
Linux Fundamentals Eğitimi

Eğitim Hakkında

Bu Linux eğitim sınıfı, katılımcılara Linux ve Unix'in temel araçlarını ve kavramlarını ve komut satırının nasıl kullanılacağını öğretir. Yeni başlayanlar Linux'ta sağlam bir temel geliştirirken, ileri düzey kullanıcılar kalıpları keşfeder ve bilgilerindeki boşlukları doldurur.

Neler Öğreneceksiniz

Temel dosya işlemeyi,
Temel ve gelişmiş dosya sistemi özelliklerini,
G / Ç yeniden yönlendirme ve boruları,
Metin işleme ve normal ifadeleri,
İşler ve süreçler nasıl yönetiliri,
Standart Unix editörü nasıl kullanılırı.

Eğitim İçeriği

What is Linux?

Unix and its Design Principles
FSF and GNU
GPL – General Public License
The Linux Kernel
Linux Kernel and Versioning
Components of a Distribution
Slackware
SUSE Linux Products
Debian
Ubuntu
Red Hat Linux Products
Oracle Linux

Login and Exploration

Logging In
Running Programs
Interacting with Command Line



Desktop Environments

GNOME

Starting X

Gathering Login Session Info

Gathering System Info

Uptime & w

Got root?

Switching User Contexts

Sudo

Help from Commands and Documentation

Whereis

Getting Help Within the Graphical Desktop

Getting Help with man & info

The Linux Filesystem

Filesystem Support

Unix/Linux Filesystem Features

Filesystem Hierarchy Standard

Navigating the Filesystem

Displaying Directory Contents

Filesystem Structures

Determining Disk Usage With df and du

Determining Disk Usage (GUI)

Disk Usage with Quotas

File Ownership

Default Group Ownership

File and Directory Permissions

File Creation Permissions with umask

SUID and SGID on files

SGID and Sticky Bit on Directories

Changing File Permissions

User Private Group Scheme

Manipulating Files

Directory Manipulation

File Manipulation

Deleting and Creating Files

Managing Files Graphically

Drag and drop with Nautilus

Physical Unix File Structure

Filesystem Links

File Extensions and Content

Displaying Files

Previewing Files

Producing File Statistics

Displaying Binary Files

Searching the Filesystem

Alternate Search Method

Shell Basics

- Role of Command Shell
- Communication Channels
- File Redirection
- Piping Commands Together
- Filename Matching
- File Globbing and Wildcard Patterns
- Brace Expansion
- Shell and Environment Variables
- Key Environment Variables
- Which and Type
- General Quoting Rules
- Nesting Commands

Archiving and Compression

- Archives with tar
- Archives with cpio
- The gzip Compression Utility
- The bzip2 Compression Utility
- The XZ Compression Utility
- The PKZIP Archiving/Compression format
- GNOME File Roller

Text Processing

- Searching Inside Files
- The Streaming Editor
- Text Processing with Awk
- Replacing Text Characters
- Text Sorting
- Duplicate Removal Utility
- Extracting Columns of Text
- Combining Files and Merging Text
- Comparing File Changes

Regular Expressions

- Regular Expression Overview
- Regular Expressions
- RE Character Classes
- Regex Quantifiers
- RE Parenthesis

Text Editing

- Text Editing
- Pico/GNU Nano
- Pico/Nano Interface
- Nano configuration
- Pico/Nano Shortcuts
- vi and Vim
- Learning Vim
- Basic vi

Intermediate vi

Messaging

System Messaging Commands
Controlling System Messaging
Internet Relay Chat
Instant Messenger Clients
Electronic Mail
Sending Email with sendmail
Sending and Receiving Email with mailx
Sending and Receiving Email with mutt
Sending Email with Pine
Evolution

Command Shells

Shells
Identifying the Shell
Changing the Shell
Configuration Files
Script Execution
Shell Prompts
Bash: Bourne-Again Shell
Bash: Configuration Files
Bash: Command Line History
Bash: Command Editing
Bash: Command Completion
Bash: "shortcuts"
Bash: prompt
Setting Resource Limits via ulimit

Introduction to Shell Scripting

Shell Script Strengths and Weaknesses
Example Shell Script
Positional Parameters
Input & Output
Doing Math
Exit Status
Comparisons with test
Conditional Statements
Flow Control: case
The borne for-Loop
The while and until Loops

Process Management and Job Control

What is a Process?
Process Lifecycle
Process States
Viewing Processes
Signals
Tools to Send Signals

Nohup and disown
Managing Processes
Tuning Process Scheduling
Job Control Overview
Job Control Commands
Persistent Shell Sessions with Screen
Using screen
Advanced Screen

At and Cron

Automating Tasks
at/batch
cron
The crontab Command
crontab Format
/etc/cron.* / Directories
Anacron

Managing Software

Downloading with FTP
FTP
lftp
Command Line Internet – Non-interactive
Command Line Internet – Interactive
Managing Software Dependencies
Using the Yum command
Using Yum history
YUM package groups
Configuring Yum
yumdownloader
Popular Yum Repositories
Using the Zypper command
Zypper Services and Catalogs
The dselect & APT Frontends to dpkg
Aptitude
Configuring APT

The Secure Shell (SSH)

Secure Shell
OpenSSH Client & Server Configuration
Accessing Remote Shells
Transferring Files
Alternative sftp Clients
SSH Key Management
ssh-agent

Mounting Filesystems & Managing Removable Media

Filesystems Concept Review
Mounting Filesystems
NFS

SMB
Filesystem Table (/etc/fstab)
AutoFS
Removable Media

Printing

Legacy Print Systems
Common UNIX Printing System
Defining a Printer
Standard Print Commands
Format Conversion Utilities
enscript and mpage

The X Window System

The X Window System
X Modularity
X.Org Drivers
Configuring X Manually
Automatic X Configuration
Xorg and Fonts
Installing Fonts for Modern Applications
Installing Fonts for Legacy Applications
The X11 Protocol and Display Names
Display Managers and Graphical Login
Starting X Apps Automatically
X Access Control
Remote X Access (historical/insecure)
Remote X Access (modern/secure)
XDMCP
Remote Graphical Access With VNC and RDP
Specialized X Servers

EMACS

Emacs
The Emacs Interface
Basic Emacs
More Emacs Commands