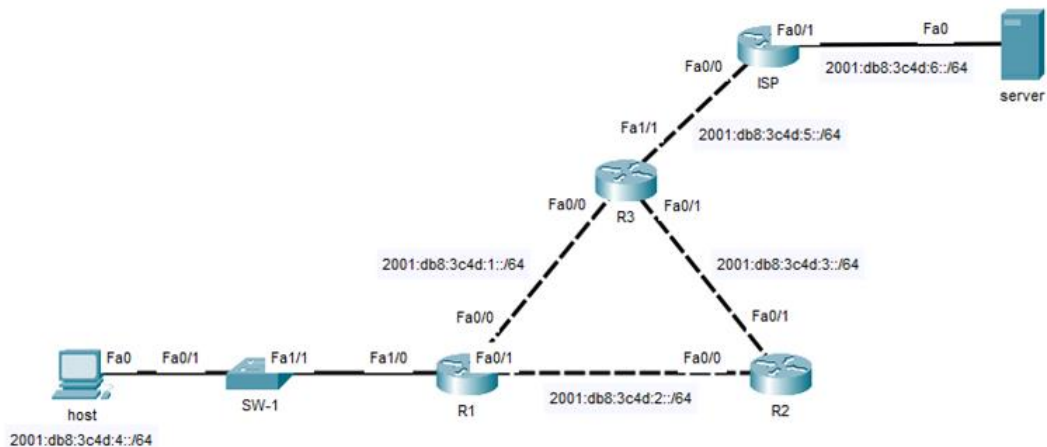


IPv6 Default Route

Lab Summary

Configure a default route on R3 that enables internet access for hosts.

Figure 1 Lab Topology



Lab Configuration

Start Packet Tracer File: **ipv6 default route.pkt**

Click on *host* icon, select *Desktop*, and *Command Prompt*.

Step 1: Verify there is currently no internet connectivity to server from host.

```
C:\>ping 2001:db8:3c4d:6::1
```

Pinging 2001:db8:3c4d:6::1 with 32 bytes of data:

Reply from 2001:DB8:3C4D:1::2: Destination host unreachable.

Reply from 2001:DB8:3C4D:1::2: Destination host unreachable.

Reply from 2001:DB8:3C4D:1::2: Destination host unreachable.

Reply from 2001:DB8:3C4D:1::2: Destination host unreachable.

Ping statistics for 2001:DB8:3C4D:6::1:

Packets: Sent = 4, Received = 0, Lost = 4 (**100% loss**)

Click on *R3* icon and select *CLI* folder.

Step 2: Enter global configuration mode

```
R3 > enable
```

```
R3# configure terminal
```

Step 3: Configure IPv6 default route on R3 with next hop address of 2001:db8:3c4d:5::2

```
R3(config)# ipv6 route ::/0 2001:db8:3c4d:5::2
```

Click on *host* icon, select *Desktop*, and *Command Prompt*.

Step 4. Ping the server 2001:db8:3c4d:6::1 from host to verify the default route is working.

```
C:\>ping 2001:db8:3c4d:6::1
```

Pinging 2001:db8:3c4d:6::1 with 32 bytes of data:

```
Reply from 2001:DB8:3C4D:6::1: bytes=32 time=10ms TTL=125
```

```
Reply from 2001:DB8:3C4D:6::1: bytes=32 time<1ms TTL=125
```

```
Reply from 2001:DB8:3C4D:6::1: bytes=32 time<1ms TTL=125
```

```
Reply from 2001:DB8:3C4D:6::1: bytes=32 time<1ms TTL=125
```

Ping statistics for 2001:DB8:3C4D:6::1:

```
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss)
```