# 71 Linux admin interview questions (and answers)

## Questions

1. Can you explain the difference between a hard link and a symbolic link in Linux?
2. How would you troubleshoot a server that's running out of disk space?
3. What is the purpose of the /etc/fstab file and how would you modify it?
4. Describe the process of setting up a LAMP stack on a fresh Linux installation.
5. How do you manage and monitor system logs in Linux?
6. Explain the concept of file permissions in Linux and how to modify them.
7. What steps would you take to secure a Linux server after a fresh installation?
8. How would you schedule a recurring task in Linux?
9. Can you describe the boot process of a Linux system?
10. What tools would you use to diagnose network connectivity issues on a Linux server?
11. Can you explain the purpose of the /var directory in Linux?
12. What is the significance of the 'sudo' command in Linux?
13. How do you check the current running processes in a Linux system?
14. What is a package manager and why is it important in Linux?
15. Can you explain what a daemon is in Linux?
16. How would you find a specific text string in a large log file?
17. What is the purpose of the 'cron' command in Linux?
18. How would you change the hostname of a Linux system?
19. How do you set up and configure a firewall on a Linux system?
20. Can you describe the process of creating and managing a RAID array in Linux?
21. What are the steps to upgrade the kernel on a Linux system?
22. How would you manage user accounts and permissions in an enterprise Linux environment?
23. Explain how you would monitor and optimize system performance on a Linux server.
24. Can you describe the process of creating and managing LVM (Logical Volume Manager) on Linux?
25. How do you handle software dependencies and conflicts when installing packages on Linux?
26. What is SELinux and how do you configure it?
27. Describe how you would implement and manage disk quotas in Linux.
28. How do you configure and manage network interfaces on a Linux server?
29. What are some common tools for performing backups on Linux, and how do you use them?
30. How would you set up and configure a DNS server on Linux?
31. Can you explain the process of setting up and managing SSH keys for secure access?
32. What steps would you take to recover a corrupted Linux system?
33. How do you automate repetitive administrative tasks in Linux using scripting?
34. How would you implement a high-availability solution for a critical service running on Linux?
35. Explain the concept of Linux namespaces and how they relate to containerization.
36. Describe a complex issue you've encountered with system performance and how you diagnosed and resolved it.
37. How would you approach capacity planning for a rapidly growing Linux-based infrastructure?
38. Explain the concept of Linux kernel tuning and provide examples of when and how you might adjust kernel parameters.
39. How would you implement and manage a centralized logging solution for a distributed Linux environment?
40. Describe how you would implement a disaster recovery plan for a critical Linux-based application.
41. How would you identify and terminate a process that's consuming excessive CPU resources?
42. Explain the difference between a zombie process and an orphan process. How would you deal with each?
43. What is the significance of the 'nice' value in process scheduling? How would you change it?
44. How do you view real-time process statistics in Linux?
45. Can you explain the concept of process forking and its importance in Linux?
46. What tools would you use to analyze process memory usage?
47. How would you troubleshoot a process that's hanging or unresponsive?
48. Explain the difference between threads and processes in Linux.
49. What is a process control group (cgroup) and how is it used?
50. How would you set resource limits for a specific user or process?
51. Can you describe the purpose and usage of the 'strace' command?
52. How do you prioritize processes to ensure critical services get more system resources?
53. What are some best practices for securing SSH access on a Linux server?
54. Can you explain the role of iptables in Linux security and how to configure it?
55. What steps would you take to secure sensitive files and directories on a Linux system?
56. How do you monitor for unauthorized access or suspicious activity on a Linux server?
57. What is the importance of regular software updates and patch management in maintaining Linux security?
58. Describe how you would use tools like Fail2ban to enhance security on a Linux server.
59. What is the principle of least privilege, and how would you implement it in a Linux environment?
60. Explain the difference between symmetric and asymmetric encryption. How would you use them in Linux?
61. How can you use SELinux to enhance the security of a Linux system?
62. What are some common vulnerabilities in Linux systems, and how can they be mitigated?
63. Describe a time when you had to recover a Linux server after a crash. What steps did you take?
64. How would you handle a situation where a critical service on a Linux server suddenly stops working?
65. If a user reports that their permissions on a shared directory have changed unexpectedly, how would you investigate and resolve the issue?
66. What actions would you take if you discovered unauthorized access attempts on a Linux server?
67. How would you manage and mitigate a sudden spike in load on a critical Linux server?
68. Explain how you would handle a situation where the Linux system is experiencing network latency issues. What tools and steps would you use?