

Android pentest Emulator set-up

1. Emulator setup:

What is an emulator?

An Android emulator is a virtual device that mimics the functionality of a real Android smartphone or tablet. It runs on your computer and behaves just like a physical device, including the operating system, app interface, and hardware interactions.

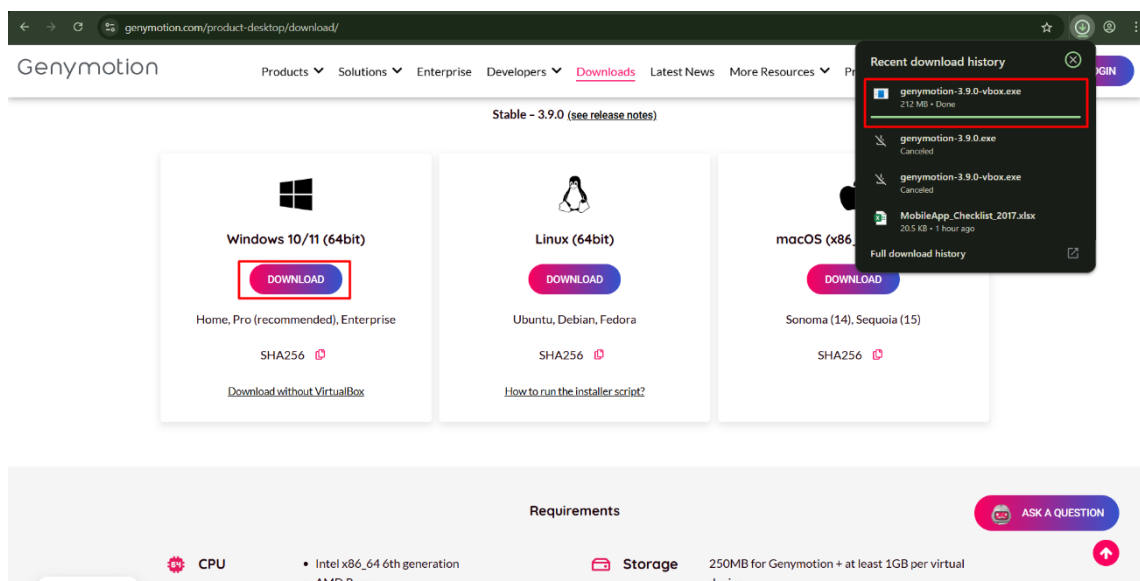
Popular Android emulators:

1. Android studio
2. Genymotion (We would be going for Genymotion in this guide)

Genymotion setup steps:

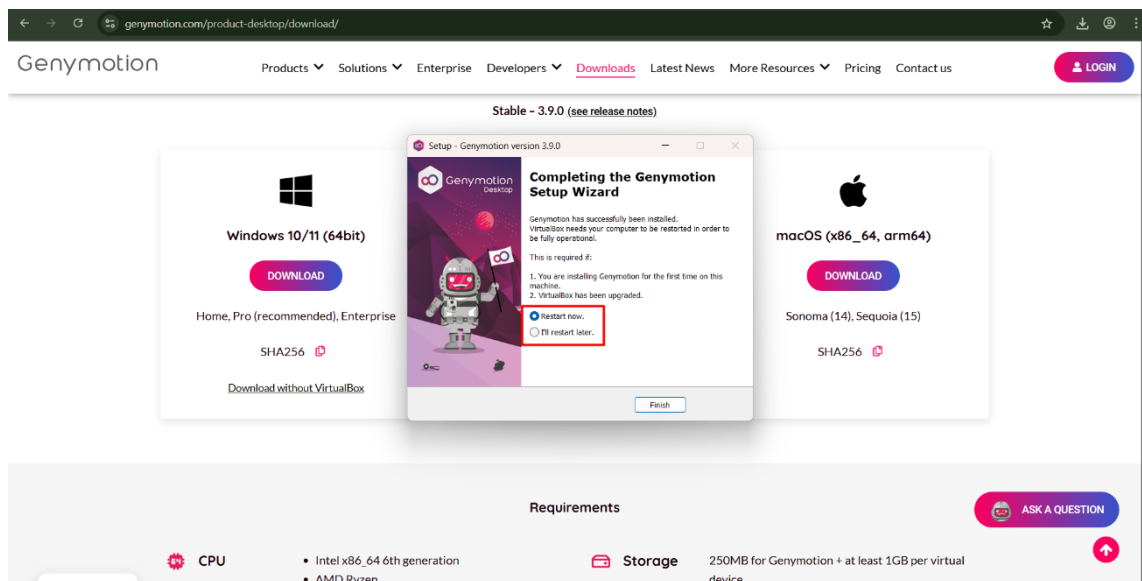
Step 1:

Go to this link [Genymotion download](https://www.genymotion.com/download/) and download the appropriate version based on your OS. We would be downloading the windows version with virtual box.



