How to Set Up UTM on a Mac

Lesson 1 in the "Don't Look Security" Homelab" Series

It Started with a Switch

From PC to Mac. That's when the trouble began.

I wanted to build a homelab, run a few VMs, maybe even break a few things safely. But macOS wasn't exactly playing nice with the virtualization tools I knew.

Then I found UTM — the trench coat of virtualization. No frills, does the job, and blends in on macOS like it was always meant to be there.

What Is UTM?

UTM is a free, open-source virtualization tool for macOS. Under the hood, it uses Apple's virtualization frameworks and QEMU. But you? You get a nice GUI.

Run Anything

Windows, Linux, even other macOS instances — all from the safety of your Mac

Built for Mac

Works beautifully on Apple Silicon and Intel, designed specifically for macOS

No Terminal Required

Clean interface means no command-line scars or complicated configurations

Understanding Your Hardware

On Apple Silicon (M1/M2)

- *Virtualize ARM-based OSs — fast and efficient*
- *Emulate x86 OSs — slower but works when needed*

On Intel Macs

- *Virtualize x86 OSs — smooth sailing*
- *Emulate ARM OSs — again, slower but functional*

⚠️ *Important: UTM doesn't support GPU passthrough or high-end 3D graphics. This is for labs and learning, not gaming.*

Step 1: Choose Your Install Method

You've got three ways to install UTM. Pick the path that fits your style:

01

App Store — Easy Mode

*Search for UTM **on the Mac App Store** and install. **Paid version** includes automatic updates, seamless experience, and supports the developer. Worth the few bucks.*

02

Direct Download — Free Mode

*Visit **mac.getutm.app**, download the .dmg, open it, and drag UTM.app into Applications. Done.*

03

Homebrew — Terminal Users

Run `brew install --cask utm` *in your terminal for a smooth, hacker-style install.*

Step 2: Approve Security Permissions

First time launching UTM, macOS might raise an eyebrow and block the app.

Here's the fix:

1. *Go to System Settings*
2. *Navigate to Privacy & Security*
3. *Find UTM in the list*
4. *Click "Allow Anyway"*

If macOS doesn't ask, you're golden. But keep this in your back pocket just in case.

Step 3: Launch UTM & Explore

Fire up the app. You'll see a sleek, minimalist interface — a modern lab waiting for its first experiments.

Virtualize

Fast. Uses the same CPU architecture as your Mac (Apple Silicon = ARM, Intel = x86)

Emulate

Slower. Different architecture — x86 on M1, ARM on Intel. Works when you need it.

Click the + button and take note of your two options. We'll build a VM in the next lesson. For now, just take in the view.

Troubleshooting Tips

UTM Won't Open?

Check Privacy & Security settings and select "Allow Anyway" to give UTM permission to run

Missing from Applications?

You probably forgot to drag UTM.app out of the DMG file. Mount the DMG again and complete the installation

Crashing on Launch?

Try rebooting your Mac, reinstalling UTM, or switch install methods (App Store, Direct Download, or Homebrew)

The Quiet Hero ofmacOS Virtualization

> UTM doesn't shout. It doesn't break things. It just works. And in the shadows of cybersecurity education and experimentation, that's exactly what we need.

What's Next?

Now The Real Work Begins

UTM's installed. The lab is lit. But the real job? It starts now.

In Lesson 2, we dive deeper into the underworld — installing Kali Linux, spinning up your first virtual machine, and laying down the digital concrete for your homelab fortress.

So until then, agent...

Keep your system clean.Keep your logs cleaner.And trust no process without a PID.