

# Linux Based Security+, Skill Labs

## Course Specifications

Course Number: ACI76-055SL\_rev1.0

Lab Length: Approximately 14 hours

## Configuring a VPN Tunnel Using pfSense

Configure a secure VPN tunnel using pfSense to protect network communications and enable secure remote access.

## Comparing Clear Text and Encrypted Protocols

Analyze the risks of clear-text protocols and compare them to encrypted alternatives to understand secure data transmission.

## Linux Attack and Response

Analyze common attacks against Linux systems and apply response techniques to detect and mitigate threats.

## Log Analysis of Linux Systems with Grep and Gawk

Analyze Linux system logs using command-line tools to identify suspicious activity and support incident investigations.

## Attacking and Defending Linux Systems

Simulate attacks against Linux systems and apply defensive controls to strengthen system security.

## Cracking Passwords on Linux Systems

Analyze password cracking techniques to understand authentication weaknesses and improve password security policies.

## Identifying and Analyzing Host Intrusion Detection Alerts

Analyze host-based intrusion detection system alerts to identify malicious activity on Linux systems.

## Exploiting Shellshock

Examine the Shellshock vulnerability to understand command injection risks and apply mitigation strategies.

## **Vulnerability Scanning of a Linux Target**

Perform vulnerability scans against Linux systems to identify weaknesses and prioritize remediation efforts.

## **Encrypting Data Using TrueCrypt**

Implement data encryption using disk encryption tools and analyze methods used to attack encrypted data.

## **Injection Attacks Using WebGoat**

Analyze common injection attacks against web applications to understand exploitation techniques and defenses.

## **Managing Permissions, Users, and Groups in Linux**

Configure Linux permissions, users, and groups to enforce access control and system security.

## **Creating a Proxy Server and SSL Certificate Using pfSense**

Configure a proxy server and deploy SSL certificates to secure network traffic and web communications.

## **Steganography**

Analyze steganography techniques to understand how data can be hidden within files and detect covert data channels.