Thursday, July 3, 2025 2:03 PM

🦉 What is a Passive Interface?

In routing (especially in **RIP, OSPF, EIGRP**), a **passive interface** is a router interface that:

- **Does NOT send routing updates**,
- **Still allows the interface to receive routes**, and
- **Keeps the network advertised** to others.

✅ Purpose of Passive Interface:

- **Improve security** by **not broadcasting routing updates** on untrusted interfaces (like LANs).
- **Reduce unnecessary traffic**.
- Prevent accidental neighbor relationships (e.g., in RIP/OSPF/EIGRP).

🧠 Where it's useful:

- You want to **advertise a network** but **don't want to send routing updates** on that interface.

📄 Example Scenario:

Router interface connected to **end-users or PCs**, not another router.

🔧 Cisco Command (RIP Example):

```
Router(config)# router rip
Router(config-router)# passive-interface FastEthernet0/0
```

- This stops RIP updates on FastEthernet0/0
- But still advertises that network to other routers

💡 In Short:

Feature	Normal Interface	Passive Interface
Sends routing updates	✅ Yes	❌ No
Receives routing updates	✅ Yes	✅ Yes
Network advertised to others	✅ Yes	✅ Yes

📌 Supported in:

- **RIP**
- **EIGRP**
- **OSPF**
- **BGP** (different behavior)