

78 Cisco Networking interview questions to ask your applicants

Questions

1. Can you explain the differences between TCP and UDP? Under what circumstances would you use one over the other?
2. What is a VLAN, and how does it help in network segmentation?
3. Describe the process of configuring a static IP address on a Cisco router.
4. How do you troubleshoot a slow network connection? What tools would you use?
5. What is the purpose of a firewall in a network environment? Can you name some common types?
6. Explain what NAT is and how it works in a networking context.
7. What are the key differences between OSPF and EIGRP routing protocols?
8. How would you secure a wireless network? What protocols and methods would you implement?
9. Can you describe the function of Spanning Tree Protocol (STP) in a switched network?
10. What steps would you take to recover from a network outage or failure?
11. Can you explain the OSI model and its layers?
12. How would you configure a DHCP server on a Cisco router?
13. What is the difference between a router and a switch?
14. Explain the concept of subnetting and why it's important.
15. What is a VLAN trunk and when would you use it?
16. How would you troubleshoot a connectivity issue between two devices on different VLANs?
17. What is the purpose of the Spanning Tree Protocol (STP), and how does it work?
18. Explain the difference between access and trunk ports on a switch.
19. What is a routing protocol, and can you name a few examples?
20. What is the purpose of HSRP, and how does it work to provide redundancy in a network?
21. Can you explain the differences between different types of network topologies, such as star, ring, and mesh?
22. How would you configure quality of service (QoS) on a Cisco device, and why is it important?
23. What is the function of the Access Control List (ACL) in network security, and how would you implement one?
24. Describe the process of configuring and managing a site-to-site VPN on a Cisco router.
25. How do you analyze and interpret the output of the 'show interface' command?
26. What steps would you take to set up a basic BGP configuration?
27. Can you explain the role of DHCP relay and when you would use it?
28. What are some common causes of packet loss in a network, and how would you troubleshoot it?
29. How would you implement port security on a Cisco switch, and what are its benefits?
30. What is the function of Syslog in network management, and how would you configure it on a Cisco device?
31. Describe the difference between RADIUS and TACACS+ in network authentication.
32. What is the purpose of a load balancer, and how would you configure one in a Cisco environment?
33. How can you ensure high availability in a network design?
34. Explain the concept of link aggregation and how it benefits network performance.
35. Can you explain the difference between stateful and stateless firewalls?
36. How would you approach designing a scalable network infrastructure for a growing company?
37. What steps would you take to perform a network security audit?
38. How do you manage and monitor network performance in a large enterprise setting?
39. What is the role of MPLS in modern networking?
40. Can you describe a time when you had to troubleshoot a complex network issue? What steps did you take?
41. How do you ensure compliance with network security standards and regulations?
42. How do software-defined networking (SDN) and traditional networking differ?
43. What is the role of the Address Resolution Protocol (ARP) in a network, and how does it function?
44. Can you explain the process of configuring access control lists (ACLs) to filter traffic on a Cisco device?
45. What are the main differences between IPv4 and IPv6, and why is the transition important?
46. How would you implement and manage Virtual Private Network (VPN) connections for remote users?
47. Describe how you would set up a basic configuration for a Cisco firewall.
48. What is the purpose of the Link Layer Discovery Protocol (LLDP), and how does it operate?
49. How do you configure port mirroring on a Cisco switch for network analysis?
50. What are common techniques to prevent DHCP spoofing in a network environment?
51. Can you explain the difference between static and dynamic routing, and when to use each?
52. How would you troubleshoot a routing loop in a network?
53. What is the function of the Network Time Protocol (NTP), and how would you configure it on a Cisco device?
54. Can you describe how to use SNMP for network monitoring and management?
55. Describe the process you follow for diagnosing a network issue. What steps do you take to identify the root cause?
56. How would you deal with an IP address conflict in a network? What tools and methods would you use to resolve it?
57. Can you explain how you would troubleshoot a device that is not connecting to the network?
58. What steps would you take to troubleshoot intermittent connectivity issues on a wireless network?
59. How do you approach pinpointing the source of network latency problems?
60. What methods would you use to diagnose a routing issue between two different networks?
61. How do you determine if a network problem is hardware or software related?
62. Describe a time when you had to troubleshoot a complex VLAN issue. What was your approach and the outcome?
63. What is the role of logging in network troubleshooting, and how do you use logs effectively?
64. How would you handle a situation where multiple users are experiencing slow internet speeds?
65. Describe a time when you had to diagnose a network outage. What was your approach and solution?
66. How would you handle a situation where a critical network device fails during peak business hours?
67. Imagine you're upgrading a network's hardware and software. How would you ensure minimal downtime?
68. How would you manage a situation where multiple users report intermittent Wi-Fi connectivity issues?
69. Describe your process for preparing a network for a company-wide software deployment.
70. How would you approach troubleshooting a situation where a particular application is running slowly across the network?
71. Explain how you would deal with a scenario where a network segment is experiencing significant packet loss.
72. What steps would you take if you discovered unauthorized devices connected to your network?
73. Describe how you would handle a situation where a user's device cannot obtain an IP address from the DHCP server.