Linux Shell Scripting

Duration: 2 days Price: € 1299

Open Schedule

Audience Linux Shell Scripting Course

The course Linux Shell Scripting is intended for administrators, developers and testers who want to learn how to write and understand shell scripts in a **Linux** environment.

Prerequisites Course Linux Shell Scripting

To participate in this course general knowledge of computers and operating systems is required. **Programming** experience is beneficial for a good understanding.

Realization Training Linux Shell Scripting

The theory is treated on the basis of presentations. The concepts are illustrated with demos. The theory is interspersed with exercises. The course times are from 9.30 to 16.30.

Certification course Linux Shell Scripting

The participants receive an official certificate Linux Shell Scripting after successful completion of the course.

Content Course Linux Shell Scripting

In the course Linux Shell Scripting participants learn to write shell scripts in a Linux environment. The participants learn to write scripts with script commands, special characters, regular expressions and I/O redirection. Central in the course is the Bash shell.

Intro Shell Scripting

The Linux Shell Scripting course starts with an explanation of the basic principles of shell scripts. Shell scripts are typically small programs that are executed by a command line interpreter. System administrators often use shell scripts for operations such as file manipulation, program execution and text printing.

Executing Commands

In the course it is explained how to run shell scripts with the exec and fork commands. Furthermore, the syntax of shell scripts is treated. And also the differences between the various shells such as the Bourne, C, Korn and Bash shell are reviewed.

Bash Environment

Special attention is paid to the Bash shell. The various profiles, the setting of local and global variables and the export of variables are discussed. And also command substitution and shell expansion are covered.

Regular Expressions

Then regular expressions, which are ideally suited for pattern matching, are treated. The syntax of regular expressions and the meaning of the various special characters is explained.

sed and awk

Attention is also paid to the sed batch editor and the awk report generator. The sed batch editor allows the creation and modification of a text file to be handled automatically.

Control Flow

Subsequently the Linux Shell Scripting course discusses control flow with conditionals and loops and reading and writing files. The participants also learn to process the input of users in scripts with command line parameters, options and redirection.

Functions

Finally calling and writing functions, passing parameters and collecting return values is on the course program.

Modules Course Linux Shell Scripting

Module 1 : Shell Scripting Intro	Module 2 : Executing Commands	Module 3 : Bash Environment
What are shell scripts?	Fork and Exec	Shell Initialization Files
Types of shells	Built-in Commands	/etc/profile and /etc/bashrc
Bourne Shell	Creating Script Files	User Configuration Files
C Shell	Shell Syntax	/.bash_profile, /.bash_login and /.bash_logout
Korn Shell	Shell Functions	Global Variables and Local Variables
Bash shell	Shell Parameters	Exporting Variables
Invocations	Shell Expansions	Reserved Variables
Bash Startup Files	Redirections	Special Parameters
Interactive Shells	Init Script	Shell Expansion
Conditionals and Arrays	Writing Scripts	Command Substitution
Shell Arithmetic	Executing Scripts	Aliases
Directory Stack	Debugging Scripts	Bash Options
Module 4 : Regular Expressions	**Module 5 : sed and awk**	**Module 6 : Conditionals**
What is Grep?	What is sed?	Selection Statements
Grep and Regular Expressions	sed Commands	if-then-else Statement
Pattern Matching	Interactive Editing	Checking Files
Meta Characters	Deleting Lines	Checking shell Options
Repetition Operators	Range of Lines	Testing exit Status
Line Anchors	Non-Interactive Editing	String Comparisons
Word Anchors	Using sed in Scripts	Nesting if's
Single Character Match	What is awk?	Boolean Operations
Wildcards	Print Selected Fields	The test Command
Character Ranges	Formatting Fields	Compound Condition Testing
Range Expressions	Special Patterns	case Command
Character Classes	awk Scripts and Variables	Initscript with case
Module 7 : Interactive Scripts	**Module 8 : Repetitive Tasks**	**Module 9 : Functions**
Displaying Messages	Iteration Statements	Function Syntax
echo Built-in	for Statement	Function Parameters
Escape Sequences	while Statement	Positional Parameters
read Built-in	until Statement	return Built-in
Prompt for User Input	Loop control	Variables in Functions
File Descriptors	Output Redirection	Array Variables and Functions
Redirection of Errors	Input Redirection	Functions on Command Line
File I/O	Break and Continue	Catching Signals
Closing File Descriptors	select Built-in	Signals with kill
Here Documents	shift Built-in	Handling traps

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