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LCE400 - CentOS 8 / RHEL 8: Fundamentals

Presentation

Objectives: Master CentOS 8 fundamentals.

Who can benefit: Users of any operating system.

Prerequisites: Basic computer knowledge at a user level.

Learning technique: Clear, theoretical course content divided into lessons and extensive LABS.

Student Evaluation: Self-correcting, end-of-course questionnaire.

Duration: 2 days (14 hours).

Prerequisites

Hardware

- A computer running either MacOS, Linux, Windows™ or Solaris™,
- QWERTY US Keyboard,
- 4 GB of RAM,
- Headphones,
- A mic (optional).

Software

Chrome, Edge or Firefox web browser.

Internet

- A fast, direct (no proxy or VPN), Internet connection (4G minimum),
- Access to: https://itraining.network, https://ittraining.team and subdomains thereof.
- Accessible ports: 80, 443.

Training Program

- LCE400 CentOS 8 Linux (RHEL 8 / Oracle Linux 8) Fundamentals
 - Prerequisites
 - Hardware
 - Software
 - Internet
 - Using our infrastructure

- Training Program
- Skills Assessment

LCE401 - File Hierarchy System

- Linux File Hierarchy System
- File Types
- The mount Command
- The /etc/fstab file
 - Understanding the /etc/fstab file
 - Mount Options
- The umount Command
- Unix File Systems
 - Superblock
 - Inodes
 - Data Blocks
 - Hard (Physical) Links
 - Soft (Symbolic) Links

• LCE402 - The VIsual Editor

- Presentation
- LAB #1 Creating, Opening and Closing files with VI
 - 1.1 Commands
 - 1.2 Creating a new file with VI
 - 1.3 Opening a file in read-only mode using view
 - 1.4 Opening a file in read-write mode using VI
- ∘ LAB #2 The set Command
 - 2.1 Commands
 - 2.2 Turning on line numbering using set
- LAB #3 Moving around within the file
 - 3.1 Commands
- LAB #4 Inserting Text
 - 4.1 Commands
 - 4.2 Inserting text
- ∘ LAB #5 Searching for Text
 - 5.1 Commands
 - 5.2 Searching for and replacing text
- LAB #6 Deleting Text
 - 6.1 Commands
 - 6.2 Deleting lines
- ∘ LAB #7 Copy, Cut and Paste
 - 7.1 Commands
 - 7.2 Copying, Cutting and pasting text
- LAB #8 Configuring a Personalised Interface

LCE403 - Help and Documentation

- Help on external commands
- Help on built-in commands
- The man command
 - Command Line Switches
- The apropos command
 - Command Line Switches
- The makewhatis and whatis Commands under RHEL/CentOS 6

- Command Line Switches
- The mandb and whatis commands with RHEL/CentOS 7
 - Command Line Switches
- The info command
 - Command Line Switches

LCE404 - Basic Shell Commands and Text Manipulation Tools

- LAB #1 Use of Basic Shell Commands
 - 1.1 The stty Command
 - 1.2 The date command
 - 1.3 The who Command
 - 1.4 The df Command
 - 1.5 The free Command
 - 1.6 The whoami Command
 - 1.7 The pwd Command
 - 1.8 The cd Command
 - 1.9 The Is Command
 - 1.10 The Isof Command
 - 1.11 The touch Command
 - 1.12 The echo Command
 - 1.13 The cp Command
 - 1.14 The file Command
 - 1.15 The cat Command
 - 1.16 The mv Command
 - 1.17 The mkdir Command
 - 1.18 The rmdir Command
 - 1.19 The rm Command
 - 1.20 The sort Command
 - 1.21 The more Command
 - 1.22 The less Command
 - 1.23 The find Command
 - 1.24 The su Command
 - 1.25 The updatedb and locate Commands
 - 1.26 The whereis Command
 - 1.27 The which Command
 - 1.28 The uptime Command
 - 1.29 The w Command
 - 1.30 The uname Command
 - 1.31 The du Command
 - 1.32 The clear Command
 - 1.33 The exit Command
 - 1.34 The logout Command
 - 1.35 The sleep Command
 - 1.36 The wall Command
 - 1.37 The seg Command
 - 1.38 The screen Command
- LAB #2 Switches and Arguments
- LAB #3 Regular Expressions
 - BREs
 - EREs
- Manipulating Text Files

- Text-search Utilities
 - The grep Command
 - The egrep Command
 - The fgrep Command
 - LAB #4 Using grep, egrep and fgrep
- The Stream EDitor SED
 - LAB #5 Using sed
- The Text Processor AWK
 - Presentation
 - Field Separation
 - Conditions
 - A regular expression applied to a record
 - A regular expression applied to a field
 - Comparisons
 - Logical Operators
 - Built-in Variables
 - Awk Scripts
 - The printf function
 - Control Statements
 - o if
 - o for
 - while
 - do-while
 - LAB #3 Using awk
- LAB 7 Other Useful Commands
 - 7.1 The expand Command
 - 7.2 The unexpand Command
 - 7.3 The cut Command
 - 7.4 The uniq Command
 - 7.5 The tr Command
 - 7.6 The paste Command
 - 7.7 The split Command
 - 7.8 The diff Command
 - 7.9 The cmp Command
 - 7.10 The patch Command
 - 7.11 The strings Command
 - 7.12 The comm Command
 - 7.13 The head Command
 - 7.14 The tail Command
- LAB #8 Use the grep, tr and cut commands to extract your IPv4 address from the output of ifconfig
- LAB #9 Use the grep, awk and sed commands to extract your IPv4 address from the output of ip

• LCE405 -Command Line Interface

- Contents
- The Shell
- /bin/bash
 - Internal And External Commands
 - Aliases
 - The Prompt

- The history Command
- The TAB key
- Metacharacters
- Protecting Metacharacters
- Exit Status
- Redirections
- Pipes
- Command Substitution
- Conditional Command Execution
- Environment Variables
 - Principal Variables
 - Internationalisation and Localisation
 - Special Variables
 - The env Command
- Bash Shell Options
 - noclobber
 - noglob
 - nounset
- Basic Shell Scripting
 - Execution
 - The read command
 - The test Command
 - The [[expression]] Command
 - Shell Operators
 - The expr Command
 - The let Command
 - Control Structures
 - Loops
 - Start-up Scripts
 - LAB #1 Start-up Scripts

• LCE406 - Training Validation

- Course Materials
- Reminder of the Training Program
 - Day #1
 - Day #2
- Training Evaluation
- Exam Acquired knowledge

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