

Broadcast and Multicast



- IPv4 supports broadcast to all hosts on 255.255.255.255
- Routers do not forward broadcast traffic so this stays on the local subnet
- IPv6 does not support broadcast traffic
- It does however support multicast to all hosts on the local subnet (ff02::1) which is functionally equivalent
- Many services which use broadcast to 255.255.255.255 in IPv4 use more specific multicast addresses in IPv6 (eg ff05::1:3 for all DHCP servers)

Global Unicast Address Configuration

- Enable IPv6 routing first

```
R1(config)#ipv6 unicast-routing
```

```
R1(config-if)#int f0/0
```

```
R1(config-if)#ipv6 add 2001:db8:0:1::1/64
```

```
R1(config-if)#int f2/0
```

```
R1(config-if)#ipv6 add 2001:db8:0:0::1/64
```

Global Unicast Address Verification

```
R1#sh ipv6 interface brief
FastEthernet0/0          [up/up]
    2001:DB8:0:1::1
FastEthernet2/0          [up/up]
    2001:DB8::1
! truncated
```

Lab

