uses *FF:FF:FF:FF:FF:FF* as a layer 2 broadcast.
2. It uses UDP as the Transport layer protocol.
3. It uses TCP as the Transport layer protocol.
4. It does not use a layer 2 destination address.

[A.](#) 1 only

[B.](#) 1 and 2

[C.](#) 3 and 4

[D.](#) 4 only

[Answer & Explanation](#)

Answer: Option B

Explanation:

A client that sends out a DHCP Discover message in order to receive an IP address sends out a broadcast at both layer 2 and layer 3. The layer 2 broadcast is all Fs in hex, or *FF:FF:FF:FF:FF:FF*. The layer 3 broadcast is 255.255.255.255, which means all networks and all hosts. DHCP is connectionless, which means it uses User Datagram Protocol (UDP) at the Transport layer, also called the Host-to-Host layer.