Linux Server - Interview Prep for Linux Server

1. What are the key responsibilities of a Linux Server Administrator?

Key responsibilities include installing and configuring Linux systems, managing servers, ensuring system security, performing backups, monitoring system performance, patching, and automating tasks using scripting.

2. Which Linux distributions are most commonly used in enterprises and why?

Common distributions include Red Hat Enterprise Linux (RHEL), CentOS Stream, Ubuntu Server, and SUSE Linux. RHEL is favored for its stability, support, and security features in enterprise environments.

3. What is systemd and how does it differ from init?

systemd is a system and service manager for Linux that initializes user space and manages system processes after boot. It offers parallel service startup, on-demand daemon activation, and improved performance over traditional init.

4. How do you secure a Linux server?

Security steps include configuring firewalls (e.g., UFW, firewalld), disabling unused ports, using SSH key authentication, setting strong user permissions, keeping software up to date, and using tools like SELinux or AppArmor.

5. What tools are used for configuration management and automation in Linux servers?

Popular tools include Ansible, Puppet, Chef, and SaltStack. These tools help automate server provisioning, configuration, and management tasks across multiple systems.

6. Explain the importance of LVM and how it works.

Logical Volume Manager (LVM) allows flexible disk management by creating logical volumes over physical volumes. It supports resizing, snapshots, and efficient space management without downtime.

7. What is the role of containers in modern Linux environments?

Containers, managed by platforms like Docker and Kubernetes, allow application packaging with dependencies into isolated environments. They enable faster deployment, scalability, and resource efficiency.

8. Describe how you would troubleshoot a server that has become unresponsive.

Check hardware status, access logs (`/var/log`), use `top`, `htop`, `free`, or `iostat` to inspect system resource usage. Investigate recent changes, boot in rescue mode, and validate network status using `ping` or `netstat`.

9. What are some common monitoring tools used for Linux servers?

Tools include Nagios, Zabbix, Prometheus with Grafana, Netdata, and Datadog. These tools provide performance metrics, alerting, and historical data analysis.

10. What are the current trends in Linux server administration?

Trends include Infrastructure as Code (IaC), DevOps integration, cloud-native applications, container orchestration, zero-trust security models, and hybrid cloud management using tools like Terraform and AWS CLI.