

Hosting and Scanning a website on Virtual Machine

A virtual machine (VM) is a software emulation of a physical computer that runs an operating system and applications just like a physical machine. VMs allow you to create multiple isolated environments on a single physical host, each with its own virtual hardware configuration.

Oracle VirtualBox - Overview

Oracle VirtualBox is a popular Type 2 hypervisor that allows you to create and manage virtual machines on your desktop or laptop. It supports a wide range of guest operating systems, including Windows, Linux, macOS, and more. VirtualBox is free and open-source, making it an excellent choice for developers, testers, and anyone interested in exploring virtualization.

How to Install VirtualBox

Here's a step-by-step guide to installing Oracle VirtualBox on your Windows, macOS, or Linux computer:

Step 1: Download VirtualBox

1. Go to the official VirtualBox website: <https://www.virtualbox.org/>
2. Click on the "Downloads" link in the top navigation menu.

Step 2: Choose the Correct Package

1. On the Downloads page, you'll see various packages for different host operating systems. Select the appropriate package for your OS (e.g., Windows, macOS, or Linux).

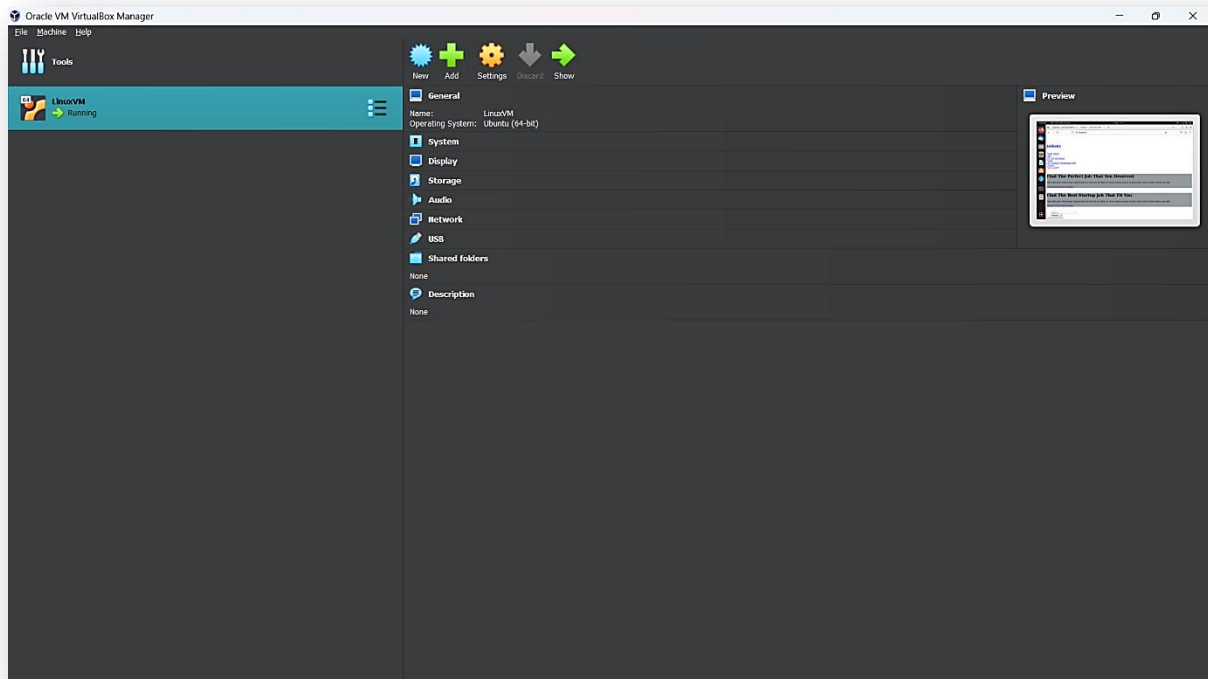
Step 3: Install VirtualBox

- Download the installer for Windows and double-click on the downloaded file to start the installation.
- Follow the on-screen instructions and accept the license agreement.
- Choose the components you want to install and the installation path.
- Complete the installation process.

Step 4: Launch VirtualBox

1. Once the installation is complete, you can launch VirtualBox from your application menu.
2. Install Nginx inside the Ubuntu machine and host a website.

