

Project Proposal

Course:

Unix

Assignment Name:

Laboratory #10: LIA proposal

Names:

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License: Public Domain

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Date: April 17, 2025

Project Description

The aim of this project is to establish a GNU/Linux web server with automated deployment of websites. This process entails establishing a Virtual Private Server (VPS), implementing

fundamental security measures, setting up the web server, and automating deployment: whenever a commit is made to the git repository, the website gets updated automatically. We will utilize a Public Domain license

Platform of Choice

We are using server as our platform choice.

Demonstration Plan

For the demonstration plan we will be using VPS.

Requirements

- Basic system setup and security: Using SSH Keys instead of passwords
- Process or service management/scheduling: Using systemd to boot up the server and restart the server if it crashes.
- Automated tasks using a script language: GitHub pushing and commit/ updating the web server

Major technical solutions compared

This project will compare different web servers (Nginx vs Apache) and Ubuntu and Debian and deployment automation methods to determine the most efficient and reliable setup. The goal is to evaluate these options based on ease of configuration

Timeline

Week 1: Set up VPS and git repository and test the website using Nginx or Apache

Week 2: Test publishing changes and configure SSH and get a free domain and compare (Nginx vs Apache)

Week 3: Automating the deployment of GitHub pushing to update the site and upload websites

Team Composition

The team members are Kukes Kanthasamy, Ethan Cole Hafso and Fahad Malik.

