

Chapter 9: System Administration

2075 Bhadra

Q. What is the significance of system administration? Describe the role & responsibilities of system administrator to keep the system updated & efficient. Explain with an example.

Ans. System administration refers to the management of one or more hardware & software systems. The task is performed by a system administrator who monitors system health, monitors and allocates system resources like disk space, performs backups, provides user access, manage user accounts, monitors system security and performs many other functions.

The roles & responsibilities of a system administrator to keep the system updated and efficient are:

1. User administration (setup and maintaining account)
2. Maintaining system.
3. Verify that peripherals are ~~work~~ working properly.
4. Quickly arrange repair for hardware in occasion of hardware failure.
5. Monitor system performance.
6. Create file system.
7. Install software.
8. Create a backup and recover policy.
9. Monitor network communication.
10. Update system as soon as new version of OS and application software comes out.
11. Password and identity management.

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Q Write short notes on:

Administration tasks

⇒ Roles and responsibilities of system administrator.
[2075 Bhadra]

2073 Bhadra.

Q Short notes on:

Duties and responsibilities of system administrator.

⇒ [2075 Bhadra]

2073 Magh.

Q Short notes on:

System administration

⇒ [2075 Bhadra]

2072 Ashwin

Q. What is system administration? How is a special user different from a general user? Explain.

Ans. General user is designed to provide basic permission for completing common daily tasks. It allows user to launch applications, create new documents, and modify basic system configurations. These operations affect only the user who is logged in. They do not include system wide changes such as installation of new software.

On other hand special user has the capability of performing any operation or task on the system. This includes all of the permission that are granted to a standard user account plus the ability to make major OS changes,

install new software, and create and modify other user accounts. It also has the permission for to set permission for other users on the system.

2072 Magh., 2070 Bhadra

Short notes on:

Role of system administrator

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Duties & Responsibilities of system administrator.

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2071 Magh., 2070 Bhadra

Q Write short notes on:

Shell scripts.

Ans. A shell script is a computer program designed to run by the Unix/Linux shell which could be one of the following:

- The Bourne Shell
- The C Shell
- The Korn Shell
- The GNU Bourne-Again Shell

A shell is a command-line interpreter and typical operations performed by shell scripts include file manipulation, program execution and printing text. Shell accept human readable commands from user and convert them into something which kernel can understand. The shell gets started when the user logs in or start the terminal.

The reason to write shell scripts are:

- o To avoid repetitive work and automation
- o System monitoring
- o Adding new functionality to the shell
- o For routine backups.

Advantages:

- o Quick start
- o Writing shell scripts are much quicker.
- o Interactive debugging.
- o Command and syntax are exactly the same as those entered in the command line.

Disadvantages:

- o Prone to costly errors
- o Slow execution speed.
- o Not well suited for large and complex task.
- o Provide minimal data structure.