

# *Introduction to Korn Shell Scripting for UNIX/Linux*

System  
Administrators

Network  
Operations

Systems  
Engineers

UNIX  
Users

UNIX  
Programmers

Database  
Administrators

Developers  
and Analysts

**2** DAY  
✓

**Hands On**  
Workshop

# Introduction to Korn Shell Scripting for Linux – Hands-on Workshop

*Skills and expertise to help you increase your knowledge in the field of UNIX Korn Shell scripting*

## About this Workshop:

This hands-on Korn Shell scripting course provides a comprehensive introduction to writing Korn Shell scripts. Besides covering fundamental syntax for program flow control, variable assignment and substitution, I/O control, and mathematical expressions, it emphasizes the powerful features of these shells, including built-in string operators, variable typesetting and conversion, functions, communication and control. The creative use of standard UNIX and Linux utilities within scripts to solve problems is stressed throughout. The course is designed for the administrators and programmers who are developing, testing, or integrating software on UNIX or Linux, as well as for advanced UNIX or Linux users. The students will have the opportunity to learn from examples coded in shell. Comprehensive hands-on exercises are integrated throughout to reinforce learning and develop real competency.



## Linux Shell Scripting

Korn Shell is a Unix shell which was developed by David Korn at Bell Labs in the early 1980s and announced on July 14, 1983. The initial development was based on Bourne shell source code

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## Targeted Audience

- UNIX/Linux Systems Administrators and Network Operation Teams
- UNIX/Linux Systems Engineers and Troubleshooters
- Database Administrators and System Analysts
- System engineers using all other flavors of UNIX operating systems
- DevOps Engineers - Linux, Shell Scripting
- Korn Shell Script Programmers
- UNIX Users and Developers
- Anyone aspiring to make a career in UNIX and Shell Scripting field

## Prerequisites

Two to three months of using any flavor of UNIX/Linux operating system

## Course Outlines

- Introduction to UNIX operating system and Korn Shell
- Shell history
- Basic shell concepts
- Shell variables and positional parameters
- Flow control in a shell script
- Testing of return codes and traps
- Using vi Editor
- Effective use of variables and filters
- Functions and typeset
- Standard in, standard out and standard error
- Shell features such as arithmetic and string handling
- Shell variables and Metacharacters
- Using regular expressions
- Feeding input into a script from the command line
- Error checking
- Functions and case statements
- Shell execution and file permissions
- Using various UNIX utilities in Shell Scripting
- Running the Shell Script

This two-day course contains both simple and more complex hands-on programming labs to deepen the students understanding of presented concepts and facilities and to gain experience in writing simple shell scripts helping them to design, testing, and debugging their day-to-day simple tasks.

## What you will learn in this Shell Scripting training course?

In this two-day course, you will be introduced to the UNIX Operating System, its various features, UNIX commands, file systems and file handling, basic and advanced levels of UNIX and Shell scripting techniques. You will get to know about the control flow, commands execution and the UNIX Server process ecosystem. This shell programming course encompasses basic to advance level of Shell Scripting based on Korn Shell. The training is user friendly and will emphasize on real-time programs aligned to industry demands.

## About Korn Shell Scripting

Various UNIX operating systems need a way to communicate with the kernel. This is done is through the use of a shell. There are a few different shells that you can use, but this article focuses on the Korn shell.

In this workshop, you will be taught how to begin writing your first Korn shell script, and how to effectively use the vi editor and add the shell name as the first line. You will learn how to build some type of script header telling users who wrote the script, what the script does, and use UNIX binaries to perform various system administration level tasks.

In a nutshell, korn shell scripting can save you a lot of time and make your job so much easier. You will learn following best practices to follow standard steps like building your script header, define your variables, and error check your work.

The Korn shell has some of the most advanced programming capabilities of any command interpreter of its type. Although its syntax is nowhere near as elegant or consistent as that of most conventional programming languages, its power and flexibility are comparable.

