54 Ansible interview questions to ask administrators and engineers

Questions

1. Can you explain what Ansible is and its primary benefits?

2. How does Ansible differ from other configuration management tools like Puppet or Chef?

3. What's the difference between a playbook and a role in Ansible?

4. Can you explain Ansible's idempotency and why it's important?

5. How would you handle sensitive data, like passwords or API keys, in Ansible playbooks?

6. How would you troubleshoot a failed Ansible playbook?

7. How would you manage different environments (dev, staging, prod) using Ansible?

8. Can you explain the concept of 'facts' in Ansible and how you might use them?

9. What is an Ansible inventory file and why is it important?

10. Can you explain what a task is in Ansible and give an example?

11. How would you use variables in an Ansible playbook?

12. What's the purpose of the 'gather_facts' directive in a playbook?

13. How do you run a specific task or set of tasks in a playbook?

14. What are Ansible modules and can you name a few commonly used ones?

15. How would you copy files from the control node to target hosts?

16. Can you explain what ad-hoc commands are in Ansible and when you might use them?

17. What's the difference between 'copy' and 'template' modules in Ansible?

18. How would you install a package on multiple servers using Ansible?

19. What is an Ansible handler and when would you use one?

20. How do you include tasks from another file in your playbook?

21. Can you explain what 'become' does in Ansible and why it's useful?

22. How would you use conditionals in Ansible tasks?

23. What is the purpose of tags in Ansible playbooks?

24. How do you define and use custom variables in Ansible?

25. Can you explain what an Ansible vault is and why it's important?

26. How would you run a playbook on a subset of hosts in your inventory?

27. What's the difference between 'include' and 'import' in Ansible?

28. How would you use loops in Ansible tasks?

29. How would you describe the importance of configuration management in an IT environment?

30. Can you describe how you would use Ansible to ensure that a specific service is running on all servers?

31. How do you handle configuration drift in a large-scale environment using Ansible?

32. What strategies would you use to manage and maintain Ansible playbooks for a rapidly scaling environment?

33. How would you approach creating an Ansible playbook for deploying a multi-tier application?

34. How do you ensure security and compliance when using Ansible for configuration management?

35. Can you explain the role of inventory files in Ansible and how you would manage them in a large environment?

36. How would you structure a complex Ansible project using roles?

37. Can you explain the concept of role dependencies in Ansible?

38. What's the purpose of the 'meta' directory in an Ansible role?

39. How do you override default variables in a role?

40. Can you describe the order of variable precedence in Ansible playbooks and roles?

41. How would you create a reusable role for deploying a web server across different environments?

42. What's the difference between static and dynamic includes in Ansible playbooks?

43. How do you use role defaults effectively?

44. Can you explain how to use Ansible Galaxy to manage roles?

45. Describe a situation where you had to optimize an Ansible playbook for performance. What steps did you take?

46. Can you share an experience where you had to integrate Ansible with another tool or service? How did you approach it?

47. Tell me about a time when you faced a challenge in automating a complex deployment with Ansible. What was the outcome?

48. How would you handle a scenario where a playbook must be executed on a large number of servers with varying configurations?

49. Imagine you have a failed playbook run in production. What are the key steps you would take to rectify the situation?

50. Can you provide an example of how you used Ansible to automate a repetitive task? What were the benefits?

51. Describe a time when you had to collaborate with a team to implement Ansible in an existing environment. What was your role?

52. How would you approach documenting your Ansible playbooks and roles for future users in your team?

53. Have you ever had to train someone on using Ansible? What approach did you take to ensure their understanding?

54. Can you share an experience where you had to modify an existing playbook to meet new business requirements? What challenges did you face?