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\* IP addresses are allocated hierarchically, so a router can group routes by address prefixes. On the other hand, the distribution of MAC addresses across the network is random and completely unrelated to the topology. The MAC address might be unique, but there's nothing special about the number that would indicate where it is; Whereas, the IP numbering scheme imposed in a hierarchical fashion on a group of computers to logically distinguish them as a group (Subnet). Sending messages between those groups is done by routing tables, themselves divided into multiple levels so that we don't have to keep track of every single subnet.

\* The routing of packets is somehow geographical. Once a computer is mobilized, its geographical location has been changed. Accordingly, the address for routing should be changed too. But the MAC address keeps unchanged. Hence, due to the unchangeable characteristic, it can not be used in routing.

\* So, If MAC is used for routing then Routes grouping would be impossible, every router would need to keep track of routes for every single device that relays traffic through it and that does not scale well beyond a certain number of hosts. Because the routing tables would become impossibly large as it would contain routes to each node on the network because MAC addresses are different for every manufacturer. Also, the broadcast mechanisms would become way expensive and time-consuming at that scale, as now your routing protocols have to carry trillions of addresses.

\* Also, the same IP address can be kept when the network card needs replacing. Without the IP abstraction, this would be very difficult.