

# Deliverable 2 Submission

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What are the server hardware specifications?

What is Ubuntu server log in screen?

What is the IP address of your ubuntu server virtual machine?

webmaster@10.0.2.15

How do you enable the Ubuntu firewall?

To enable firewall , use the Uncomplicated Firewall tool. Ensure it's installed with `sudo apt install ufw`. Then you can enable it with `sudo ufw enable`.

How do you check if the Ubuntu firewall is running?

To check if the firewall is running on Ubuntu using UFW, you can use command `sudo ufw status`.

How do you disable the Ubuntu firewall?

You can use the command `sudo ufw disable`.

How do you add Apache to the firewall?

To allow Apache through the firewall on Ubuntu you can use the command `sudo ufw allow 'Apache'`.

What is the command you used to install Apache?

The command to install Apache is `sudo apt install apache2`.

What is the command used to check if Apache is running?

The command to check if Apache is running is `sudo systemctl status apache2`.

What is the command you use to stop Apache?

To stop Apache use the command `sudo systemctl stop apache2`.

What is the command you use to restart Apache?

To restart Apache use the command `sudo systemctl restart apache2`.

What is the command used to test Apache configuration?

To test the Apache configuration you use the command `sudo apachectl configtest`.

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

To check the installed version of Apache you use the command `apache2 -v`.

## What are the most common commands to troubleshoot Apache errors?

- `tail`: used to display the last part of a file, which is often useful for checking Apache error logs in real-time. For example: `tail -f /var/log/apache2/error.log`
- `journalctl`: displays system logs, including Apache logs, on systems that use `systemd`. For example: `journalctl -u apache2.service`.
- `apachectl`: Apache control interface that provides various commands for managing Apache, such as starting, stopping, and testing the configuration.
- `netstat`: Network utility used to display network connections, routing tables, and interface statistics. It can be helpful for checking if Apache is listening on the expected ports. For example: `netstat -tulin | grep ':80|:443'`.
- `systemctl`: Used for controlling the `systemd` system and service manager. It can be used to start, stop, restart, and check the status of Apache service.

## Which are Apache Log files, and what are they used for?

- **Access log**: Records all requests. Located at `/var/log/apache2/access.log` on Ubuntu.
- **Error Log**: Logs errors encountered by Apache while processing requests. Located at `/var/log/apache2/error.log` on Ubuntu.