Macrosoft

Vzdelávanie s trvalým efektom

DOCUMENT

Course syllabus

CATEGORY

Windows Server, Linux courses

TRAINING FORMAT

In Bratislava or online with a lecturer

PRICE EXCL. VAT

350,00 €

PRICE INCL. VAT

430,50 €

including 23 % VAT

PDF SYLLABUS

LINUX for Administrators - Advanced Administration Options

Clear overview of course topics, training scope and key information.

You will learn how to administer a Linux system/server efficiently and securely. You will try options that will simplify your life as an administrator. With advanced operating system settings, you will support the goal of high long-term sustainability of your installations, reduce the time needed for troubleshooting failures and, within the saved time, be able to focus more on operating system security.

COURSE CONTENT

01

Theoretical Basics and Initial Assumptions

Characteristics of UNIX / Linux, system architecture, multitasking support, operating system booting, login process, most commonly used graphical user environments and differences between them

02

Basic Operations in the Console

Linux shell, using help, shortened and full version of the manual, restarting and shutting down the computer, displaying logs, running programs, command arguments, running programs in the background, command interpreters, BASH shell, redirecting output to a text file, program pipes /pipe, connecting to the console from the Windows system environment

03

File System

Introduction to the file system, file system types, file types, basic commands for working with files, creating, copying, moving and renaming files, i-node data structure, displaying information, finding a file, information about the file system, disk usage, working with quota, file attributes, extended access control, special permissions not only using the chmod command, mapping disk partitions, creating a virtual disk and its subsequent use

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04

User and Group Administration

Listing all users, creating and deleting users and groups, difference between the users and shadow database files, their protection and use in practice, access rights, superuser, security, switching between users, changing a password, setting advanced user properties - for example when it expires

05

Process Management

Processes and programs - basic differences, list of processes, process control, signals, used system resources and setting their limits, control, monitoring, starting and terminating processes, fork-exec mechanism, signals, interprocess communication, controlling terminal, monitoring process activity, displaying running processes in the system, updating programs, changing process priority, rescheduling, putting a process to sleep

06

Text Processing Using System Utilities

Difference between a text editor and a word processor, listing file content to the console, installing and using the basic nano text editor, commands for more advanced text operations - grep, cat, sed, awk, vi editor and its operation

07

System Options and Use of Linux in Practice

Backup, recovery and data transfer, Clonezilla program, discussion - use of Linux in embedded systems, for example special devices in industry and transport, Linux editions - Kali Linux, webserver, database server also in a corporate environment, electronic mail, mail server, Linux as an underlying system for other applications

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This document serves as an informational overview of the course syllabus. Current dates, venue and availability are listed at Macrosoft.sk.

https://www.macrosoft.sk/en/courses/linux-for-administrators