

Comprehensive Linux Hands-On Course Summary

Description

This course will show the students the fundamentals of UNIX from a hands-on Linux perspective.

Topics

- Navigating Linux file commands.
- Navigation Linux directory manipulation and Linux directories.
- Bourne Shell Programming
- An Introduction to the PERL programming language
- Linux Power Tools – sort, grep, sed and awk
- Linux Batch commands – cron and at.

Audience

This class is designed for students who have an interest in working and using the Linux environment.

Duration

Five days

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Course Outline

I. Basic Linux File Commands

- A. cp
- B. mv
- C. rm
- D. touch
- E. ln
- F. rm
- G. chmod (permission management)
- H. Exercises

II. Basic Linux Directory Navigation and commands

- A. mkdir
- B. rmdir
- C. rm -rf
- D. mv
- E. cp -r
- F. ln (soft links to directories)
- G. cd
- H. Exercises

III. The vi editor

- A. Basic Navigation
- B. Saving/Creating files
- C. Three Modes
- D. Basic cursor navigation
- E. The .exrc file and set commands
- F. Exercises

IV. The Linux Environment Variables

- A. Customizing your environment
- B. The .profile/.bashrc/.bash_profile files
- C. .plan
- D. .project
- E. The finger command
- F. Exercises

V. Regular Expressions

- A. The grep command and regular expression operators
- B. Exercises

VI. The Shell programming environment

- A. The #!/usr/bin/bash directive
- B. The echo command
- C. if /elsif/else/fi statements
- D. Comparison Operators
- E. Mathematical Operators
- F. While statements
- G. The guessing game project (Exercises)

VII. sed

- A. The sed substitute operator
- B. The sed delete operator
- C. The sed insert operator
- D. The sed change operator
- E. The sed append operator
- F. Shell programming with sed
- G. Exercises

VIII.awk

- A. The awk command syntax
- B. The print operator
- C. The comparison operators
- D. Shell programming with awk
- E. Exercises

IX. An Introduction to PERL Programming

- A. The print statement
- B. Taking user input
- C. The PERL if statement
- D. The PERL while statement
- E. Class project/Exercises

X. Summary/Review

- A. Summary
- B. Review
- C. Additional Resources