



R1

ipv6 unicast-routing

interface Loopback1

no ip address

ipv6 address 2000:1:1:1::/64 eui-64

ipv6 ospf 1 area 0

!

interface FastEthernet0/0

no ip address

duplex full

ipv6 address FC00:1:1:1::/64 eui-64

ipv6 ospf 1 area 0

!

interface Serial1/0

```
no ip address
ipv6 address 2000:DB8::/64 eui-64
ipv6 enable
ipv6 ospf 1 area 0
serial restart-delay 0
ipv6 router ospf 1
router-id 1.1.1.1
```

R2

```
interface Serial1/0
no ip address
ipv6 address 2000:DB8::/64 eui-64
ipv6 ospf 1 area 0
serial restart-delay 0
```

!

```
ipv6 unicast-routing
interface Serial1/1
no ip address
ipv6 address 2001:DB9::/64 eui-64
ipv6 ospf 1 area 0
serial restart-delay 0
```

R3

```
interface Loopback1
no ip address
ipv6 address 2001:1:1:1::/64 eui-64
ipv6 enable
```

```
ipv6 ospf 1 area 0
```

```
!
```

```
interface FastEthernet0/0
```

```
no ip address
```

```
duplex full
```

```
ipv6 address FC00:2:2:2::/64 eui-64
```

```
ipv6 enable
```

```
ipv6 ospf 1 area 1
```

```
R1#sho ipv6 route ospf
```

```
O 2001:1:1:1:C803:7FF:FE80:0/128 [110/128]
```

```
via FE80::C802:1CFF:FEF8:0, Serial1/0
```

```
O 2001:DB8::/64 [110/192]
```

```
via FE80::C802:1CFF:FEF8:0, Serial1/0
```

```
O 2001:DB9::/64 [110/128]
```

```
via FE80::C802:1CFF:FEF8:0, Serial1/0
```

```
R2#sho ipv6 route ospf
```

```
O 2000:1:1:1:C801:7FF:FE28:0/128 [110/64]
```

```
via FE80::C801:7FF:FE28:0, Serial1/0
```

```
O 2001:1:1:1:C803:7FF:FE80:0/128 [110/64]
```

```
via FE80::C803:7FF:FE80:0, Serial1/1
```

```
O 2001:DB8::/64 [110/128]
```

```
via FE80::C803:7FF:FE80:0, Serial1/1
```

```
O FC00:1:1:1::/64 [110/65]
```

```
via FE80::C801:7FF:FE28:0, Serial1/0
```

```
R3#sho ipv6 route ospf
```

```
O 2000:1:1:1:C801:7FF:FE28:0/128 [110/128]
```

```
via FE80::C802:1CFF:FEF8:0, Serial1/1
```

```
O 2000:DB8::/64 [110/128]
```

```
via FE80::C802:1CFF:FEF8:0, Serial1/1
```

```
O 2001:DB9::/64 [110/128]
```

```
via FE80::C802:1CFF:FEF8:0, Serial1/1
```

```
O FC00:1:1:1::/64 [110/129]
```

```
via FE80::C802:1CFF:FEF8:0, Serial1/1
```

```
PC1> ping fc00:1:1:1:2050:79ff:fe66:6800
```

```
fc00:1:1:1:2050:79ff:fe66:6800 icmp_seq=1 ttl=64 time=0.001 ms
```

```
fc00:1:1:1:2050:79ff:fe66:6800 icmp_seq=2 ttl=64 time=0.001 ms
```

```
fc00:1:1:1:2050:79ff:fe66:6800 icmp_seq=3 ttl=64 time=0.001 ms
```

```
fc00:1:1:1:2050:79ff:fe66:6800 icmp_seq=4 ttl=64 time=0.001 ms
```

```
fc00:1:1:1:2050:79ff:fe66:6800 icmp_seq=5 ttl=64 time=0.001 ms
```

```
PC2> ping fc00:1:1:1:2050:79ff:fe66:6800
```

```
fc00:1:1:1:2050:79ff:fe66:6800 icmp6_seq=1 ttl=58 time=160.128 ms
```

```
fc00:1:1:1:2050:79ff:fe66:6800 icmp6_seq=2 ttl=58 time=42.089 ms
```