



HP TRAINING

Hp Ux Advanced Shell Programming Tools

Master advanced HP-UX shell programming tools to automate tasks and optimize system performance.

DURATION

Flexible

LEVEL

Intermediate

FORMAT

Instructor-Led

- Globally Recognized Certification

- Expert-Led Hands-On Training

- Flexible Scheduling

Computer Pride | 1st Floor, ICEA Building, Kenyatta Avenue, Nairobi | www.computer-pride.co.ke

COURSE OVERVIEW

This advanced course on HP-UX Shell Programming Tools is meticulously designed for IT professionals seeking to master the art of scripting within the robust HP-UX environment. Delving beyond basic commands, you will explore the intricacies of Korn Shell (ksh) programming, coupled with powerful text processing utilities like sed and awk. The curriculum emphasizes crafting efficient, resilient, and intelligent scripts capable of automating complex system administration tasks, data manipulation, and service orchestration on HP-UX systems. Participants will gain a profound understanding of how to leverage the full potential of the HP-UX command-line interface to build sophisticated automation solutions.

By completing this certification, you will significantly enhance your ability to manage, monitor, and maintain HP-UX servers with unparalleled efficiency and precision. The skills acquired will directly translate into tangible benefits, including reduced manual intervention, improved system stability through proactive scripting, and faster troubleshooting capabilities. This course is an indispensable asset for those aiming to elevate their proficiency in enterprise-level UNIX administration and become a go-to expert for automation challenges in high-stakes HP-UX environments, thereby unlocking new career opportunities and contributing to more streamlined IT operations.

Level	Intermediate
Vendor	HP

COURSE CURRICULUM

01 Module 1: Advanced Korn Shell (KSH) Programming

- Advanced variable manipulation and parameter expansion techniques
- Working with associative arrays and complex data structures
- Implementing functions, libraries, and modular script design
- Signal handling and trap command for robust error management
- Co-processes and advanced I/O redirection
- Indirect parameter expansion and dynamic command execution

02 Module 2: Mastering Text Processing with sed and awk

- Advanced sed commands: branching, holding space, pattern space manipulation
- Multi-line record processing and pattern matching with awk
- Awk associative arrays and user-defined functions for complex data transformations
- Data validation, filtering, and reporting with awk scripts
- Integrating sed and awk for sophisticated text manipulation pipelines

03 Module 3: Robust Script Design and Debugging

- Implementing comprehensive error handling strategies and exit codes
- Advanced logging mechanisms for script execution and auditing
- Defensive scripting techniques for input validation and security
- Utilizing debugging tools (set -x, ksh -v) and effective troubleshooting methodologies
- Performance optimization techniques for large-scale scripts
- Script security considerations and best practices on HP-UX

04 Module 4: System Automation and Integration

- Automating complex system administration tasks (backups, monitoring, user management)
- Interacting with HP-UX system utilities (sar, ps, netstat, vgdisplay) through scripts
- Processing and manipulating configuration files (INI, XML, custom formats)
- Scripting for resource management and performance tuning

- Integrating shell scripts with databases via command-line tools (SQL*Plus, ODBC)
- Leveraging cron and at for scheduled task automation

05 Module 5: Regular Expressions and Advanced Pattern Matching

- Deep dive into regular expression syntax (BRE, ERE, PCRE nuances on HP-UX)
- Constructing complex patterns for precise data extraction and validation
- Advanced grep, egrep, and fgrep usage for file searching and filtering
- Practical applications of regular expressions in log analysis and data parsing
- Combining regular expressions with sed and awk for powerful text manipulation

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Senior HP-UX Systems Engineer**
- > **Enterprise Infrastructure Automation Architect**
- > **UNIX/Linux Advanced Scripting Specialist**

FREQUENTLY ASKED QUESTIONS

Q: What prior scripting experience is recommended to gain the most from this HP-UX Advanced Shell Programming Tools course?

To truly benefit from this advanced course, participants should have a solid foundational understanding of basic shell scripting concepts, including variable usage, conditional statements (if/else), looping constructs (for/while), and fundamental HP-UX commands. Prior exposure to Korn Shell and basic usage of utilities like grep, sed, and awk is highly recommended, as the course quickly progresses into sophisticated techniques and complex scenarios.

Q: Beyond basic automation, how does this course empower me to develop truly robust, error-tolerant, and performant scripts for critical HP-UX environments?

This course goes beyond simple task automation by focusing heavily on principles of robust script design. You will learn to implement comprehensive error handling using trap commands, exit codes, and robust logging mechanisms. We delve into defensive scripting techniques, input validation, and secure coding practices specific to HP-UX. Furthermore, modules on performance optimization and efficient use of advanced text processing tools like sed and awk will enable you to create highly performant and resilient scripts capable of handling complex, mission-critical operations without manual intervention or unexpected failures.

Q: Will this course cover techniques for integrating shell scripts with other programming languages or database systems commonly found in HP-UX enterprise setups?

Yes, this course includes a dedicated module on System Automation and Integration. While the primary focus is on shell programming, we will explore practical methods for interacting with external systems. This includes techniques for invoking and processing output from command-line database clients (e.g., SQL*Plus for Oracle, or generic ODBC tools) and basic strategies for passing data between shell scripts and other programming language executables compiled or available on HP-UX, facilitating a more integrated enterprise scripting solution.

ABOUT COMPUTER PRIDE



East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

Years of Excellence

10,000+

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READY TO ENROL?

Take the next step in your technology career.

Location

1st Flr, ICEA Building
Kenyatta Ave, Nairobi

Email

info@computer-pride.co.ke

Phone

+254 705 900 900

www.computer-pride.co.ke