**Ethernet MAC Address**

**1. Broadcast MAC Address**

An Ethernet broadcast frame is received and processed by every device on the Ethernet LAN. The features of an Ethernet broadcast are as follows:

* It has a destination MAC address of **FF-FF-FF-FF-FF-FF** in hexadecimal (48 ones in binary).
* It is flooded out all Ethernet switch ports except the incoming port.
* It is not forwarded by a router.

**2. Multicast MAC Address**

An Ethernet multicast frame is received and processed by a group of devices on the Ethernet LAN that belong to the same multicast group. The features of an Ethernet multicast are as follows:

* **There is a destination MAC address of 01-00-5E** when the encapsulated data is an IPv4 multicast packet and a **destination MAC address of 33-33** when the encapsulated data is an IPv6 multicast packet.
* There are other reserved multicast destination MAC addresses for when the encapsulated data is not IP, such as Spanning Tree Protocol (STP) and Link Layer Discovery Protocol (LLDP).
* It is flooded out all Ethernet switch ports except the incoming port, unless the switch is configured for multicast snooping.
* It is not forwarded by a router, unless the router is configured to route multicast packets.