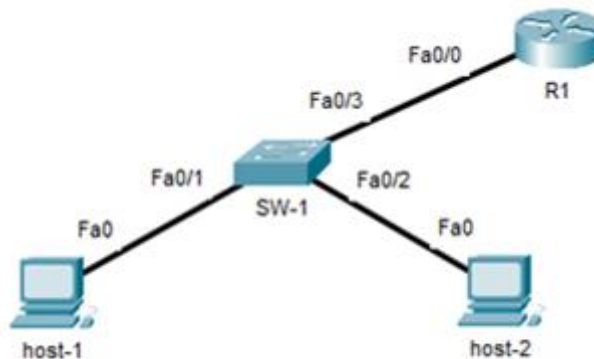


IPv6 Autoconfiguration

Lab Summary

Enable IPv6 Stateless Address Autoconfiguration (SLAAC) on all hosts connected to R1 router.

Figure 1 Lab Topology



Lab Configuration

Start Packet Tracer File: **ipv6 autoconfiguration.pkt**

Click on *R1* icon and select *CLI* folder.

Step 1: Enter global configuration mode

```
R1 > enable  
R1# configure terminal
```

Step 2: Enable IPv6 packet forwarding

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

Step 3: Configure an IPv6 address for interface Fa0/0

```
R1(config)# interface fastethernet0/0  
R1(config-if)# description link to SW-1  
R1(config-if)# ipv6 address 2001:db8:3c4d:1::3/64  
R1(config-if)# ipv6 address autoconfig  
R1(config-if)# no shutdown  
R1(config-if)# end  
R1# copy running-config startup-config
```

Step 4: Verify Lab

Confirm the IPv6 configuration is correct on R1 and interface Fa0/0 is enabled with IPv6 addressing. Ping R1 from host-1 to verify Layer 3 connectivity (same subnet). Confirm all network connected devices are assigned a link-local address (FE80) and an IPv6 global unicast address with 2001:db8:3c4d:1::/64 prefix.

```
R1# show running-config
```

```
R1# show ipv6 interface brief
```

```
host-1: c:\> ping 2001:db8:3c4d:1::3
```

```
host-2: c:\> ping 2001:db8:3c4d:1::3
```

```
host-1: c:\> ipv6config /all
```

```
host-2: c:\> ipv6config /all
```