Step 2:

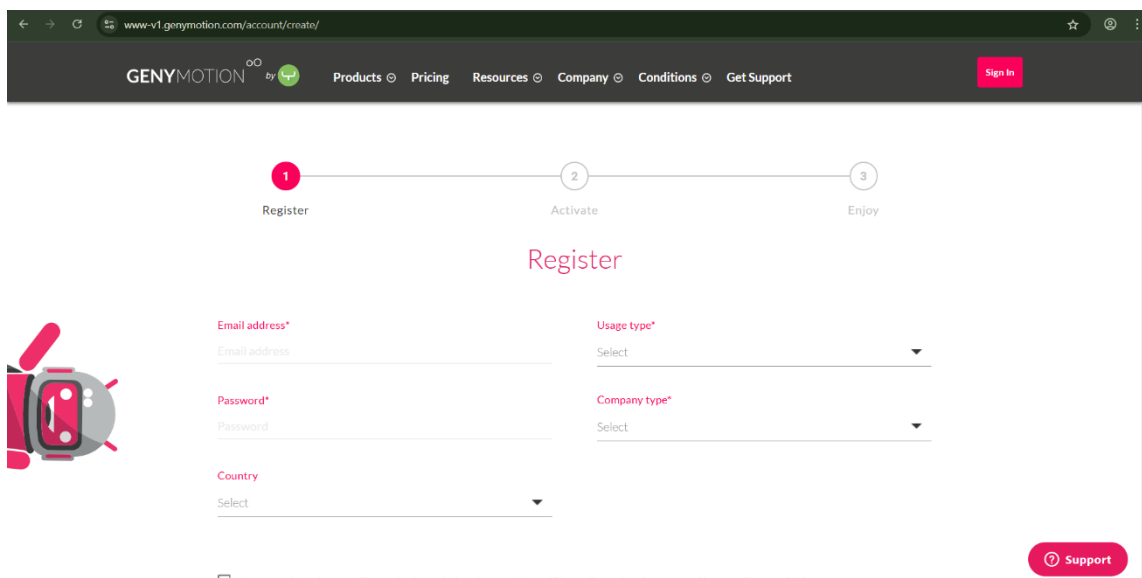
After downloading the application and proceed to install it. This will install both Genymotion and VirtualBox one by one. Following the installation Genymotion requires the system to restart. So, restart the system.



Step 3:

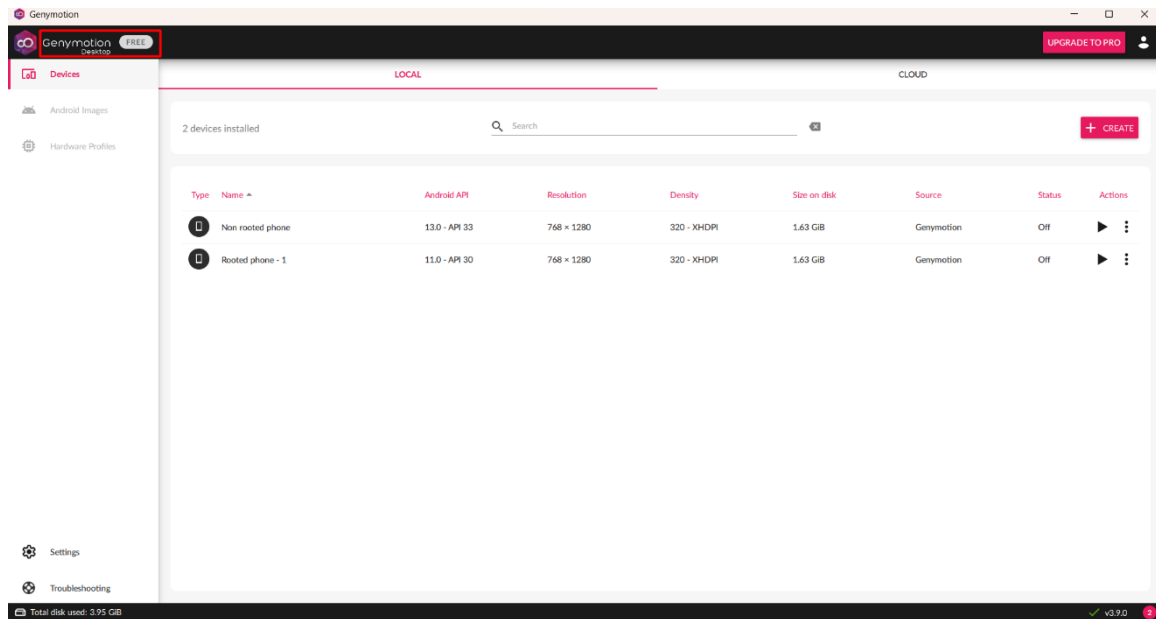
Genymotion requires an account to use it, there are both free and paid options. As of now we'll focus on the free account which has limited usability, but is sufficient for pen testing.

