

# UNIX and Linux: Advanced User

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## Course Description

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. The UNIX and Linux: Advanced User course expands on some of the basic file-management and text-processing utilities and commands, and also introduces several advanced utilities and commands. The course provides a foundation for further studies in the UNIX and Linux programming or administration domains.

## Course Objective:

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.

## Target Student:

Novice UNIX and/or Linux users who are migrating to a UNIX or Linux or to a mixed Windows/UNIX/Linux environment.

## 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.

## Performance-Based Objectives

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

- customize the UNIX and Linux shell environment.
- work with files.
- work with text.
- manage files by using advanced techniques.
- work with shell scripts.

## Course Content

### Lesson 1: Customizing the Shell Environment

Topic 1A: Understand the KornShell

Topic 1B: Display the Shell Variables

Topic 1C: Customize the KornShell Environmental Files

Topic 1D: Create Aliases

### Lesson 2: Working with Files

Topic 2A: Redirect Output

Topic 2B: Combine Commands

Topic 2C: Perform Advanced File Searches

Topic 2D: Compare Files

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## **Lesson 3: Working with Text**

Topic 3A: Search for Text Patterns

Topic 3B: Work with Lines and Fields

Topic 3C: Format Text

Topic 3D: Locate Patterns and Process Text

Topic 3E: Process Text in Real Time

## **Lesson 4: Managing Files**

Topic 4A: Determine the Disk Space Used by Files

Topic 4B: Manage Links

Topic 4C: Compress Files

Topic 4D: Archive Files

## **Lesson 5: Working with Shell Scripts**

Topic 5A: Create Shell Scripts

Topic 5B: Execute Statements Conditionally

Topic 5C: Execute Statements Repeatedly

Topic 5D: Use Functions