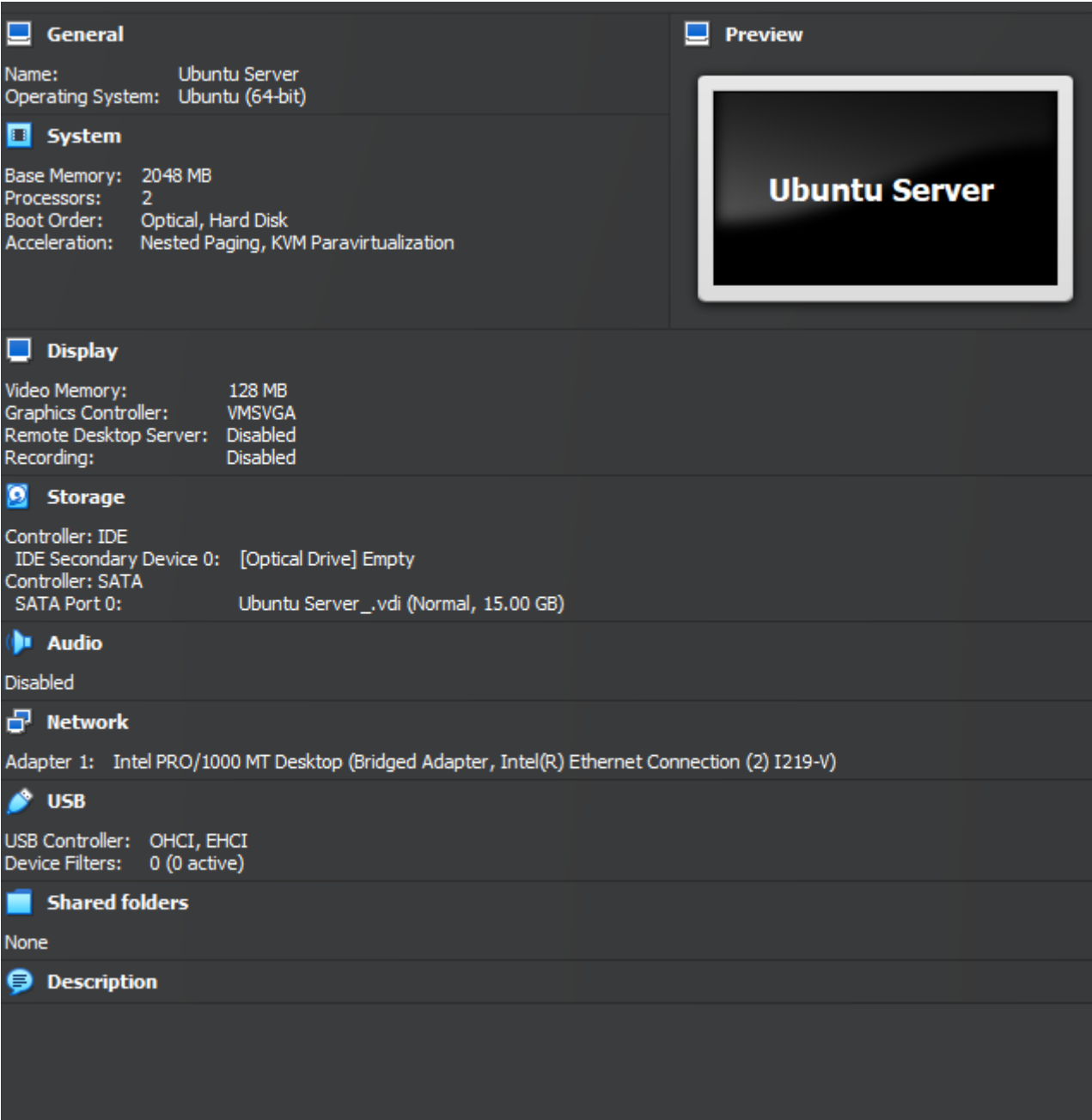
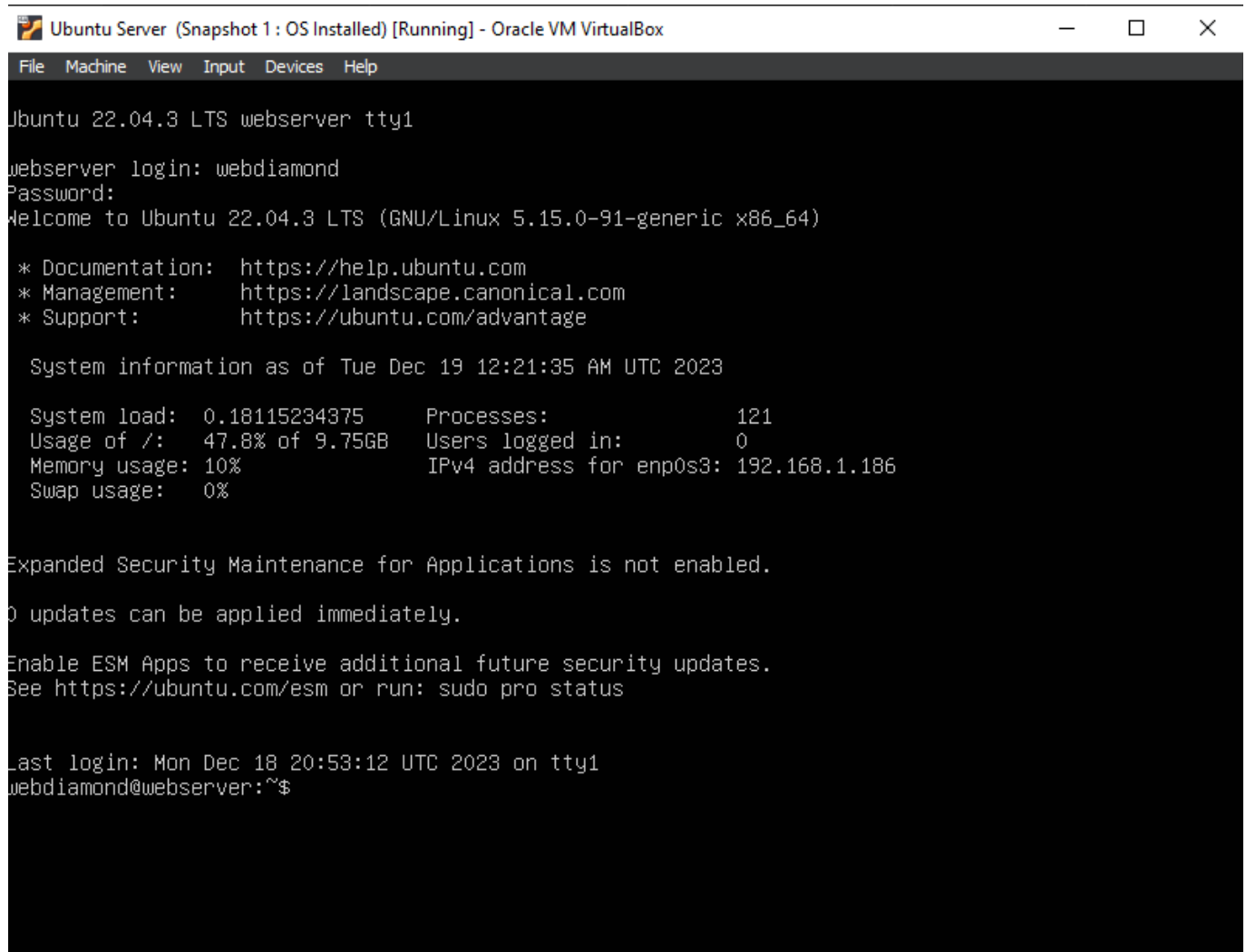


