deliverable1.md 2025-05-07

Deliverable 1 Submission

Basic Terminology

What is a web server? Hardware and software side.

On the hardware side, a web server is a computer that connects to the internet and support physical data interchange with other devices connected to the web. On the software side a web server includes several parts that control how web users access hosted files.

What is Apache?

The Apache HTTP server is the most widely used web server in the world. It receives requests from clients (like web browsers) and sends back the requested web content.

What are some examples of web server applications?

Application Name	License	Project's Website
Lighthttpd	Revised BSD license 1.4	Lighthttpd Website
OpenLiteSpeed	GPLv3 license	OpenLiteSpeed
Ngnix	NGINX Plus R33	Ngnix

Lighthttpd:



lighttpd (pronounced /lighty/) is a secure, fast, compliant, and very flexible web server that has been optimized for high-performance environments. lighttpd uses memory and CPU efficiently and has lower resource use than other popular web servers.

OpenLiteSpeed:



OpenLiteSpeed is the Open Source edition of LiteSpeed Web Server Enterprise. Both servers are actively developed and maintained by the same team, and are held to the same high-quality coding standard.

Ngnix:

deliverable1.md 2025-05-07



NGINX has evolved from a web server to a comprehensive platform for app delivery, optimization, and security in Kubernetes environments. Now, with the SaaS-based web console NGINX One, enterprises can manage web traffic, load balancing, API gateway capabilities, and security in a single, easy-to-use package.

What is virtualization?

Virtualization is a technology that creates simulated or virtual versions of hardware and software resources, allowing multiple operating systems or applications to run on a single physical machine.

What is a virtual machine?

A virtual machine (VM) is a software-based emulation of a physical computer. It allows multiple operating systems to run simultaneously on a single physical machine, effectively creating virtualized environments with their own CPU, memory, storage, and network interfaces.

What is Ubuntu Server?

Ubuntu Server is a part of the larger set of Ubuntu products and operating system developed by Canonical Ltd. Ubuntu server is a specific addition that differs a little bit from Ubuntu desktop, in order to facilitate installation on servers.

what is a firewall?

A firewall is a network security system that acts as a barrier between a trusted internal network and untrusted external networks, such as the internet.

What is SSH?

SSH (Secure Shell or Secure Socket Shell) is a network protocol that gives users; particularly systems administrators, a secure way to access a computer over an unsecured network.

Other relevant concepts:

- **Systemd** Systemd is a software suite for Linux systems that manages system resources and services.
- **Systemctl** Systemctl is a command-line utility in Linux that manages and interacts with the systemd system and service manager. It allows you to control system services, such as starting, stopping, restarting, enabling, and disabling them.
- **Virtual hosts** A virtual host is a configuration that allows a single web server to host multiple websites, each with its own distinct domain name and content. It's like having several virtual servers on a single physical machine.
- **Log File** A .log file is a text file used to record events, messages, and other information about the activities and operations of a system or application. These files are commonly used for troubleshooting, monitoring, and analyzing system behavior.