

به نام خدا  
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۱- این ۲ آی برای چه کاری استفاده می‌شوند و چرا اینترفیس ما عضو این دو آی پی multicast شده است ؟

**FF02::1:FF00:1**

**FF02::1:FF84:8**

```

R1(config)#do sh ipv int fa 0/0
FastEthernet0/0 is up, line protocol is up
IPv6 is enabled, link-local address is FE80::C801:17FF:FE84:8
No Virtual link-local address(es):
Global unicast address(es):
  FD00:1::1, subnet is FD00:1::/64
Joined group address(es):
  FF02::1
  FF02::2
  FF02::1:FF00:1
  FF02::1:FF84:8
MTU is 1500 bytes
ICMP error messages limited to one every 100 milliseconds
ICMP redirects are enabled
ICMP unreachable are sent
ND DAD is enabled, number of DAD attempts: 1
ND reachable time is 30000 milliseconds (using 30000)
ND advertised reachable time is 0 (unspecified)
ND advertised retransmit interval is 0 (unspecified)
ND router advertisements are sent every 200 seconds
ND router advertisements live for 1800 seconds
ND advertised default router preference is Medium
Hosts use stateless autoconfig for addresses.
```

برای اهداف کاری Neighbor discovery نیاز

است تا solicited address ها ساخته شوند .

حال از آنجایی که اینترفیس ما ۲ آی پی

link-local و unicast دارد در نتیجه اینترفیس

ما عضو دو آی پی multicast که هر دو

solicited address های ما هستند می‌شود.

Unicast: FD00:1::1 → FF02::1:FF00:1

link-local: FE80::C801:17FF:FE84:8 → FF02::1:FF84:8

- Each device *joins* a solicited-node multicast group address by just "deciding to listen" to the IPv6 solicited-node multicast address and then to the corresponding MAC address for that multicast IPv6 group.
- Devices that join a specific solicited-node multicast address share a *common interest*

منابع:

<https://www.networkcomputing.com/networking/understanding-ipv6-what-solicited-node-multicast>