

98 Linux Troubleshooting Interview Questions and Answers

Questions

1. If a program is running slowly, how would you investigate the cause?
2. How do you check the amount of free disk space on a Linux system?
3. Explain how to find a specific file on the entire system when you don't know its exact location.
4. What command would you use to display the contents of a text file?
5. How can you determine the IP address of your Linux machine?
6. What is the purpose of the 'ping' command, and how do you use it?
7. Describe how to check which processes are currently running on your system.
8. If a program is not responding, what steps can you take to stop it?
9. How do you change the permissions of a file or directory?
10. What is the difference between 'sudo' and 'su' commands?
11. Explain how to create a new directory in Linux.
12. How can you copy a file from one directory to another?
13. What command is used to move or rename files and directories?
14. How do you remove a file or directory from the command line?
15. Describe how to view the last few lines of a log file.
16. Explain how to redirect the output of a command to a file.
17. How do you search for a specific text string within a file?
18. What is the purpose of the 'chmod' command, and how does it work?
19. How can you find out which user is currently logged in?
20. Explain how to list all files and directories in the current directory, including hidden ones.
21. If your internet connection is not working, what are some basic troubleshooting steps you would take in Linux?
22. How can you determine the amount of RAM installed on a Linux system?
23. What command do you use to shutdown or reboot a Linux system from the command line?
24. Explain how to compress a file or directory using the 'tar' command.
25. How do you extract files from a '.tar.gz' archive?
26. If you accidentally delete a file, what steps might you take to try and recover it?
27. How would you diagnose a situation where a specific application is consuming excessive CPU resources on a Linux server?
28. Describe the steps you'd take to troubleshoot a network connectivity issue where a Linux server cannot reach an external website.
29. Explain how you would identify and resolve a situation where a Linux server is running out of disk space.
30. Walk me through the process of diagnosing a slow performing database query on a Linux server hosting a database.
31. How would you troubleshoot a scenario where a user is unable to log into a Linux server using SSH?
32. Describe the steps you'd take to identify and fix a problem where a critical system service fails to start automatically on boot.
33. Explain how you would diagnose and resolve a situation where a Linux server is experiencing high memory usage.
34. How would you troubleshoot a scenario where a file is unexpectedly being modified or deleted on a Linux server?
35. Describe the steps you'd take to diagnose a problem where a Linux server is experiencing intermittent network outages.
36. Explain how you would identify and resolve a situation where a particular user is experiencing slow performance on a Linux server.
37. Walk me through the process of diagnosing a situation where a scheduled cron job is not executing as expected.
38. How would you troubleshoot a scenario where a Linux server is unable to resolve domain names?
39. Describe the steps you'd take to identify and fix a problem where a custom application is crashing frequently on a Linux server.
40. Explain how you would diagnose and resolve a situation where a Linux server is experiencing a sudden increase in I/O wait.
41. How would you troubleshoot a scenario where a user is reporting that their files are missing after a recent system update?
42. Describe the steps you'd take to diagnose a problem where a Linux server is failing to authenticate users against an Active Directory domain.
43. Explain how you would identify and resolve a situation where a particular process is consuming excessive network bandwidth on a Linux server.
44. Walk me through the process of diagnosing a situation where a website hosted on a Linux server is experiencing slow loading times.
45. How would you troubleshoot a scenario where a Linux server is generating excessive log files?
46. Describe the steps you'd take to diagnose a problem where a critical system file has been corrupted on a Linux server.
47. Explain how you would identify and resolve a situation where a newly installed software package is causing conflicts with existing system libraries.
48. How would you troubleshoot a scenario where a Linux server is experiencing kernel panics?
49. Describe the steps you'd take to diagnose a problem where a Linux server is unable to communicate with a storage array.
50. Explain how you would identify and resolve a situation where a user is unable to access a shared network drive on a Linux server.
51. Walk me through the process of diagnosing a situation where a virtual machine running on a Linux server is experiencing performance issues.
52. How would you troubleshoot a scenario where a Linux server is exhibiting symptoms of a potential security breach?
53. Describe the steps you'd take to diagnose a problem where a Linux server is failing to apply security updates.
54. Explain how you would identify and resolve a situation where a custom script is failing to execute properly on a Linux server.
55. Explain what steps you would take to diagnose a server that is suddenly inaccessible over the network, but you can access it locally.
56. How would you diagnose a situation where a specific application is consistently slow, but the overall system performance appears normal? Elaborate on the tools and techniques you'd employ.
