



Metasploited setting up metasploitable3 and pains along the way

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Are Gaben who art at Valve,
Hallowed be thy game.
Thy Steamdom come.
Thy graphics stun
On PC as it is at Valve.
Give us this sale our daily deal,
And forgive us our conspiracies [HL3 Confirmed],
As we forgive those who play on consoles,
And lead us not into peasantry,
But deliver us from DRM.
For thine is the Steamdom, and the player, and the game,
For ever and ever.

Gaben.

[The Gaben's Prayer](#)

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1 What

Metaspitable (in this case we are talking about version 3), is a set of Virtual Machines (VM's), that are build with a large amount of security vulnerabilities. It is good to learn the basics of metasploit¹ exploiting.

For the latest version Metaspitable (version 3), it comes with a host of vulnerabilities built in, from SSH to [GlassFish](#).

2 How

To setup you will need to install Vagrant, Packer, and a Vagrant Provider.² After the ensurance of the needed packages, you may need to configure (as you will with in this guide). After you have the box setup, you may also wish to allow external access, which you will have to configure afterwords.

2.1 Installation

To install vagrant you will need to use a [Provider](#) which will be used to ship the Box. For this write-up, the *VirtualBox* provider will be used, which requires the installation of virtualbox, of course.

You can also do this headless but that requires more information than is present within this write-up. If you need to have a GUI on a headless device, you can use RDP or VNC to facilitate the connection.³

2.1.1 Vagrant and Packer

If you need to [install](#) packer, you can install it from there [website](#) directly, or you can add their repository, from there [website](#). For debian (as of 22 Jan. 2026) you can use the following commands:⁴

```
wget -O - https://apt.releases.hashicorp.com/gpg | sudo gpg --dearmor -o
/usr/share/keyrings/hashicorp-archive-keyring.gpg
echo "deb [arch=$(dpkg --print-architecture)
signed-by=/usr/share/keyrings/hashicorp-archive-keyring.gpg]
https://apt.releases.hashicorp.com $(grep -oP
'(?<=UBUNTU_CODENAME=).*' /etc/os-release || lsb_release -cs) main"
| sudo tee /etc/apt/sources.list.d/hashicorp.list
sudo apt update && sudo apt install vagrant
```

To install packer, it is a similar process, you can [install](#) packer directly, or through adding their repository (which we did above).

¹Metasploit is a [open-source](#) framework used to exploit known vulnerabilities easier.

²You could technically, use a pre-built image, like the one for VirtualBox found [here](#).

³I have (or will soon) another write-up that goes into how to do some of that: [write-up](#)

⁴ensure that you have the packages necessary to download (wget), add to the keyring (gpg), and elevate user (sudo, if your not root already (not recommended)).

2.1.2 Virtual Box

Virtual Box, as our provider, will need to be installed. For this example, we will use debian. For debian, you may need to add the *contrib* and *non-free* components.⁵

Next, because of the way Vagrant is using Virtual Box, when you run the next step, you will need to add some configuration, to allow virtualbox to do Host-only networking.⁶

```
# Edit, and possibly create, the '/etc/vbox/networks.conf' file.
# You can add the following, if you want to allow it to make any ip
  address.

* 0.0.0.0/0 ::/0

# You could also specify directly the ones you need.
```

2.2 Starting

To start the virtual machine initially, you need to get the repository, and start vagrant. You can do that with the following:

```
git clone https://github.com/rapid7/metasploitable3
cd metasploitable3
vagrant up --provider=virtualbox
```

After you set it up you can start it through the VirtualBox GUI.

2.3 Lore

For me this was much more difficult that it needed to be. Ensure that you have a good box in order to create this. In the end debian worked wonders, especially compared to other distrobutions, and sadly even *proxmox*.

3 Troubleshooting

As I said in the lore, you should probably used debian, or a stable, commonly used, host OS. You should also ensure that you have the following capabilities:

- VT-x/AMD-V Supported Processor recommended
- 65GB Available space on drive
- 4.5GB of memory

⁵You can see more information on the [Debian Wiki](#).

⁶You can view more info from the manual: <https://www.virtualbox.org/manual/ch06.html>. I resolved this froa [stackoverflow](#) post.

The first point is necessary, ensure that the device can virtualize, which also includes if you do it in a VM (ensure you have nested virtualization supported and enabled).

References

- [1] rapid7. “Metasploitable3.” Github, 26 Sept. 2021, <https://github.com/rapid7/metasploitable3>. Accessed 22 Jan. 2026.
- [2] Sergio-Baustista “Proxmox-SOC-HomeLab Docs.” *Github*, 2025 <https://github.com/Sergio-Bautista/Proxmox-SOC-HomeLab/blob/main/docs/setup/metasploitable3-setup.md>. Accessed 22 Jan. 2026.
- [3] Rapid7. “Metasploitable3 — Rapid7 Blog.” *Rapid7*, 15 Nov. 2016 <https://www.rapid7.com/blog/post/2016/11/15/test-your-might-with-the-shiny-new-metasploitable3/>. Accessed 22 Jan. 2026

There are aproxamently 961 words in this document.