Crafty Project

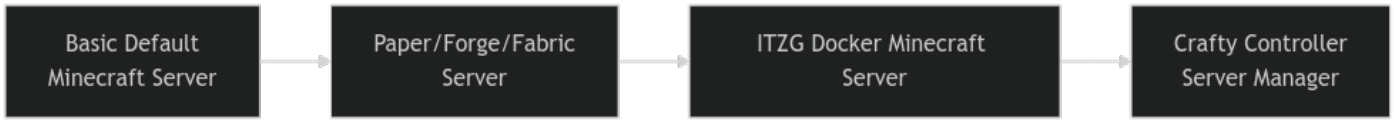
Getting Started

Well, that’s not very hard. Just use a hosting solution like Shockbyte, HostGator, or one of the countless other platforms out there.

Oh, you don’t want to pay for that? You want to do it yourself, huh? Well, alright, that's cool too. If you want to start simple, you could find or buy an old computer, flash it with Linux, install Java, grab the server binary (bytecode-ary?) from Minecraft’s website, and—boom—you’ve got a server.

Of course, unless you've done that before (or have experience with something similar), that probably sounded like complete gibberish. Well, good for you, gibberish is a language you can learn! Though, now that I think about it, learning gibberish would preclude it from being gibberish, making it unlearnable. But hey, I digress.

The goal of this project is to get you from little to no Minecraft server knowledge to a full-blown Minecraft hosting wizard. Will this guide be able to accomplish that I don't know, but it'll try. Below is a rough progression timeline:



Basic Default Minecraft Server

This first tutorial won’t dive into the finer points of Minecraft server installation, but it should give you an idea of what a barebones Minecraft server looks like. This guide aims to provide you with a solid foundation that you can build upon, whether by following future sections of this guide or exploring on your own.

The Hardware

It's both the least important and the most important part of a Minecraft server.

On one hand, almost any hardware can handle a small Minecraft server (1 to 5 people). On the other hand, if it’s faulty, congratulations—you’ve just signed up for a time-consuming, skill-testing nightmare. A bad power supply? Spotty Wi-Fi or Ethernet? RAM bottlenecks or random crashes? Any of these will turn a simple setup into a troubleshooting marathon. At that point, you’ll need to know a whole lot more than just how to run a Minecraft server. That’s all to say, **make sure you have a stable foundation.**

Tentative Lower Requirements

Component	Requirement
CPU	Anything equal to or better than a raspberry pi 4 or your old PC from 10 years ago.
GPU	Needed*
RAM	3GB or more

Anything lower and—your experience will suffer.

The Operating System (OS)

Much like hardware, the operating system can make or break a Minecraft server.

An OS that's too involved—like Windows—or the more overly hand-holdy Linux distros with desktop environments, the ones meant for direct human interaction, aren’t exactly server material.

An OS that’s too barebones won’t necessarily have the tool(s) you need to install/run the server, and worse, it may not even have a repository that provides it. This, of course, brings us back to the skill and time issue we had with hardware.

Now, if you want to avoid that headache, I’d recommend going with an OS with high stability and software availability, like Ubuntu Server.

> To install Ubuntu follow the ubuntu installation guide.

Once that's done, we can begin in earnest.

The Server

Installing java

As of time of writing, the current Minecraft server used Java 21 To install Java 21 on ubuntu run:

```
sudo apt install openjdk-21-jre-headless
```

Installing the server

Start by creating a folder to hold your server:

```
mkdir minecraft-server
```

And for god's sake, click the TAB key after the first few characters of “minecraft-server” or just copy it.

> The above statement applies in perpetuity. #Tab-is-your-friend.

Change directories into the folder you just created

```
cd minecraft-server
```

Download the server

```
wget -o server.jar https://www.minecraft.net/en-us/download/server
```

Run the server

```
java -Xms1G -Xmx3G -jar server.jar
```

> `-Xms1G` Allows the server 1G minimum amount of RAM.

> `-Xmx3G` Allows the server 3G max amount of RAM.

> `-jar` Tells java that the following file is a jar.