

# How To Host A DIY Minecraft Server At Home Using Docker

My oldest child recently delved into Minecraft. My son is the opposite. He plays Bedrock Edition on an iPad and a game console. He prefers Java Edition on an older computer. He launches it from his terminal! ) To play with each other, I looked into running a Dockerized Minecraft server on my home server, and it was much more straightforward than I anticipated.

## Running a dedicated server

The official server distribution is a single Java jar, which means it should be simple to run. Before trying it, though, I searched for Docker images, and found a good one: itzg/minecraft-server.

You can either open the container by using a docker run command or daemonize it. But, I've been keeping it simple with docker compose up in a byobu session.

Here's my current docker.yml file

There are a variety of configuration options. However, I would like to highlight two options:

The game's persistent data is stored on a volume mounted to the host so we can easily access the files. The "WORLD" option lets you import a save that was made on a different computer.

## Connecting to the Server

After a few seconds the server is now ready to accept connections, but my clients aren't able to see it for reasons. Minecraft will remain on the "Scanning games on your local network screen" screen for as long as. However the reason, you can "Add Server" to add it manually, and voila!

## Web Map

Most of my Minecraft knowledge is about 10 years old. However, I'm aware of third-party tools can produce a web view of a Minecraft world similar to those in Google Maps. After searching around, it seems like Minecraft Overviewer is the prominent one these days.

While the installation process is simple, I came across an Docker file that was even simpler. This is a one-shot (not permanent) procedure, so we'll be using docker run:

Leaflet will create a web map with read-only access to game data from the other container, and another volume to write it to. The directory can be symlinked into a web-served directory on the host like /var/www or ~/public\_html for access from any web browser.

It takes a few minutes to run but the results are pretty impressive:

Makefile

Finally, as per my wishes, I added a few shortcuts to the Makefile for quick access.

Motives to build Dockerized Minecraft Server

A dedicated server built by yourself is probably unnecessary for most people. If you're just looking for a way to play locally and one of your machines is fairly powerful, you can click "Open to LAN" within the game. **WNAT SPOUT** If you're planning to play with a larger number of people outside your home, you're probably better off using a hosted server that is paid for. This could be the official "Realms" or one of a variety of third-party options.