

Unix and Linux Advanced

Introduction: You know how to use the command line interface in UNIX and Linux to perform basic tasks. However, at times, you may need to perform certain complex tasks, which require a more detailed knowledge of the file-management and text-processing utilities. This instructor-led UNIX and Linux Advanced User course expands on some of the basic file-management and text-processing utilities and commands, and introduces several advanced utilities and commands. The course provides a foundation for further studies in the UNIX and Linux programming or administration domains.

You will customize the work environment on your computer, work with files using advanced commands and utilities, work with the text contained in files using text-processing commands and utilities, manage files using the advanced file management techniques, and work with shell scripts containing conditional and loop control statements.

Duration: Instructor-led, group-paced, classroom-delivery learning model with structured hands on activities – 14 hours (2 days)

Objectives: Upon successful completion of this course, students will be able to:

- Customize the UNIX and Linux shell environment.
- Work with file
- Work with text
- Manage files by using advanced techniques
- Work with shell scripts

Prerequisites: The user should be proficient in using the basic system functions, such as opening and saving files, managing windows, starting applications, and configuring desktop preferences of the Windows operating system. The user should also be familiar with personal computer (PC) concepts, such as hardware, software, processing, and data storage. The user should have taken UNIX and Linux: Fundamentals or possess equivalent knowledge.

Course Outline

Quick review of Unix Fundamentals

- Review pipes versus redirection
- Review the vi editor

Customizing the Shell Environment

- Understand the Korn Shell
- Display the Shell Variables
- Customize the Korn Shell Environmental Files
- Create Aliases

Working with Files

- Redirect Output
- Combine Commands
- Perform Advanced File Searches
- Compare Files

Working with Text

- Search for Text Patterns
- Work with Lines and Fields
- Format Text
- Locate Patterns and Process Text
- Process Text in Real Time

Working with Shell Scripts

- Create and Execute Shell Scripts
- Work with text and numerical variables
- Execute Statements Conditionally
- Execute Statements Repeatedly
- Use Functions