

Deliverable 1

Basic Terminology

What is a web server?

- On the hardware side, a **web server** is a computer that stores web server software and a website's component files like HTML, CSS stylesheets, and JavaScript files. On the software side a **web server** includes several parts that control how web users access hosted files.

What are some example web server applications?

Application Name	license	Project's Website
Apache	Apache 2.0	Apache.org
Nginx	2-clause BSD	Nginx.com
Caddy	Apache 2.0	Caddy.com

Apache



An **Apache Server** is a web server application that delivers content such as HTML pages, multimedia and CSS Style sheets over the internet.

Nginx



NGINX is a free, open-source, high-performance HTTP server and reverse proxy, as well as an IMAP/POP3 proxy server. NGINX is known for its high performance, stability, rich feature set, simple configuration, and low resource consumption.

Caddy



Caddy obtains and renews TLS certificates for your sites automatically. Its novel certificate management features are the most mature and reliable in its class.

What is virtualization?

- **Virtualization** is technology that you can use to create virtual representations of servers, storage, networks, and other physical machines.

What is virtualbox?



- **Oracle VM VirtualBox** is cross-platform virtualization software. It allows users to extend their existing computer to run multiple operating systems including Microsoft Windows, Mac OS X, Linux, and Oracle Solaris, at the same time.

What is a virtual machine?

- A **Virtual Machine** is a compute resource that uses software instead of a physical computer to run programs and deploy apps.

What is Ubuntu Server?



- **Ubuntu Server** is a server operating system, developed by Canonical and open source programmers around the world, that works with nearly any hardware or virtualization platform.

What is a firewall?

- A **firewall** is a network security device that monitors traffic to or from your network.

What is SSH?

- **SSH**, also known as Secure Shell, is a network protocol that gives users, particularly system administrators, a secure way to access a computer over an unsecured network.

Other Concepts

- **Index**: An index is sorting data by creating keywords or a list with pointers to where further information about the keyword is found.
- **Dependencies**: Dependency is a relationship between software components where one component relies on the other to work properly.
- **TLS encryption**: Transport Layer Security (TLS) is an encryption protocol that protects Internet communications.
- **SSL encryption**: SSL, or Secure Sockets Layer, is an encryption-based Internet security protocol.
- **Systemd**: Systemd is the modern replacement for the legacy Linux initialization systems, System V (SysV) and Linux Standard Base init (LSB init).
- **Init system**: Init is the first process started during system boot.
- **Systemctl**: The systemctl command is a utility which is responsible for examining and controlling the systemd system and service manager.
- **Encapsulate**: The term encapsulation is used to describe a process of adding headers and trailers around some data.
- **Umask value**: A four-digit octal number that UNIX uses to determine the file permission for newly created files.
- **Nano**: Nano is an easy to use command line text editor for Unix and Linux operating systems.