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│ Realms │ │Virtual Host│ │ DIY Host │ │ FAQ  │ │ Troubleshooting│ │ Contact  │
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Realms
- Java
- Bedrock

Virtual Host
- Java
  - Each Minecraft version has their own choices of mod loaders: Forge and Fabric
    - Forge
    - Fabric
- Bedrock

DIY Host
- Java
  - Each Minecraft version has their own choices of mod loaders: Forge and Fabric
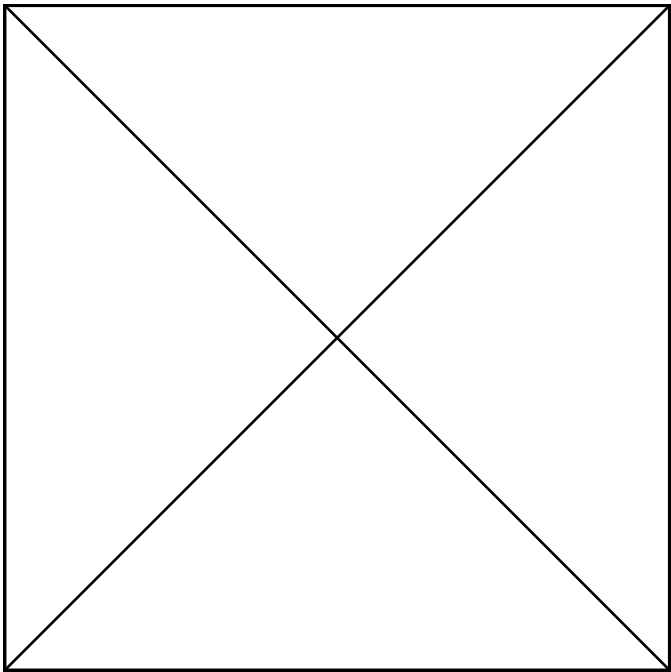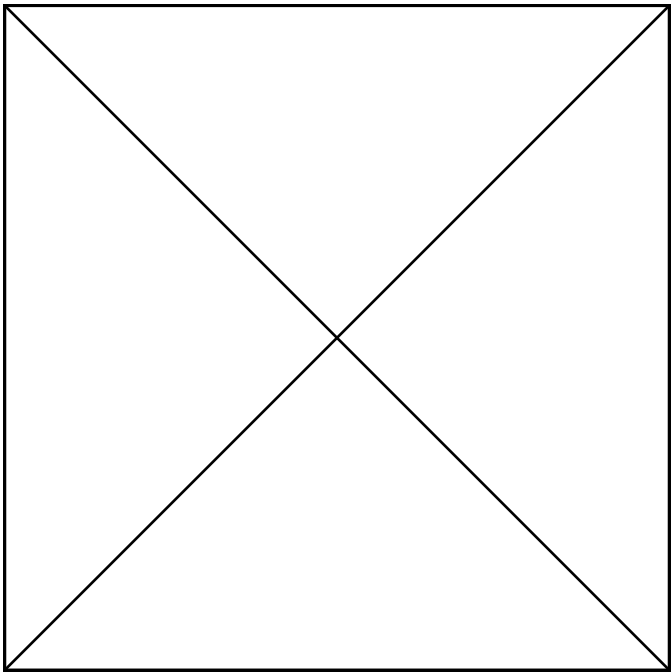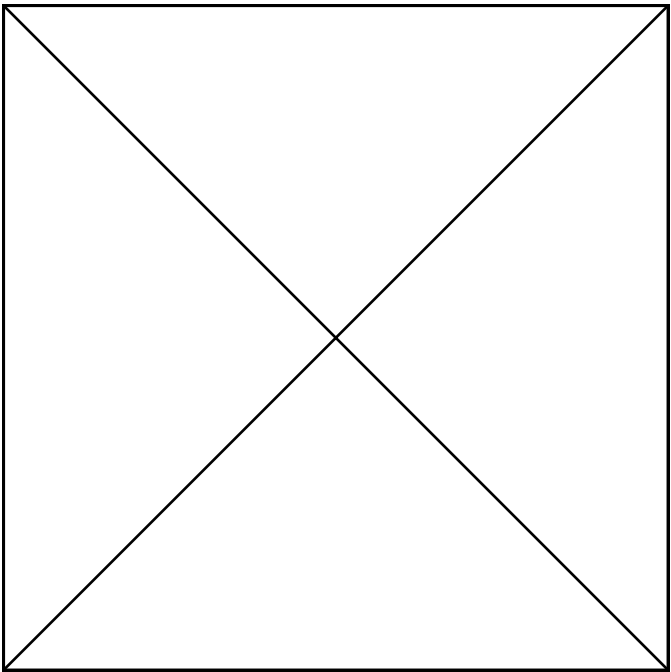   - Forge
    - Fabric
- Bedrock

