

## **SECTION1: INTRODUCTION OF UNIX / LINUX**

- What is Linux?
- Why Linux is better?
- Flavors of Linux
- Why RHEL?
- Linux in Cloud
- Linux Architecture
- user, shell and kernel

## **SECTION2: FILE ATTRIBUTES**

- Basic Commands
- Managing files and directories
- Links
- File Compressions
- Filter Commands
- Grep, sed, find

## **SECTION3: THE KING OF EDITORS**

- What are the types of Editors
- Nano, gedit...etc
- Modes of operations
- Find and Replace
- Delete and Paste
- Yank and Paste
- Execute mode operations

## **SECTION4: PROCESS MANAGEMENT**

- What is a process?
- Process states
- Running processes with background and foreground
- Adjust process priority and kill process
- Process States and Zombies
- Monitoring the current system

## **SECTION5: MANAGE USERS AND GROUPS**

- Managing Users
- User properties and where are they stored on the system.
- Understanding /etc/passwd, /etc/group, /etc/shadow and /etc/shadow
- Change password and Password aging policies
- Managing Groups
- User account Initializations
- User configuration file
- Sudo configurations for users and groups

## **SECTION6: FILE PERMISSIONS**

- What is a permission?
- Types of permissions
- Access Levels
- What is a umask?
- Changing permissions with chmod
- What is chgrp?
- What is chown?

## **SECTION7: NETWORKING BASICS**

- What is a network and Networking?
- Managing Hostname & Ip-address
- Managing port numbers
- Remote login connections
- Telnet
- SSH
- SCP & WinSCP

## **SECTION8: SHELL PROGRAMMING**

- What is a Shell?
- Types of shells
- Shell types
- When to use shell script?
- The first shell script
- Interactive shell script
- Shell keywords

## **SECTION9: SHELL VARIABLES**

- What is a variable?
- Variable types
- System defined variables
- Paths
- User defined variables
- Null variables
- Operators
- Types of operators

## **SECTION10: TAKING DECISIONS**

- If-then-fi statement
- If-then-else-fi statement
- Nested if-elses
- Use of logical operators
- The Test commands

## **SECTION11: LOOP CONTROL STRUCTURE**

- What is a loop?
- While loop
- Until loop
- The for loop
- The break statement
- The continue statement

## **SECTION12: POSITIONAL PARAMETERS**

- Command line arguments
- Positional parameter values
- Set keyword
- Setting values of positional parameters
- Shift on positional parameters
- Displaying date on desired format

## **SECTION13: FUNCTIONS**

- What is a function?
- Simple introduction to functions
- Scope of the variable.
- Returning a variable value
- Passing parameters to a function
- Positional parameters in functions

## **SECTION14: SCHEDULING JOBS**

- What is automation?
- One time task execution with AT
- Jobs with crontab
- Shell script to send automatic mails
- Shell script to monitor file system with mail alerts
- Jobs output redirection

## **SECTION15: DEBUGGING SHELL SCRIPTS**

- What is Debugging?
- Fix bugs (errors)
- Built in debugging help

**TRAINER: Mr. R N RAJU (Red Hat Certified & Cloud Engineer)**

- **MOBILE NUMBER:** +91 9848363431
- **MAIL ID:** [Rnraju4u@gmail.com](mailto:Rnraju4u@gmail.com)
- **YOUTUBE:** SysGeeks