## Course Contents

### Unit 1 – Introduction to Korn Shell Scripting

- Features of UNIX.
- Introduction to Father of Korn Shell.
- Korn shell overview.
- Various types of Shells.
- What is a shell script.
- Principle of Korn Shell script.
- Shell script example.
- Invoking shell script – Methods.
- Unit 1 Assessment.



*Opportunities are made,  
not found*

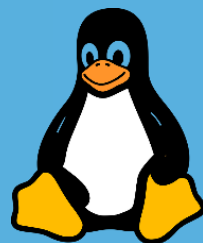
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## Unit 2

- An introduction to the vi editor.
- Starting vi Editor – Creating a new file.
- Edit and manipulate text files.
- Using functions cut, copy and paste functions.
- Using keystrokes.
- Set various parameters within vi editor.
- vi Options - Changing vi behavior.
- Understand how command line editing facility works within vi editor.
- Executing UNIX commands within vi editor.
- Import the contents of other files within the vi editor.
- Using command-line editing.
- Setting up \$HOME/.exrc file.
- Unit 2 Assessment.

Learn how to effectively use a shell for performing typical operations using Korn shell features including file manipulation, program execution, and printing text.



## Unit 3

- The “alias” Command.
- Setting up the alias.
- The use of .kshrc file.
- Removing the alias.
- Related commands.
- Using the history command.
- Changing the size of the history command.
- Unit 3 Assessment.

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## Unit 4 – Shell Basics

- Shell, Kernel and UNIX Metacharacters.
- Understand and use wildcards to access files with similar names.
- Redirection and pipes to control the input & output of processes.
- Understanding File Descriptors.
- Creating file by using cat command.
- Group commands in order to control their execution.
- Unit 4 Assessment

## Unit 5 – Using Shell Variables

- Identify variables that define your environment.
- Learn how to set, position, and delete variable.
- Define the use of the following quoting Metacharacters:
  - Double quotes “, Single quotes ‘, Backslash \
- Learn how to use command substitution.
- Special shell variables.
- Unit 5 Assessment.

## Unit 6 – UNIX Process and Shells

- Define UNIX process and Thread?
- Understanding UNIX process.
- Describe the relationship between parent and child processes.
- Login process environment.
- Creating a subshell – Parents and children.
- What is a shell script and writing a shell script.
- Create and identify different methods in executing the shell scripts.
- Exit codes from Commands.
- Understand Zombie process.
- Process – Conclusion.
- Unit 6 Assessment.

## Unit 7 – Controlling UNIX Processes

- Monitoring of UNIX process.
- Understand and initiate background processes.
- Learn how to terminate running or hanged processes.
- List useful process signals.
- Describe the use of nohup command.
- Controlling, suspending and starting foreground and background jobs.
- Unit 7 Assessment.

## Unit 8 – Additional Shell Features

- Writing Korn shell scripts.
- Learn how to pass positional parameters to shell scripts.
- Perform simple integer arithmetic by using expr command.
- Conditional Execution.
- The read command.
- Use loops within scripts.
- Unit 8 Assessment.

## Unit 9 – Linux Utilities I

- Use the find command.
- Use grep, egrep, and fgrep commands to look for text files for patterns.
- Use the head and tail commands to view exact lines in a file.
- Understand how commands works including: leave, last, lock, logins, and logname.
- Unit 9 Assessment.

## Unit 10 – Linux Utilities II

- Use which, whereis, whence, and what commands.
- The xargs command and its effective usage.
- Determine the type of a file using the file command.
- Understand how ff command is used to lists the file names and statistics for a file system.
- Use compress command to save disk space.
- Describe uncompress and zcat commands.
- Using gzip and gunzip commands.
- How to use the split command.
- Understand host and hostent commands.
- Unit 10 Assessment.

## Detail Information

Course Code	:TN130
Course Duration	: 2 Days Hands-on Course
Course Fee	: Obtain upon request
Course Location	: TLC, Customer onsite and Online on Zoom
Terms and Conditions:	: 100% Payment in Advance
Deliverables	: Student Guide and Course Certificate



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not found