RHEL Linux - Red Hat System Administration Practice Exam (Sample)

Study Guide

Everything you need from our exam experts!

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Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- **Practice answering questions under realistic conditions,**
- **Improve accuracy and speed,**
- **Review explanations to strengthen weak areas, and**
- **Approach the exam with greater confidence.**

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here’s how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don’t just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There’s no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!

Questions

1. Which account on Linux is similar to the local Administrator account on Windows?

A. regular user

B. system user

C. root

D. there is no such account

2. What file do you modify to configure static IP addressing?

A. /etc/sysconfig/network-scripts/ifcfg-[interface_name]

B. /etc/network/interfaces

C. /etc/ipconfig.conf

D. /etc/netplan/01-netcfg.yaml

3. How do you display the last logins of users on the system?

A. logins

B. last

C. who

D. history

4. In terms of file permissions, which permissions override others?

A. Others; group; user

B. Group; others; user

C. User; group; others

D. User; others; group

5. Choose the best answer: Which of these is not a severity level in a Red Hat bug report?

A. Low severity

B. They all are possible severity levels

C. Extreme severity

D. Medium severity

6. Which process state indicates that the process has stopped?

A. T

B. S

C. Z

D. X

7. What is the use of the 'grep' command?

A. to rename files

B. to search text using patterns

C. to initialize a system

D. to copy files

8. How can you find out the TCP/IP configuration of a RHEL system?

A. ifconfig

B. ip addr show

C. netstat -rn

D. tcpdump -i eth0

9. Which of the following commands is used to display the current working directory in Linux?

A. pwd

B. cd

C. dir

D. ls

10. The command 'su' without a target user indicates that you want to:

A. login as a regular user

B. login as a system user

C. change the working directory of the current user

D. login as the root user

Answers

1. C
2. A
3. B
4. C
5. C
6. A
7. B
8. B
9. A
10. D

Explanations

1. Which account on Linux is similar to the local Administrator account on Windows?

A. regular user

B. system user

C. root

D. there is no such account

In Linux, the account that serves a role similar to the local Administrator account in Windows is the root account. The root account has unrestricted access and control over the entire operating system, allowing it to perform any task, from installing software to configuring system settings. This account is the highest level of authority within the Linux operating system, enabling system administrators to execute commands that are restricted for regular users. Using the root account, one can manage and modify system files, access all directories, and manage user permissions, akin to an Administrator's capabilities in a Windows environment. Other user types like regular users and system users have limited privileges designed to enhance security and reduce the risk of accidental or malicious changes to the system. These accounts are not equivalent to the administrative capabilities of the root account and are typically used for day-to-day tasks without granting full control over the system. The option suggesting that there is no such account does not apply because the root account clearly fulfills the role of system administration in Linux, directly comparable to the Administrator account in Windows.

2. What file do you modify to configure static IP addressing?

A. /etc/sysconfig/network-scripts/ifcfg-[interface_name]

B. /etc/network/interfaces

C. /etc/ipconfig.conf

D. /etc/netplan/01-netcfg.yaml

To configure static IP addressing on a RHEL Linux system, the correct file to modify is located at /etc/sysconfig/network-scripts/ifcfg-[interface_name]. This file is specific to Red Hat-based distributions, including RHEL, CentOS, and Fedora. When you want to set a static IP address for a network interface, this configuration file contains important parameters such as the device name, the network interface type, the IP address itself, the subnet mask, and gateway. The structure of this file allows the system to correctly configure the network settings during startup or when the network service is restarted. Modifying this file is the standard method in these distributions, and it enables fine-tuning of the network interface settings to meet the needs of your specific environment. After editing this file, a restart of the networking service is typically required for the changes to take effect. Other options, such as the file located at /etc/network/interfaces, are relevant to Debian-based distributions (like Ubuntu) and not applicable to RHEL. Similarly, /etc/ipconfig.conf and /etc/netplan/01-netcfg.yaml relate to other configurations and systems, making them unsuitable for static IP configuration on RHEL.

3. How do you display the last logins of users on the system?

A. logins

B. last

C. who

D. history

To display the last logins of users on the system, the command used is "last". This utility reads from the `/var/log/wtmp` file, which keeps a record of all logins and logouts. When you execute the "last" command, it provides a chronological list of the last logged-in users, along with the time they logged in, the duration of their sessions, and their terminal details. This information can be invaluable for system administrators to monitor user activity and login trends. In contrast, the other options serve different purposes. The "logins" command is not a standard command for viewing user login history and may not be available in all distributions. The "who" command shows currently logged-in users rather than historical login information. The "history" command displays a list of commands entered by the user in the current shell session, which does not relate to user login information. Therefore, "last" is the most appropriate choice for viewing the history of user logins on the system.

4. In terms of file permissions, which permissions override others?

A. Others; group; user

B. Group; others; user

C. User; group; others

D. User; others; group

The correct choice emphasizes that user permissions take precedence over group and others' permissions within the Linux file permission model. In this model, each file or directory has three levels of access: user (the owner of the file), group (members of the file's group), and others (everyone else). When determining access, the permissions for the user are evaluated first. If the user has the necessary permissions, they can access the resource without consideration of the group or others' permissions. This hierarchy is crucial because it ensures that the file owner retains the most control over their files, which is a foundational principle of file security and management in Linux. In scenarios where a user has the necessary permissions, those permissions will always be honored regardless of the broader group or others' settings. Conversely, if the user's permissions do not allow access, the subsequent group or others' permissions will not be considered. This structure reflects the importance placed on the file owner's rights, ensuring they have the final say over their files.