VM running on Oracle VirtualBox :



Status of Nginx :

```
Aug 7 00:17
charan@charan-VirtualBox: /var/www/html

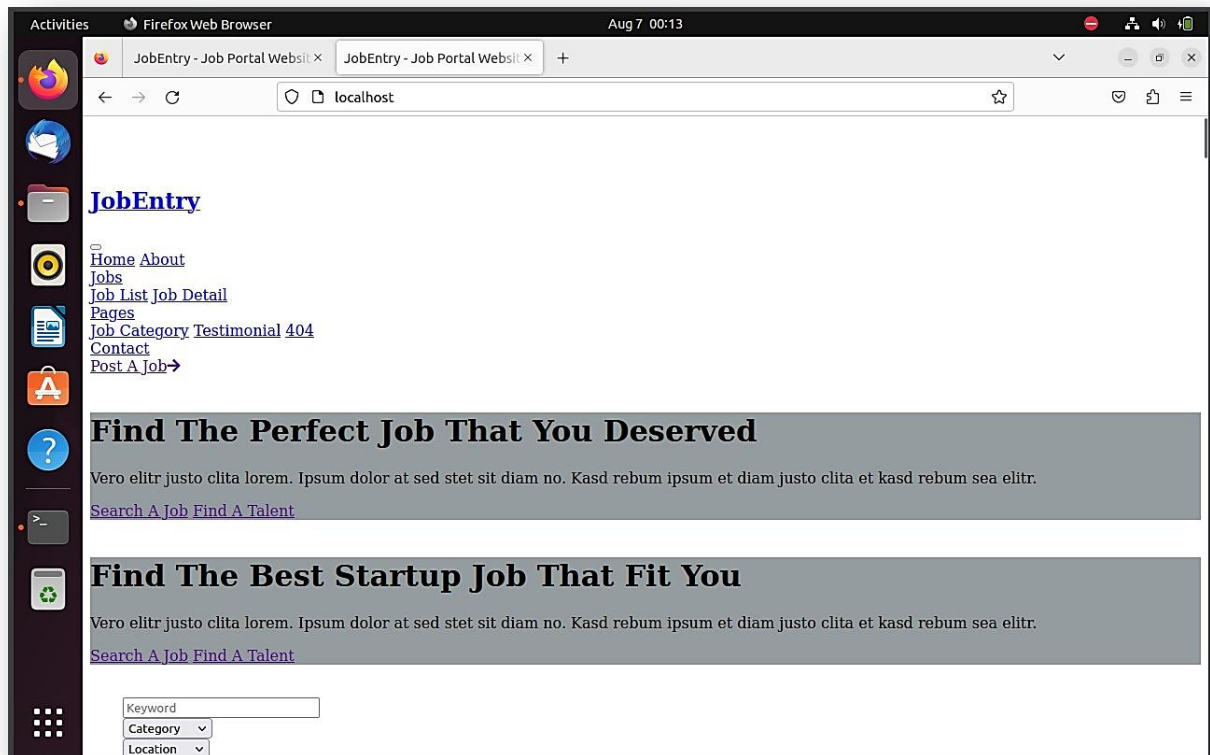
<!-- Back to Top -->
<a href="#" class="btn btn-lg btn-primary btn-lg-square back-to-top"><i class="bi bi-arrow-up"></i></a>
</div>

<!-- JavaScript Libraries -->
<script src="https://code.jquery.com/jquery-3.4.1.min.js"></script>
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0/dist/js/bootstrap.bundle.min.js"></script>
<script src="lib/wow/wow.min.js"></script>
<script src="lib/easing/easing.min.js"></script>
<script src="lib/waypoints/waypoints.min.js"></script>
<script src="lib/owlcarousel/owl.carousel.min.js"></script>

<!-- Template Javascript -->
<script src="js/main.js"></script>
</body>
</html>
charan@charan-VirtualBox: /var/www/html$ sudo systemctl start nginx
[sudo] password for charan:
charan@charan-VirtualBox: /var/www/html$ sudo systemctl status nginx
● nginx.service - A high performance web server and a reverse proxy server
   Loaded: loaded (/lib/systemd/system/nginx.service; enabled; vendor preset: en
   Active: active (running) since Sun 2023-08-06 23:58:07 IST; 4min 24s ago
     Docs: man:nginx(8)
   Process: 678 ExecStartPre=/usr/sbin/nginx -t -q -g daemon on; master_proces
   Process: 725 ExecStart=/usr/sbin/nginx -g daemon on; master_process on; (co
   Main PID: 726 (nginx)
    Tasks: 5 (limit: 4478)
   Memory: 10.4M
      CPU: 165ms
   CGroup: /system.slice/nginx.service
           └─726 "nginx: master process /usr/sbin/nginx -g daemon on; master
             727 "nginx: worker process"
             728 "nginx: worker process"
             729 "nginx: worker process"
             730 "nginx: worker process"

Aug 06 23:58:06 charan-VirtualBox systemd[1]: Starting A high performance web s
Aug 06 23:58:07 charan-VirtualBox systemd[1]: Started A high performance web se
charan@charan-VirtualBox: /var/www/html$
```

Website successfully hosted on localhost :



Output of the Nmap Scan :

