Ipv4 Unicast, Multicast, and Broadcast

In an IPv4 network, the hosts can communicate one of three different ways:

1. Unicast: The process of sending a packet from one host to an individual host.
2. Broadcast: The process of sending a packet from one host to all hosts in the network.
   1. Limited BroadcasT
      1. Destination: 255.255.255.255
      2. Routers do not forward a limited broadcasr
   2. Directed broadcast
      1. Destination: 172.16.4.**255**
      2. Hosts within the 172.16.4.0/24 network (/24 → c class)
3. Mulitcast: The process of sening a packet from one host to a selected group of hosts, possibly in different networks.
   1. reduces traffic
   2. Multicast address range: 244.0.0.0 to 239.255.255.255
   3. Link local - 224.0.0.0 to 224.0.0.255 (Example: routing information exchanged by routing protocols)
   4. Globally scoped addresses - 244.0.1.0 to 238.255.255.255 (Example: 224.0.1.1 has been reserved for network time protocol)