Linux Shell Programming

Category: Infrastructure & IT Operations | **Vendor:** Linux Professional Institute

Duration: 16.00 hours (2 days) **13.0 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

This Linux Bash Shell Programming training course is designed to give delegates practical experience in developing and writing LINUX shell scripts. Most of the built-in shell commands are introduced together with the main program control structures. This course is not suitable for C shell programmers.

About This Course

This Linux Bash Shell Programming training course is designed to give delegates practical experience in developing and writing LINUX shell scripts. Most of the built-in shell commands are introduced together with the main program control structures. This course is not suitable for C shell programmers.

Who Should Attend

Programmers, administrators and support personnel who need to understand existing shell scripts, automate procedures and write their own utilities.

Prerequisites & Entry Requirements

General Prerequisites:

The Linux Shell Programming course assumes knowledge of the LINUX Operating System to the level covered in the Linux Introduction (LI) course. Some programming experience may also prove advantageous.

Learning Outcomes

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

To provide the skills needed to develop and customise shell programs.

The delegate will learn and acquire skills as follows:

- Writing simple scripts to enhance basic command output
- Using the various shell quoting mechanisms appropriately
- Manipulating shell variables and user-defined variables in scripts
- Implementing conditional execution facilities
- Using the shell's built-in loop constructs where appropriate
- Writing scripts to trap user interrupts
- User defined Functions
- Developing menu-driven shell scripts

Detailed Course Outline

Day 1

Course Introduction

- Administration and Course Materials
- Course Structure and Agenda
- Delegate and Trainer Introductions

Session 1: LINUX COMMAND REVIEW

- Basic Linux commands

- General commands

- File and directory handling commands

- Filename generation characters and regular expressions (regex)

- I/O Redirection features

- Other commands

Session 2: GETTING STARTED

- What is a shell script?

- Development guidelines

- Creating and editing shell scripts

- Naming and storing shell scripts

- Executing shell scripts

- Exercise: Write a simple shell script

Session 3: USING VARIABLES

- Environment variables

- Local variables

- Assigning values to variables

- Assessing variable values

- Using quotes

- Delimiting variable names

- Echo control sequences

- Exercise: Add variables to a script

Session 4: INTEGER ARITHMETIC

- Using the expr command

- Using the (( )) notation

- Exercise: Add integer arithmetic to a shell script

Session 5: HANDLING RUN TIME DATA

- The read command

- Command line arguments

- Exercise: Writing a generic shell script

- Exercise: Writing an interactive shell script

Session 6: CONDITIONAL EXECUTION

- The if statement

- The test command

- Exercise: Adding validation to previous scripts

Session 7: ADDITIONAL KORN, BASH & POSIX SYNTAX

- Other test notations

- Default and substitute variables

- Exit status codes

- Exercise

Day 2

Session 8: LOOP CONSTRUCTS

- The while loop

- The until loop

- The for loop

- The while true and until false loops

- Loop control commands

- Exercise: Enhancing the previously written scripts

- Exercise: Writing a script to copy files using a 'for' loop

- Exercise: Writing a script to generate numbers with the 'while' loop

Session 9: MULTI-BRANCH DECISIONS

- The case statement

- Menu driven applications

- Exercise: Developing and writing a menu system

Session 10: FUNCTIONS

- What is a function?

- Syntax

- Examples

- Exercise: Add a function to a script

Session 11: INTERRUPT HANDLING

- Interrupt signals

- Trapping interrupts

- Exercise: Adding traps to the menu script

Session 12: ADDITIONAL FEATURES AND FACILITIES

- The exec commands
- The includes notation
- More about loops
- Arrays
- Here Documents
- Exercise: Create a here script

Skills You Will Learn:

To provide the skills needed to develop and customise shell programs.

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Frequently Asked Questions

Q: What delivery options are available for Linux Shell Programming?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

Q: How many CPD hours does this course provide?

The 2-day Linux Shell Programming course provides up to 13.0 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Linux Shell Programming training?

The training takes place over 2 day(s), with each day lasting approximately 16.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Linux Shell Programming?

Yes, we provide corporate training, dedicated training, and closed classes for Linux Shell Programming. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: Linux Shell Programming, Linux, LSP

Q: Why choose Nexus Human for Linux Shell Programming?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Linux Shell Programming training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

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