What are the server hardware specifications (virtual machine settings)? Take a screenshot - don't type it!



What is Ubuntu server log in screen? Take screenshot - do not type it!



```
Ubuntu 22.04.3 LTS webserver tty1
webserver login: webdiamond
Password:
Welcome to Ubuntu 22.04.3 LTS (GNU/Linux 5.15.0-91-generic x86_64)

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

System information as of Tue Dec 19 12:21:35 AM UTC 2023

System load: 0.18115234375   Processes:            121
Usage of /:  47.8% of 9.75GB   Users logged in:      0
Memory usage: 10%           IPv4 address for enp0s3: 192.168.1.186
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

Last login: Mon Dec 18 20:53:12 UTC 2023 on tty1
webdiamond@webserver:~$
```

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

My IP address for Ubuntu Server `192.168.1.186`

How do you enable the Ubuntu Firewall?

This command enable firewall `sudo ufw enable`

```
$ sudo ufw enable
```

[Copy](#)

You'll see output like this:

Output

```
Firewall is active and enabled on system startup
```

How do you check if the Ubuntu Firewall is running?

This command check status firewall `sudo ufw status`

```
$ sudo ufw status
```

Output

```
Status: active
Logging: on (low)
Default: deny (incoming), allow (outgoing), deny (routed)
New profiles: skip
```

How do you disable the Ubuntu Firewall?

To disable Ubuntu firewall `sudo UFW disable`

How do you add Apache to the Firewall?

This command is to add firewall `sudo ufw allow 'Apache'`

What is the command you used to install Apache?

This command is to install Apache `sudo apt install apache2 -y`

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

Allow to check if Apache still running `sudo systemctl status apache2 --no-pager`

What is the command you use to stop Apache?

Stop Apache `sudo systemctl stop apache2`

What is the command you use to restart Apache?

Allow to restart Apache `sudo systemctl restart apache2`

What is the command used to test Apache configuration?

To test Apache configuration `sudo apachectl -t`

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

Check the Apache installed version `sudo apache2 -v`

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

This command checks the Apache configuration files for syntax errors. `apachectl configtest` Control and interact with Linux service `systemctl` Service Manager `systemd` View the logs `journalctl` on the `systemd` Apache configuration `apachectl`

Which are Apache Log Files, and what are they used for? Provide examples and screenshots.

Troubleshooting Apache on a Fedora `/var/log/httpd/error_log`

Error Log Examples

```
[Wed Jul 15 01:34:12.093005 2020] [proxy:error] [pid 13949:tid 140150453516032] (13)Pe  
[Wed Jul 15 01:34:12.093078 2020] [proxy_http:error] [pid 13949:tid 140150453516032] [
```

```
sudo tail -n 2 /var/log/apache2/error.log
```