






Name	Adrik Ojeda
Course	cis106
Semester	spring25

# Deliverable 2

## Server Specifications

Preview

General

System

Display

Storage

Audio

Network

USB

Shared folders

Description

Name:Ubuntu Server

Operating System:Ubuntu (64-bit)

Base Memory:2048 MB

Processors:2

Boot Order:Optical, Hard Disk

Acceleration:Nested Paging, KVM Paravirtualization

Video Memory:128 MB

Graphics Controller:VMSVGA

Remote Desktop Server:Disabled

Recording:Disabled

Controller: IDE

IDE Secondary Device 0:[Optical Drive] Empty

Controller: SATA

SATA Port 0:Ubuntu Server.vdi (Normal, 15.00 GB)

Disabled

Adapter 1: Intel PRO/1000 MT Desktop (Bridged Adapter, Killer E2200 Gigabit Ethernet Controller)

USB Controller: OHCI, EHCI

Device Filters: 0 (0 active)

None

Hostname: webserver

user: Adrik

password: pccc

## Ubuntu Login Screen

```
Ubuntu 24.04.2 LTS webserver tty1
webserver login: adrik
Password:
Welcome to Ubuntu 24.04.2 LTS (GNU/Linux 6.8.0-59-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Mon May 12 10:42:57 PM UTC 2025

System load:  0.16          Processes:           112
Usage of /:   44.7% of 9.75GB Users logged in:          0
Memory usage: 9%           IPv4 address for enp0s3: 192.168.1.119
Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.
0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

adrik@webserver:~$
```

What is the IP address of your Ubuntu Server Virtual Machine?

- 192.168.1.119

How do you enable the Ubuntu Firewall?

- `sudo ufw enable`
  - `ufw`, or "Uncomplicated Firewall", is a command-line tool for managing firewall rules.
    - `sudo ufw status`
    - `sudo ufw disable`
    - `sudo ufw enable`

How do you check if the Ubuntu Firewall is running?

- `sudo ufw status`

How do you disable the Ubuntu Firewall?

- `sudo ufw disable`

How do you add Apache to the Firewall?

- `sudo ufw allow 'Apache'`

What is the command you used to install Apache?

- `sudo apt install apache2 -y`

What is the command you use to check if Apache is running?

- `systemctl status apache2 --no-pager`
  - `systemctl` is a command-line tool that allows for the management and monitoring of the `systemd` system and service manager
    - `systemctl reboot`
    - `systemctl poweroff`
    - `systemctl get-default`

What is the command you use to stop Apache?

- `sudo apachectl stop`

What is the command you use to restart Apache?

- `sudo systemctl restart apache2`

What is the command used to test Apache configuration?

- `sudo apache2ctl configtest`

What is the command used to check the installed version of Apache?

- `apache2 -v`

## Definitions and Examples

- `systemctl` is a command-line tool that allows for the management and monitoring of the `systemd` system and service manager
  - `systemctl reboot`
  - `systemctl poweroff`
  - `systemctl get-default`
- `ufw`, or "Uncomplicated Firewall", is a command-line tool for managing firewall rules.
  - `sudo ufw status`
  - `sudo ufw disable`
  - `sudo ufw enable`