57. Explain your approach to troubleshooting a network connectivity issue where a server can ping external addresses but cannot resolve hostnames. What are the potential causes and how would you investigate?
58. Describe a scenario where a file system becomes read-only unexpectedly. What steps would you take to identify the root cause and restore write access?
59. A critical service on your Linux server crashes intermittently without leaving any obvious error messages. How would you proceed to debug this issue?
60. You suspect a memory leak in a running process. Detail the tools and methods you would use to confirm the leak and identify the source code responsible.
61. How would you troubleshoot a situation where a user is unable to log in to a Linux system, even with the correct credentials? Consider different authentication methods.
62. Explain how you would diagnose and resolve a problem where a newly installed kernel module is causing system instability or crashes.
63. Describe your approach to troubleshooting a situation where a background process is consuming excessive CPU resources, impacting overall system performance.
64. A scheduled cron job is failing to execute as expected. What steps would you take to determine the cause of the failure and ensure the job runs successfully?
65. How would you investigate a scenario where a Linux server is experiencing high disk I/O, but no specific process appears to be responsible? Consider different monitoring tools.
66. Explain how you would troubleshoot a situation where a virtual machine (VM) running on a Linux host is experiencing network connectivity issues that the other VMs are not.
67. Describe your approach to diagnosing and resolving a problem where a systemd service fails to start automatically at boot time. Consider dependency issues.
68. You suspect a security breach on your Linux server. What steps would you take to investigate the incident, identify the attacker's entry point, and mitigate the damage?
69. How would you troubleshoot a situation where a shared library is causing conflicts between different applications on a Linux system? Consider versioning issues.
70. Explain how you would diagnose and resolve a problem where a Linux server is experiencing frequent kernel panics. What tools and techniques would you use to gather information?
71. Describe your approach to troubleshooting a situation where a database server on a Linux system is experiencing performance degradation due to slow queries. Consider profiling tools.
72. How would you investigate a scenario where a Linux server is sending out spam emails? What steps would you take to identify the compromised account or process?
73. Explain how you would troubleshoot a situation where a containerized application running on a Linux system is failing to start due to resource constraints. Consider cgroups.
74. Describe your approach to diagnosing and resolving a problem where a Linux server is experiencing high network latency. What tools and techniques would you use to identify the bottleneck?
75. How would you troubleshoot a situation where a user is reporting that their files are being corrupted on a shared network file system (NFS)? Consider file locking issues.
76. Explain how you would diagnose and resolve a problem where a Linux server is unable to connect to an external API due to SSL/TLS certificate issues. Consider certificate validation.
77. Describe your approach to troubleshooting a situation where a Python application is crashing due to a segmentation fault. How would you use debugging tools to find the error?
78. How would you troubleshoot a situation where you suspect a race condition is causing unpredictable behavior in a multi-threaded application? What tools would you use?
79. How would you diagnose a situation where a critical service unexpectedly stops running, leaving no immediately obvious error messages in its logs?
80. Explain your approach to troubleshooting a system experiencing intermittent network connectivity issues.
81. Describe a scenario where you suspect a memory leak is impacting system performance. How would you confirm and identify the leaking process?
82. A user reports slow application performance. Walk me through the steps you'd take to identify the bottleneck, considering CPU, memory, disk I/O, and network.
83. How would you troubleshoot a situation where a NFS server is running, but you are unable to SSH into it?
84. Explain your methodology for diagnosing and resolving a kernel panic.
85. Describe your process for identifying and mitigating a rogue process consuming excessive system resources.
86. How would you determine if a system has been compromised by a rootkit, and what steps would you take to remediate the situation?
87. You suspect a specific system call is failing. How can you trace system calls made by a process to verify this and understand the failure?
88. Explain your approach to troubleshooting a complex dependency issue preventing a critical application from starting.
89. Describe a time you had to debug a complex bash script. What tools and techniques did you use?
90. How do you approach troubleshooting performance degradation in a virtualized environment?
91. Explain how you would troubleshoot a situation where a user is unable to print to a network printer.
92. A critical database server is experiencing high latency. Describe your troubleshooting steps.
93. How would you approach troubleshooting a situation where a service is failing to start after a system reboot?
94. Explain how you would troubleshoot a situation where a user's home directory has incorrect permissions.
95. Describe your methodology for diagnosing and resolving a situation where a RAID array is degraded.