To run a Minecraft server, you must first know your options.

Host a server on Realms>

A complete guide on running a personal Minecraft server courtesy of Mojang. This is by far the easiest way to get a server for you and your friends.

You can expect a consistent experience and decent reliability for a small cost per month the server is running. Realms has one major downside: It does not, at the present time, support mods. Datapacks however, work as intended.

Host a server with a service>

A complete guide on using a hosting service to manage your Minecraft server for you. This offers more customization and control, but comes at the cost of difficulty.

While each service is different, prices can range anywhere from free to hundreds of dollars each month. That choice is up to you and what your needs are expected to be.

These services often provide their own control panel and unique ways to manage mods that the server uses.

Host a server on your own>

A complete guide on using your own technology to run and manage s Minecraft server. By far the most customizable experience available. However, you need to be able to handle any issues that might come up. WYSIWYG.

If you are okay with that responsibility, keep note that running a Minecraft server and playing Minecraft on the same machine is possible, but require a powerful system.
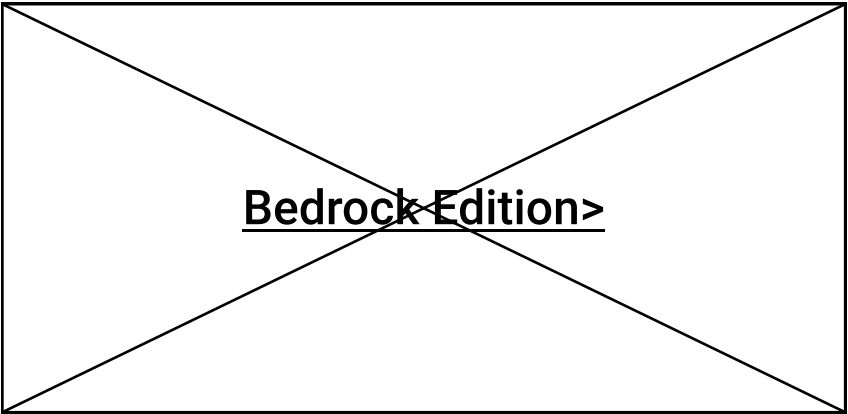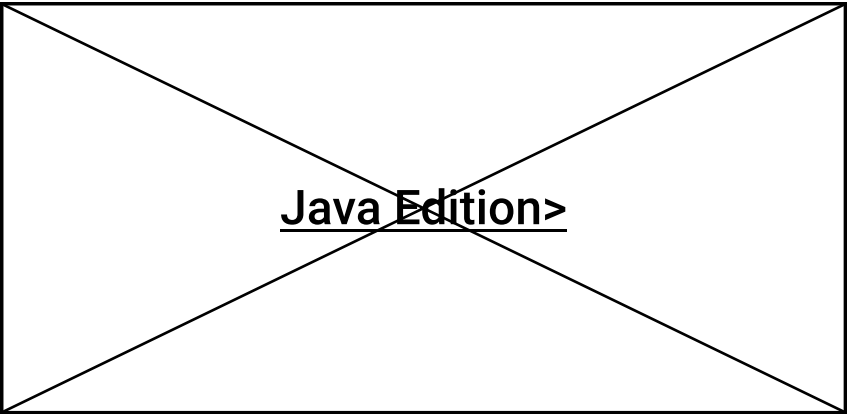
Minecraft Realms Server Guide

A complete gudie to Realms server hosting,

from Java to Bedrock.