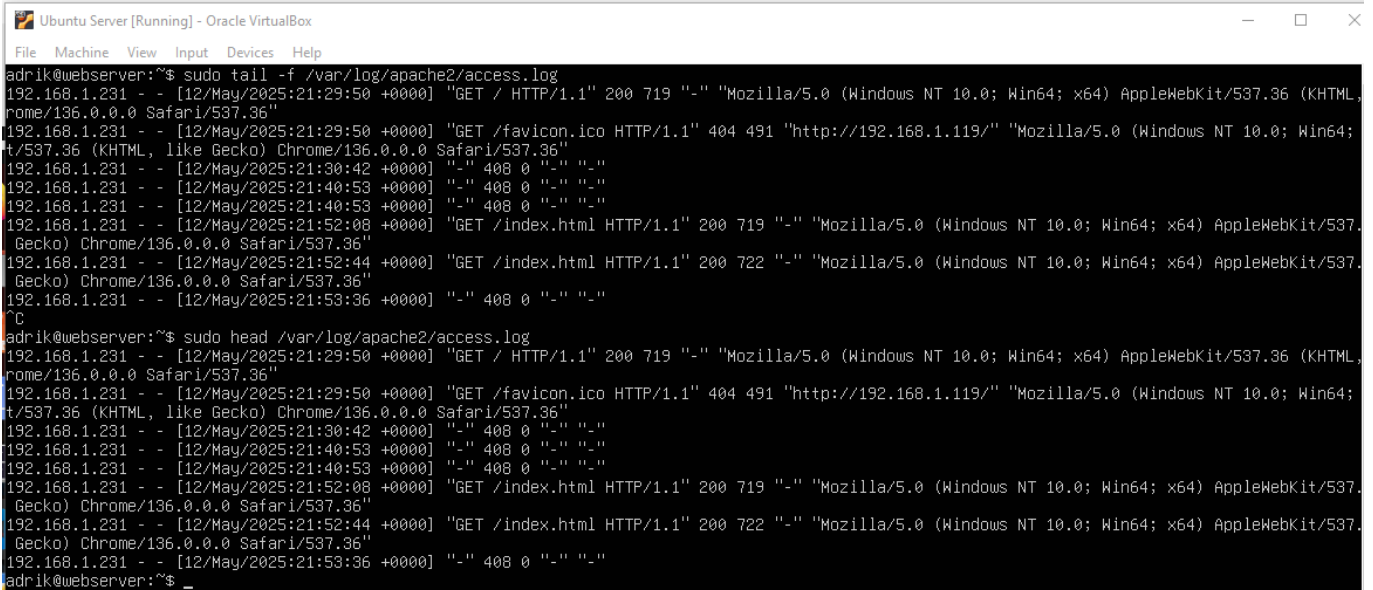
What are the most common commands to troubleshoot Apache errors? Provide a brief description of each command.

- `systemctl`
  - Used to control and interact with Linux services via the `systemd` service manager.
- `journalctl`
  - Used to query and view the logs that are generated by `systemd`
- `apachectl`
  - When troubleshooting, this command is used to check Apache's configuration.

Which are the common Apache Log Files, and what are they used for?:

- The access log and the error log

- `sudo tail -f /var/log/apache2/access.log`
- `sudo head /var/log/apache2/access.log`



The screenshot shows a terminal window titled "Ubuntu Server [Running] - Oracle VirtualBox". The terminal displays the output of the `tail -f /var/log/apache2/access.log` command. The logs show several GET requests from 192.168.1.231 to the web server. The requests include a favicon.ico and an index.html. The user then presses `^C` to stop the tail command and runs `head /var/log/apache2/access.log` to view the beginning of the log file. The output shows the same set of requests as the tail command.

```
adrik@webserver:~$ sudo tail -f /var/log/apache2/access.log
192.168.1.231 - - [12/May/2025:21:29:50 +0000] "GET / HTTP/1.1" 200 719 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/136.0.0.0 Safari/537.36"
192.168.1.231 - - [12/May/2025:21:29:50 +0000] "GET /favicon.ico HTTP/1.1" 404 491 "http://192.168.1.119/" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/136.0.0.0 Safari/537.36"
192.168.1.231 - - [12/May/2025:21:30:42 +0000] "-" 408 0 "-" "-"
192.168.1.231 - - [12/May/2025:21:40:53 +0000] "-" 408 0 "-" "-"
192.168.1.231 - - [12/May/2025:21:40:53 +0000] "-" 408 0 "-" "-"
192.168.1.231 - - [12/May/2025:21:52:08 +0000] "GET /index.html HTTP/1.1" 200 719 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/136.0.0.0 Safari/537.36"
192.168.1.231 - - [12/May/2025:21:52:44 +0000] "GET /index.html HTTP/1.1" 200 722 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/136.0.0.0 Safari/537.36"
192.168.1.231 - - [12/May/2025:21:53:36 +0000] "-" 408 0 "-" "-"
^C
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192.168.1.231 - - [12/May/2025:21:30:42 +0000] "-" 408 0 "-" "-"
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```