

AIX Fundamentals

Category: Software Development & Programming | **Vendor:** Various

Duration: 40.00 hours (5 days)

32.5 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

IBM AIX Operating System and Korn Shell Programming training course introduces the delegate to the main concepts of the AIX Operating System. The most commonly used commands are described in detail as are the command line wildcard and redirection facilities. The mechanisms by which a user acquires a login environment are discussed and the main features of the Korn/Posix/Bash Shells are introduced.

It is designed to give delegates practical experience in developing and writing shellscripts. Most of the built-in shell commands are introduced together with the main program control structures.

About This Course

IBM AIX Operating System and Korn Shell Programming training course introduces the delegate to the main concepts of the AIX Operating System. The most commonly used commands are described in detail as are the command line wildcard and redirection facilities. The mechanisms by which a user acquires a login environment are discussed and the main features of the Korn/Posix/Bash Shells are introduced.

It is designed to give delegates practical experience in developing and writing shellscripts. Most of the built-in shell commands are introduced together with the main program control structures.

Who Should Attend

Programmers, administrators and support personnel who need to understand the AIX Operating system, existing shellscripts, automate procedures and write their own utilities.

Prerequisites & Entry Requirements

General Prerequisites:

There are no formal pre-requisites for the AIX Fundamentals course, although an understanding of and exposure to information technology is advantageous.

Some programming experience may also prove advantageous.

An understanding of IT is required.

Learning Outcomes

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

- Creating, copying, renaming, moving and deleting files and directories
- Using the shell's redirection and pipe facilities
- Editing text files using the vi editor
- Setting and changing access permissions on files
- Monitoring and controlling their own processes
- Using the basic file and text searching utilities
- Customising their own login environment
- 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
- Developing menu-driven shellscripts

Detailed Course Outline

Course Contents - DAY 1

Course Introduction

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

Session 1: INTRODUCTION TO THE AIX OPERATING SYSTEM

- A brief history of UNIX
- The UNIX kernel
- The UNIX file system
- A login Session
- Getting started navigating the file system
- The file system structure
- Directories and files
- Pathnames
- Navigating the file system
- Exercise: Logging on to the system
- Exercise: Navigating the file system

Session 2: BASIC COMMANDS

- Command line syntax
- Basic file handling commands
- Basic Directory handling commands
- Filename wildcard characters
- Exercise: Manipulating files and directories

Session 3: REDIRECTION AND PIPES

- Input redirection
- Output redirection
- Pipes
- Exercise: Using redirection and pipe facilities

Session 4: INTRODUCTION TO THE vi EDITOR

- Overview of the vi editor
- Basic functions
- Switching to input mode
- Other useful commands
- Exercises: Using the vi editor
- Exercise: Using more advanced vi features

Session 5: SEARCHING AND REPLACING TEXT

- Replacing text
- Using the vi editor
- Using sed for search and replace
- Searching for text with grep
- Exercises: Searching and Replacing Text

Session 6: RECALLING AND EDITING COMMANDS

- Overview
- The Bash shell
- The Korn shell
- Exercises: Recall and Edit Commands

Session 7: FILE PERMISSIONS AND ACCESS CONTROL

- Users and user groups
- File access permissions
- Changing file attributes
- Switching users and user groups
- Linking files
- Exercise: Setting and access permissions

Course Contents - DAY 3

Session 8: PROCESSES

- What is a process?
- Monitoring processes
- Killing processes
- Background processes
- Job Control
- Grouping commands
- Exercise: Monitoring and controlling processes

Session 9: THE USER ENVIRONMENT

- Customising the `.profile` or `.bash_profile`
- Customising the `.kshrc` or `.bashrc`
- Exercise: Setting up an environment

Session 10: MORE BASIC COMMANDS

- The find command
- The cut command
- The sort command
- The finger command
- Exercise: Using file handling commands

Course Contents - DAY 4

Session 11: UNIX COMMAND REVIEW

- Basic Unix commands
- General commands
- File and directory handling commands
- Filename generation characters
- I/O Redirection features
- Other commands

Session 12: 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 13: 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 14: INTEGER ARITHMETIC

- Using the expr command
- Using the (()) notation
- Exercise: Add integer arithmetic to a shell script
- Session 15: HANDLING RUN TIME DATA
- The read command
- Command line arguments
- Exercise: Writing a generic shell script
- Exercise: Writing an interactive shell script

Session 16: CONDITION EXECUTION

- The if statement
- The test command
- Other test notations
- Default and substitute variables
- Exit status codes
- Exercise: Adding validation to previous scripts

Session 17: 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 18: MULTI-BRANCH DECISIONS

- The case statement
- Menu driven applications
- Exercise: Developing and writing a menu system

Session 19: FUNCTIONS

- What is a function?
- Syntax
- Examples
- Exercise: Add a function to a script

Session 20: INTERRUPT HANDLING

- Interrupt signals

- Trapping interrupts
- Exercise: Adding traps to the menu script

Session 21: 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:

- Creating, copying, renaming, moving and deleting files and directories
- Using the shell's redirection and pipe facilities
- Editing text files using the vi editor
- Setting and changing access permissions on files
- Monitoring and controlling their own processes
- Using the basic file and text searching utilities
- Customising their own login environment
- 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
- Developing menu-driven shellscripts

Frequently Asked Questions

Q: What delivery options are available for AIX Fundamentals?

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 5-day AIX Fundamentals course provides up to 32.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the AIX Fundamentals training?

The training takes place over 5 day(s), with each day lasting approximately 40.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for AIX Fundamentals?

Yes, we provide corporate training, dedicated training, and closed classes for AIX Fundamentals. 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: AIX Fundamentals, Programming, AF

Q: Why choose Nexus Human for AIX Fundamentals?

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 AIX Fundamentals training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

Professional Training & Development

 Email: info@nexushuman.com

 Website: www.nexushuman.com

 Phone: +353 1 XXX XXXX (Ireland) | +44 20 XXXX XXXX (UK)