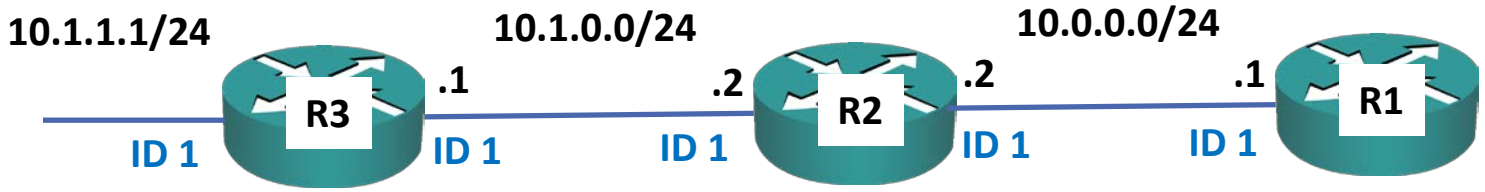
EIGRP for IPv6

- EIGRP is not split into a different version for IPv6 support (unlike OSPF)
- EIGRP supports both IPv4 and IPv6 address families

IPv4 EIGRP Configuration

```
R2(config)#router eigrp 100
R2(config-router)#network 10.0.0.0 0.255.255.255
```



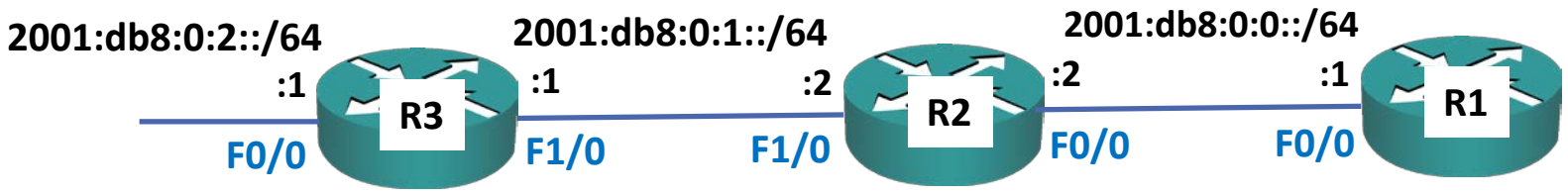
EIGRP Configuration - network

```
R2(config-router)#network 10.0.0.0 0.255.255.255
```

- The network command means:
  - Look for interfaces with an IP address which falls within this range.
  - Enable EIGRP on those interfaces – send out and listen for EIGRP hello messages, and peer with adjacent EIGRP routers.
  - Advertise the network and mask which is configured on those interfaces.

EIGRP for IPv6 Configuration

```
R2(config)#ipv6 unicast-routing
R2(config)#ipv6 router eigrp 100
R2(config-rtr)#int f0/0
R2(config-if)#ipv6 eigrp 100
R2(config-if)#int f1/0
R2(config-if)#ipv6 eigrp 100
```



IPv4 EIGRP Router ID

- EIGRP routers are identified to each other by EIGRP Router ID
- The Router ID is in the form of an IPv4 address
- The highest loopback address will be used by default (or highest address on another interface if no loopback is present)
- This can be overridden by manually configuring the Router ID

```
R1(config)#router eigrp 100
R1(config-router)#router-id 10.0.0.1
```

EIGRP for IPv6 Router ID

- The EIGRP for IPv6 Router ID is in the form of an IPv4 address (not IPv6)
- The highest loopback address will be used by default (or highest address on another interface if no loopback is present)
- This can be overridden by manually configuring the Router ID

```
R1(config)#ipv6 router eigrp 100
R1(config-rtr)#router-id 10.0.0.1
```

Passive Interfaces

```
R1(config)#router eigrp 100
R1(config-rtr)#passive-interface loopback 0
R1(config-rtr)#passive-interface FastEthernet2/0

R1(config)#ipv6 router eigrp 100
R1(config-rtr)#passive-interface loopback 0
R1(config-rtr)#passive-interface FastEthernet2/0
```

EIGRP Verification