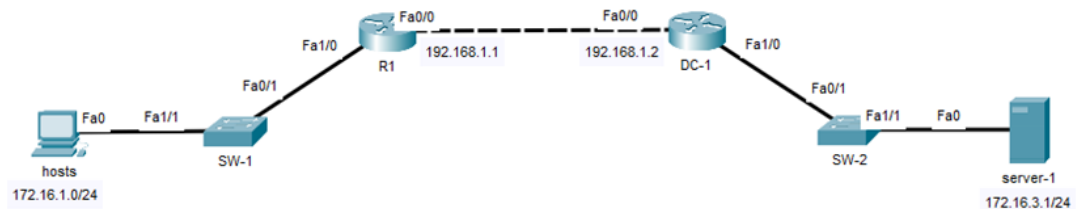


IPv4 Default Route

Lab Summary

Configure a default route on R1 for packet forwarding to all unknown destinations. The default route specifies the next hop address to forward packets when no route to the destination subnet exists in the routing table.

Figure 1 Lab Topology



Lab Configuration

Start Packet Tracer File: **ipv4 default route.pkt**

Step 1: Go to a command prompt on host and verify there is no current network connectivity to server-1.

```
c:\> ping 172.16.3.1
```

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

Step 2: Enter global configuration mode

```
R1> enable
```

```
R1# configure terminal
```

Step 3: Configure a default route on R1 with a next hop of 192.168.1.2 (DC-1 interface Fa0/0).

```
R1(config)# ip route 0.0.0.0 0.0.0.0 192.168.1.2
```

```
R1(config)# end
```

```
R1# copy running-config startup-config
```

Step 4: Verify Lab

Verify the configuration is correct and confirm the default route with next hop 192.168.1.2 is installed in the routing table of R1. In addition, confirm there are no routes to DC-1 subnet 172.16.3.0 in the routing table. Ping the data center server (172.16.3.1) to verify the default route is working correctly.

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

```
R1# show ip route
```

```
S* 0.0.0.0/0 [1/0] via 192.168.1.2
```

```
host: c:\> ping 172.16.3.1
```