Physical/Mac address/BIA/Ethernet
48 bit address written in hexadecimal
12 Hexadigits

Number systems
Base 2 binary 0,1
Base 10 Decimal 0-9
Base 16 Hexadecimal 0-9,A-F

00-50-56-C0-00-08 -Dash seperated
00:50:79:66:68:00 : Colon seperated
0ca7.5eba.0000 . Dot seperated

1 byte

Bit 7 LG Local-1/Global -0
Bit 8 IG Indiviual-0 (Unicast) / Group -1 (Multicast/Broadcast)

01:80:c2:00:00:00 -L2 Mcast For Spanning Tree

0 1 78
0000 0001

FFFF.FFFF.FFFF

F F 78
1111 1111 -

0c:a7:5e:ba:00:00

0 C 78
0000 1100

Arp request (Broadcast)

Sip	Dip	Smac	Dmac
10.1.1.1	10.1.1.3	6800	FFFF

SW
Learning -------> Source Mac
Filtering ----> Dest Mac (Not sending) g0/0 ,g0/3,g1/0
Flooding/Forwading ---> Dest mac (Flood g0/1 & g0/2)

Mac Address Table

Vlan	Mac Add	type	Port	Timestamp/Aging
10	6800	Dynamic	g0/0	300 sec
10	6802	Dynamic	g0/2	300 sec
10	6801	Dynamic	g0/1	300 sec

0050.7966.6803
mac address-table static 0050.7966.6803 vlan 20 interface g0/3

Unicast --> Smac/Dmac present in Frame/ Mac address table -Single Dest
Broadcast --> Dmac FFF --Multi destination
Unknown unicast --> Smac/Dmac present in Frame/Not Avl in mac address -Multi Dest
Multicast --> Dmac 01 -Multi Destination

BUM Traffic

4hr
5 min /300 sec