Account creation link - <https://www-v1.genymotion.com/account/create/>



Step 4:

After creating an account, go to Genymotion application and login. Upon successful login we would be presented with a Dashboard indicating our account is on the free tier.

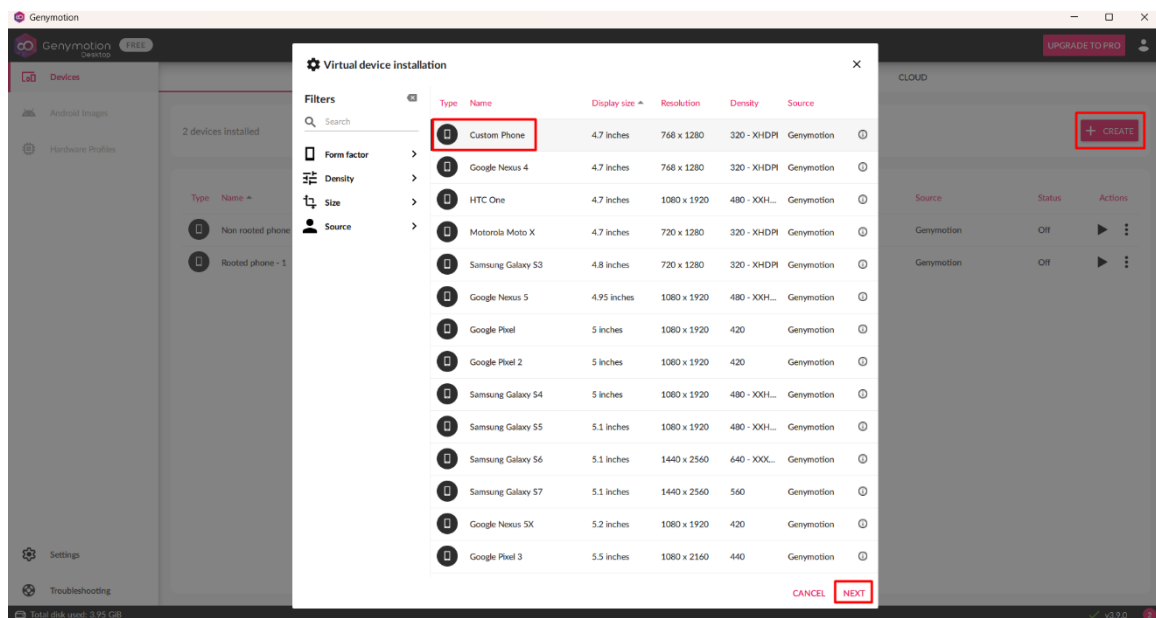


Step 5:

Now that Genymotion is successfully installed and configured, we need to create an emulator for pretesting.

