Linux Administration III   2023-2024 Catalog

[ARCHIVED CATALOG]

SVAD 250 - Linux Administration III

PREREQUISITES: SVAD 116 - Linux Administration I
PREREQUISITES/COREQUISITE: SVAD 216 - Linux Administration II

PROGRAM: Cloud Technologies
CREDIT HOURS MIN: 3
LECTURE HOURS MIN: 2
LAB HOURS MIN: 2
DATE OF LAST REVISION: Fall, 2016

Students will manage and implement key elements of administering and managing an enterprise level Linux operating system, including advanced file system and partitioning concepts, securing Linux, managing firewalls and extensive troubleshooting.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:

1. File creation, editing, and management with vim and grep.
2. Create, modify and delete and manage user and group accounts.
3. Controlling file access through Access Control Lists (ACLs).
4. Disk management, including partitions, logical volumes, and file system implementation.
5. Network File System (NFS) and Server Message Block (SMB) tools and techniques.
6. Controlling and troubleshooting enterprise level Linux boot processes.
7. Scheduling tasks and prioritizing system processes.
8. Installation automation using Kickstart or similar tools.
9. Limiting network communication with appropriate firewall techniques.

COURSE CONTENT: Topical areas of study include -

- Automating Installation with Kickstart
- Using Regular Expressions with grep
- Creating and Editing Text Files with vim
- Scheduling Future Linux Tasks
- Managing Priority of Linux Processes
- Controlling Access to Files with Access
- Control Lists (ACLs)
- Managing SELinux Security
- Connecting to Network-defined Users and Groups
- Adding Disks, Partitions, and File Systems to a Linux System
- Managing Logical Volume Management (LVM) Storage
- Accessing Network Storage with Network File System (NFS)
- Accessing Network Storage with SMB
- Controlling with Troubleshooting with Linux Boot Process
- Limiting Network Communication with firewall

Course Addendum - Syllabus (Click to expand)