

Class D 224.0.0.0-239.255.255.255

224.0.0.5/6

224.0.0.10

224.0.0.9

224.0.0.1 (All hosts)

224.0.0.2 (All routers)

TTI=1

239.0.0.0/8 --> RFC 1918

232.0.0.0/8 --> SSM

ASM/SSM

Any source Multicast

Source Specific Multicast

GLOP

32 bit

16 bit ASN

233.X.Y.0/24

650053

128 64 32 16 8 4 2 1

11111110 0 0 0 1 1 1 0 1

233.254.29.0

233.254.29.255

128 64 32 16 8 4 2 1 128 64 32 16 8 4 2 1

0 0 0 1 0 0 1 1 1 0 0 0 1 0 0 0

19.136

233.19.136.0-233.19.136.255

Mac address 48 bit

25 bits are reserved + 23 bits copy from last 23 bits of ur multicast address

01-00-5E-0

0000 0001 0000 0000 0101 1110 0000 0000 0000 0000 0000 0101

0 1 0 0 5 E 0 0 0 0 0 5

8 8 8

224.0.0.5

00000000 00000000 00000101

Query interval 60 sec

IGMP configured querier timeout is 120 seconds

```
R1:
ip multicast-routing
interface Ethernet0/0
ip address 10.1.1.1 255.255.255.0
ip pim dense-mode
ip igmp query-interval 30
exit
```

```
R2
ip multicast-routing
interface Ethernet0/0
ip address 10.1.1.2 255.255.255.0
ip pim dense-mode
exi
```

MC-1

```
int e0/0
ip add 10.1.1.3 255.255.255.0
no sh
ip igmp join-group 239.1.1.1
exit
```

MC-2

```
int e0/0
ip add 10.1.1.4 255.255.255.0
no sh
ip igmp join-group 239.1.1.1
exit
```

IGMP snooping:

```
-----
ip igmp snooping
ip igmp snooping vlan 1
```

```
sh ip igmp snooping vlan 1
sh ip igmp snooping groups
sh ip igmp snooping querier
```

```
ip igmp snooping vlan 1 mrouter int g0/0
```

DVMRP
Mospf

```
Pim V1          Pim v2
protocol no -2  protocol -103
lgmp
224.0.0.2       224.0.0.13.
```

Modes

Dense -
Sparse

Dense:

- Too many clients
- Flood and prune
- SPT (Source tree)
- (s,G)