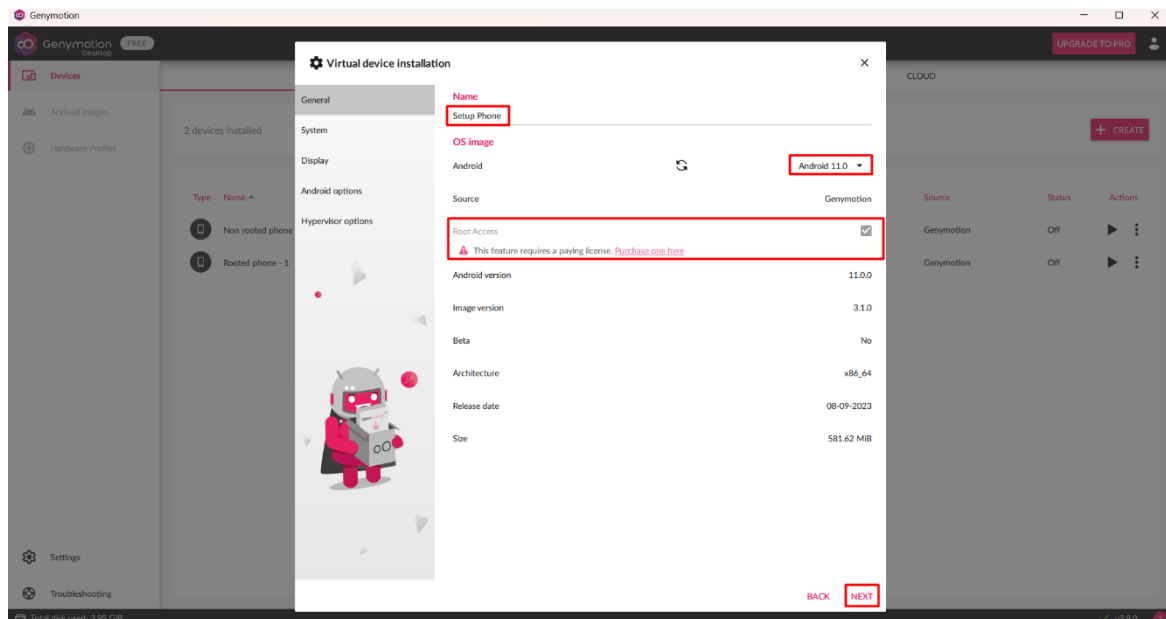
To create an emulator:

