File Content Management in Linux

Project description

This simulation project puts the performer, **Maheswar Reddy Avula**, into the position of a system administrator for an organization. Responsibilities include obtaining information contained in server log and user data files and finding files with specific names.

Searching for error messages in a log file

Direction: In this task, you must navigate to the /home/analyst/logs directory and report on the error messages in the **server_logs.txt** file.

The **cd** command was used to navigate to **/home/analyst/logs** as follows:

```
analyst@7ac38da80a35:~$ ls
logs   project   reports   temp
analyst@7ac38da80a35:~$ cd logs
```

The **grep** command was used to filter the **server_logs.txt** file to display all lines containing the string "**error**" as follows:

```
analyst@7ac38da80a35:~/logs$ grep 'error' server_logs.txt
2022-09-28 13:56:22 error    The password is incorrect
2022-09-28 15:56:22 error    The username is incorrect
2022-09-28 16:56:22 error    The password is incorrect
2022-09-29 13:56:22 error    An unexpected error occurred
2022-09-29 15:56:22 error    Unauthorized access
2022-09-29 16:56:22 error    Unauthorized access
```

Find files containing specific strings

Direction: The admin must navigate to the **/home/analyst/reports/users** directory and use the correct Linux commands and arguments to search for user data files that contain a specific string "**Q1**" and "**access**" in their names.

The cd command was used to navigate to the required directory.

```
analyst@7ac38da80a35:~$ ls
logs   project   reports   temp
analyst@7ac38da80a35:~$ cd reports/users
```

The **grep** command was used in conjunction with the **ls** command using piping operator | to display all files containing the string "**Q1**" and "**access**" as follows:

```
analyst@7ac38da80a35:~/reports/users$ ls | grep 'Q1'
Q1_access.txt
Q1_added_users.txt
Q1_deleted_users.txt
analyst@7ac38da80a35:~/reports/users$
```

Search more file contents

Direction: The admin must search for information contained in user files and report on users that were added and deleted from the system.

The ls command was used to display all the contents of the **/home/analyst/reports/users** directory.

```
analyst@7ac38da80a35:~/reports/users$ ls | grep 'access'
Q1_access.txt
Q2_access.txt
Q3_access.txt
Q4_access.txt
```

The **Q2_deleted_users.txt** file was searched for username **jhill** using the **grep** command as follows:

```
analyst@7ac38da80a35:~/reports/users$ grep 'jhill' Q2_deleted_users.txt
1025        jhill      Sales
analyst@7ac38da80a35:~/reports/users$
```

The **Q4_deleted_users.txt** file was searched for department name "**Human Resources**" using the grep command as follows:

```
analyst@7ac38da80a35:~/reports/users$ grep "Human Resources" Q4_added_users.txt
1151        sshah      Human Resources
1145        msosa      Human Resources
analyst@7ac38da80a35:~/reports/users$
```

Summary

Information contained in server log and user data files was obtained and files with specific names were found using appropriate commands. All tasks were successfully completed in accordance with the directions given by the organization.