5. Choose the best answer: Which of these is not a severity level in a Red Hat bug report?

A. Low severity

B. They all are possible severity levels

C. Extreme severity

D. Medium severity

The identification of "Extreme severity" as not a recognized severity level in Red Hat bug reports is accurate because Red Hat standardizes its severity levels for consistency and clarity in tracking and prioritizing bugs. Typically, the severity levels used include categories like Low, Medium, and High, but they do not extend to "Extreme." Each severity level is designed to categorize the impact of the bug on the functionality or usability of the system. A Low severity report indicates minor issues that do not significantly affect the operation, Medium severity indicates a moderate level of impact, and High severity denotes critical issues that require immediate attention. However, the absence of an "Extreme severity" classification suggests that while issues can be serious, they are generally contained within the established severity framework, ensuring effective communication and prioritization. In contrast, the other terms listed as severity levels (Low, Medium) are indeed part of the standardized set used in Red Hat bug reporting, so these options are valid classifications. Additionally, suggesting that they all are possible severity levels also incorporates the recognized levels but inaccurately includes "Extreme."

6. Which process state indicates that the process has stopped?

A. T

B. S

C. Z

D. X

The process state that indicates a process has stopped is represented by the letter "T". In Linux, when a process is in the "T" state, it signifies that the process has been stopped, usually due to receiving a signal like SIGSTOP or because it has been suspended by the user (for instance, via a job control command in a terminal). When a process is stopped, it is not using any CPU time, and its resources are preserved in memory, allowing it to be resumed later. This is important for job control that allows users to manage multiple processes in a shell environment efficiently. Understanding the other process states helps to clarify why "T" is the correct answer. The "S" state indicates a process that is sleeping, waiting for something to happen (like I/O), and is still active in terms of the CPU. The "Z" state refers to a zombie process, which has completed execution but still has an entry in the process table because its parent process hasn't collected its exit status. The "X" state is not a commonly recognized state in standard Linux process management. In terms of process management, knowing these states is essential for system administration and troubleshooting, making it easier to handle processes effectively within a Linux environment.

7. What is the use of the 'grep' command?

A. to rename files

B. to search text using patterns

C. to initialize a system

D. to copy files

The 'grep' command is a powerful utility in Unix-like operating systems, including RHEL Linux, that is primarily used for searching through text files using specific patterns defined by regular expressions. When you use 'grep', you can specify a pattern to search for, and 'grep' will filter the contents of files, displaying only the lines that match the given pattern. This is particularly useful for analyzing logs, configuration files, and any text data where you want to extract specific information. The command can be combined with various options to modify its behavior, such as ignoring case sensitivity, displaying line numbers, or providing recursive search capabilities. Its versatility makes it a standard tool in the command-line toolbox for system administrators and developers alike. In contrast, renaming files falls under commands like 'mv', initializing a system involves processes like booting or using commands such as 'systemctl', and copying files is accomplished with the 'cp' command. Each of these alternatives serves a very different function and does not provide the text search capabilities that 'grep' is designed for.

8. How can you find out the TCP/IP configuration of a RHEL system?

A. ifconfig

B. ip addr show

C. netstat -rn

D. tcpdump -i eth0

To determine the TCP/IP configuration of a RHEL system, using the command "ip addr show" is the most effective method. This command provides detailed information about the network interfaces on the system, including their assigned IP addresses, subnet masks, and other relevant attributes. It is a part of the iproute2 package, which is the modern suite used for IP networking in Linux. The output of "ip addr show" displays all network interfaces and their respective configurations, making it easy to understand the current state of the system's TCP/IP settings. This command is also capable of showing information for both IPv4 and IPv6 addresses, which is important for modern networking. While "ifconfig" can also yield similar information regarding network interfaces and their configurations, it has been largely replaced by the "ip" command in most Linux distributions, including RHEL. This makes "ip addr show" a more relevant and preferred option. Commands like "netstat -rn" focus specifically on the routing table rather than the broader network interface configuration, and "tcpdump -i eth0" is a packet analysis tool used for monitoring network traffic, which does not directly provide information about the system's TCP/IP configuration. Thus, "ip addr show" is the appropriate

9. Which of the following commands is used to display the current working directory in Linux?

A. pwd

B. cd

C. dir

D. ls

The command that is used to display the current working directory in Linux is 'pwd'. This stands for "print working directory," and when executed in the terminal, it outputs the full pathname of the directory that you are currently in. In contrast, 'cd' is the command used to change the current directory rather than display it. Although 'dir' and 'ls' are commands that list files and directories within the current directory, they do not provide the pathname of the current directory itself. Understanding these distinctions is crucial for navigating the Linux file system efficiently.

10. The command 'su' without a target user indicates that you want to:

A. login as a regular user

B. login as a system user

C. change the working directory of the current user

D. login as the root user

When the command 'su' is executed without specifying a target user, it defaults to switching to the root user, which is the administrative account in a Linux environment. This command is a shorthand for "substitute user" or "switch user," and it is commonly used by system administrators to gain elevated privileges necessary for performing administrative tasks. Using 'su' alone prompts the user to enter the root password, allowing them to access the root account temporarily. This action is essential for managing system-level configurations, installing software, managing users, and executing commands that require higher permissions. Other options such as logging in as a regular or a system user do not apply here since specifying 'su' without parameters does not switch to those accounts. Additionally, 'su' does not change the working directory of the current user by default; it is primarily concerned with user identity rather than the current working directory context. Therefore, using 'su' directly leads to obtaining root privileges for the user, facilitating access to critical system functions.

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

https://rhellinux-redhatsystemadministration.examzify.com

We wish you the very best on your exam journey. You've got this!