1. Click on create from the Dashboard
2. Then Choose custom phone and click next

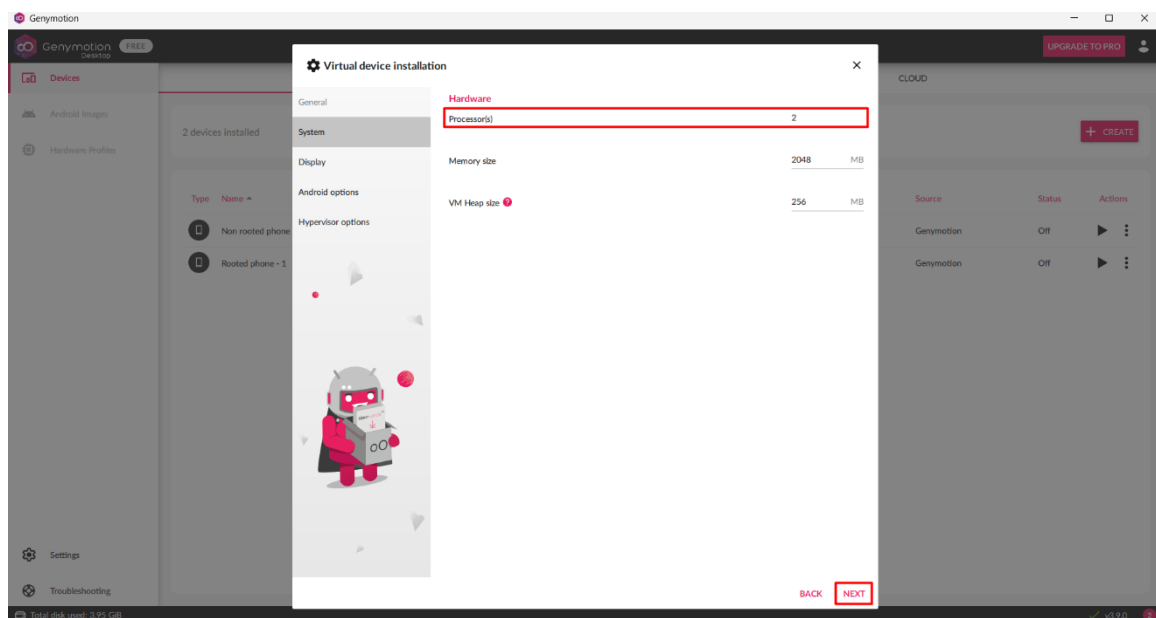


3. Now give the phone your preferred name

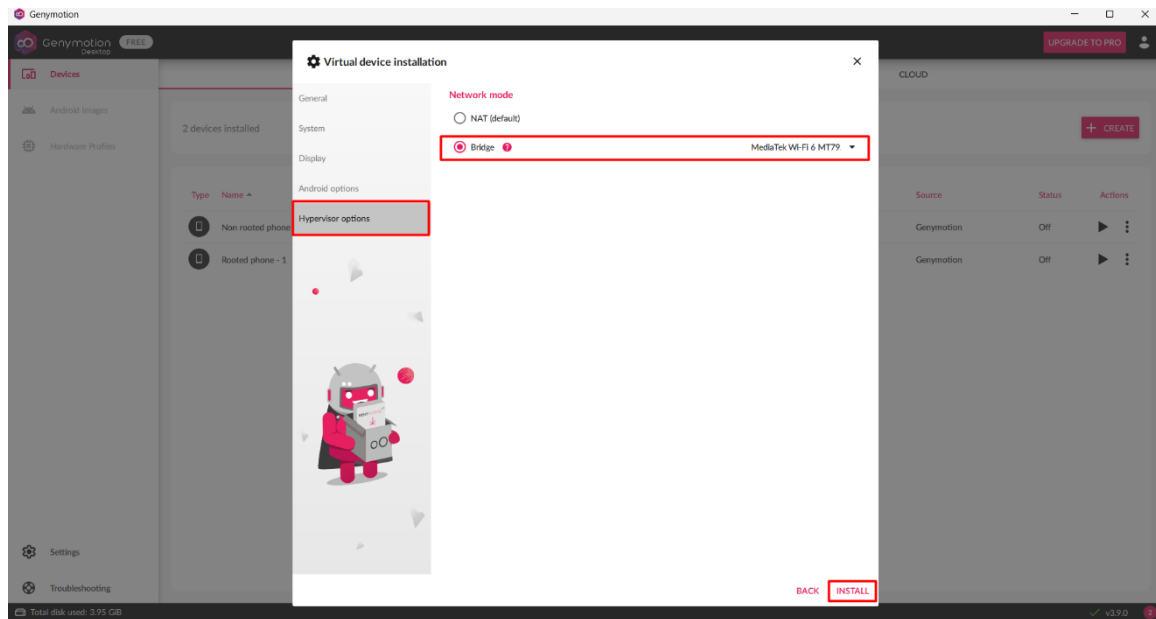
4. Choose the android version below 11 (To get root access on above android 11 we need to move a paid license) and click on next.



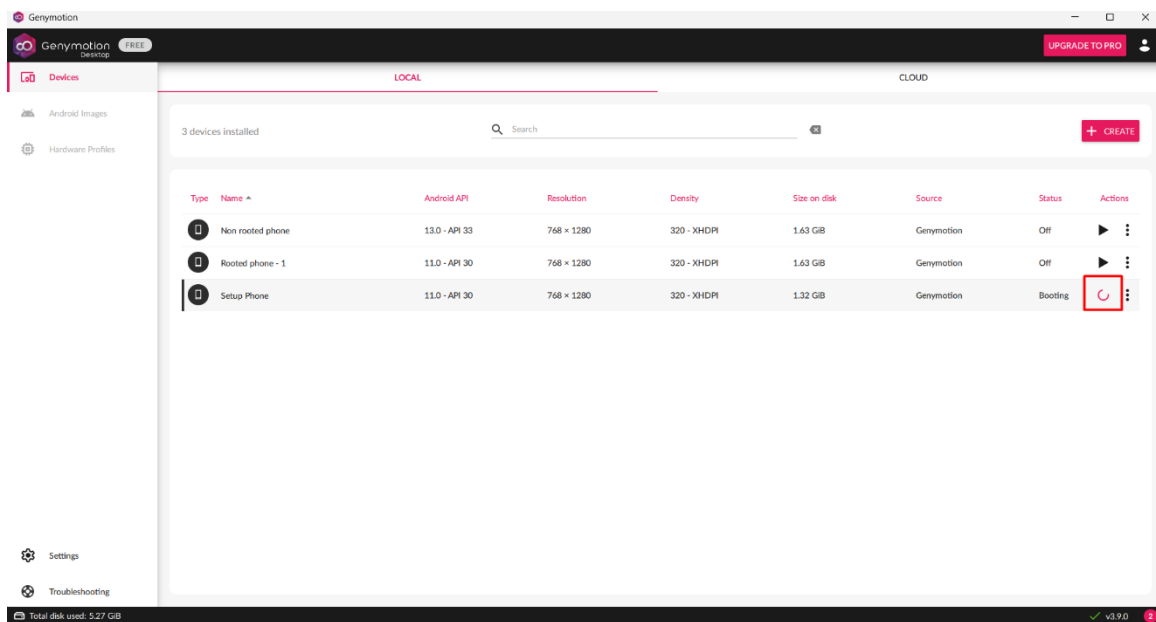
5. Choose the hardware configuration based on your system.



6. Then move to the Hypervisor options, choose the network mode Bridge. This enables the emulator to be interactive with other tools and machines within the network. Then click on install.



7. Start the emulator by clicking on the start button.



8. After a successful start, we will be provided with an emulator and its Ip and port like a real device.

