

# **JUNIOR NETWORK ENGINEER INTERVIEW VAULT**



**Real Technical Interview Questions & Answers  
for Entry-Level & CCNA Candidates**

**by Gokhan Kosem**

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# **Junior Network Engineer Interview Vault**

**Real Technical Interview Questions & Answers  
for Entry-Level & CCNA Candidates**

**Gokhan Kosem - IPCisco.com**

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## **Junior Network Engineer Interview Vault**

Interview Questions & Practical Preparation Guide

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Written and Prepared by

**Gokhan Kosem**

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# MODULE: NETWORK FUNDAMENTALS

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## Question 5

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### JUNIOR LEVEL NETWORK ENGINEER INTERVIEW

**What is a ring topology?  
Follow-up: How does data  
move in a ring topology?**

**Answer:** In a ring topology, each device connects to two other devices, forming a loop.



**Follow-up:** Data travels from one device to the next around the ring.




## Question 6

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JUNIOR LEVEL NETWORK ENGINEER INTERVIEW


# What does the broadcast address represent in a subnet? Follow-up: Can it be assigned to a host?

**Answer:** The broadcast address is used to send traffic to all devices in the subnet.



Subnet

**Follow-up:** It cannot be assigned to a host.



192.168.1.255  
(Broadcast)

Not Allowed for Host

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## Question 7

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# What is a MAC address table? Follow-up: How does a switch build it?

**Answer:** It maps MAC addresses to switch ports.

MAC Address	Switch Port
00:11:22:55:44:55	Port 1
00:11:22:59:44:25	Port 1
...	...
AA:BB:CC:DD:EE:FF	Port 2
...	...
...	Port 1



**Follow-up:** The switch learns it by examining source MAC addresses of incoming frames.



# MODULE: SWITCHING FUNDAMENTALS

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## Question 47

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### JUNIOR LEVEL NETWORK ENGINEER INTERVIEW

**What is VLAN Trunking Protocol (VTP)?  
Follow-up: What problem does VTP help solve?**

**Answer:** VTP is used to share VLAN information between switches.



**Follow-up:** It helps keep VLAN configurations consistent.




## Question 49

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JUNIOR LEVEL NETWORK ENGINEER INTERVIEW

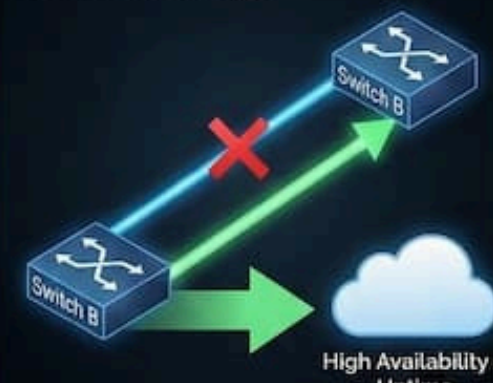
# What is a redundant link? Follow-up: Why is it important?

**Answer:**  
A backup network connection.



The diagram shows two network switches, both labeled 'Switch A'. A blue arrow labeled 'Primary link' connects the top of the left switch to the top of the right switch. A green arrow labeled 'Backup Link' connects the bottom of the left switch to the bottom of the right switch. Below the switches, several document icons are shown with lines indicating data flow.

**Follow-up:**  
It improves availability.



The diagram shows two network switches, both labeled 'Switch B'. A blue arrow labeled 'Primary link' connects the top of the left switch to the top of the right switch, with a red 'X' over it indicating failure. A green arrow labeled 'Backup Link' connects the bottom of the left switch to the bottom of the right switch. A green arrow points from the bottom of the right switch to a cloud icon labeled 'High Availability / Uptime'.

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# MODULE: ROUTING FUNDAMENTALS

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## JUNIOR LEVEL NETWORK ENGINEER INTERVIEW

**Question:** What are the administrative distance values of OSPF and EIGRP?

**Follow-up:** Which protocol is preferred when both advertise the same route?

### Answer: AD Values



### Follow-up: Preference



Because EIGRP has a lower administrative distance, **EIGRP routes are preferred over OSPF routes.**

JUNIOR LEVEL NETWORK ENGINEER INTERVIEW

What is the difference between a distance vector and a link-state routing protocol? Follow-up: Give one example of each.

**Answer:** Distance vector protocols share route information with neighbors; link-state protocols share full network topology.

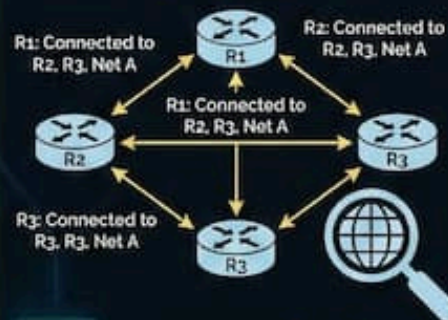
Distance Vector



Example: RIP

Link-state protocols share full network topology.

Link-State



Example: OSPF

# MODULE: NETWORK TROUBLESHOOTING

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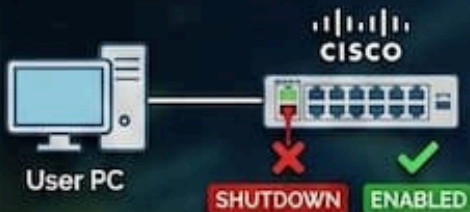
## JUNIOR LEVEL NETWORK ENGINEER INTERVIEW ENGINEER INTERVIEW

**Question:** You connect a PC to a Cisco switch port and there is no connectivity.

**What is your first check?**

**Follow-up:** Which command helps verify the port status?

### Answer: First Check



Check if the switch port is enabled and not shut down.

### Follow-up: Command

```
>_
show interface status

Port Name  Status  Wlan Duplex Speed  Type
-----
Gi1/0/1    connected  10      a-40  a-1000  10/100/1000BaseTX
```

The **show interface status** command can be used.

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## JUNIOR LEVEL NETWORK ENGINEER INTERVIEW

**Question:** Users report they cannot access a website, but the network link is up. What would you check first?

**Follow-up:** What would you check if ping works but the website still doesn't open?

**Answer:**

### First Check - DNS



First, check DNS resolution.

### Follow-up: Ping Works, Website Fails



- 🌐 DNS Settings
- ✅ HTTP/HTTPS Access
- ✅ Firewall Rules
- ✅ Proxy Configuration

If ping works, check DNS settings, HTTP/HTTPS access, firewall rules, or proxy configuration.