    Minecraft Realms is a Mojang-hosted private server. This means you and your friends have a private world for you all to play together. Mojang does not offer this service for free, however. As the hosting and management is offered as a service, Mojang expects $7.99/month as payment. There are several payment options to handle this, from a monthly subscription or a single bulk payment up front, at a slight discount.

    Realms is offered both for Minecraft Java Edition and Minecraft Bedrock. The choice on which version is up to you, as each version has pros and cons. It is important to note that Bedrock players can only play on Bedrock servers while Java players can only play on Java Servers. Another downside of Realms is the lack of mod support. If you wanted to run a modded Minecraft Server, you need to find another solution. However, the game experience can still be modified through the use of datapacks. The use of datapacks is out of the scope of this guide, but other sources on the internet are available for that information.

    Now for the big decision you need to make: Will you be running Java or Bedrock edition? This will likely just be whichever version you own, but it plays an important role in what you will need to do. If you know which version you will be using, simply click the corresponding box below.
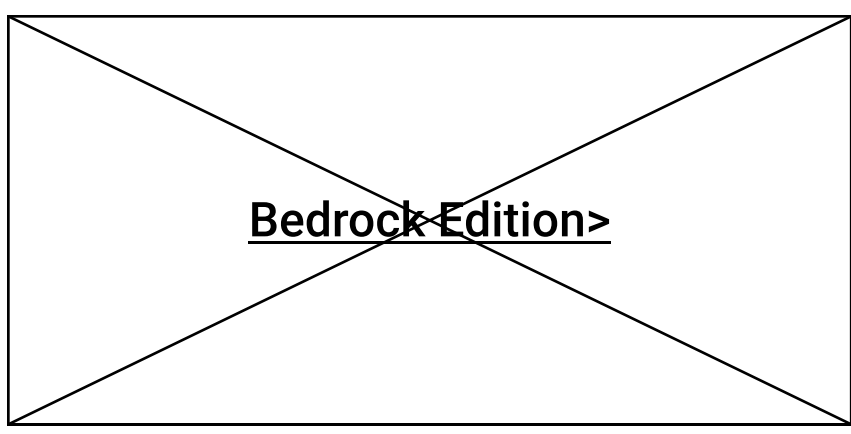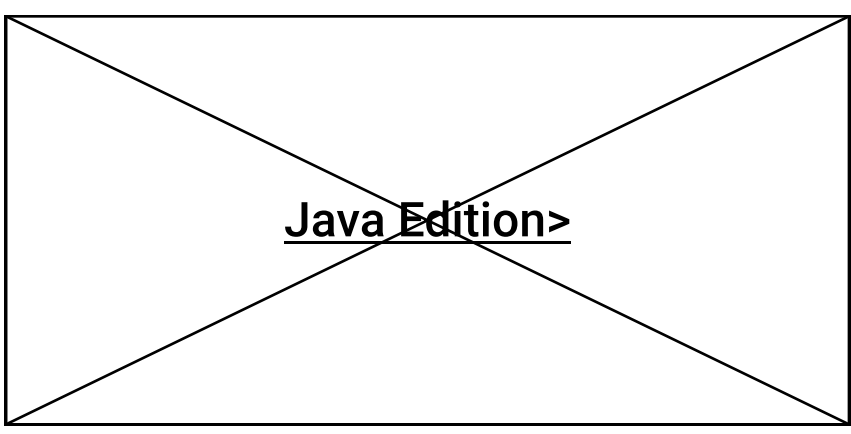

Java Edition>

Bedrock Edition>

Minecraft Service Host Server Guide

A complete gudie to Realms server hosting,

from Java to Bedrock.

Definitely the more complex of options, hosting services come in many forms. Don't let this intimidate you! Many companies offer their own solutions on how to manage, run, and operate a server. Services such as Hostinger, Shockbyte, BisectHosting, GG Servers, and APEX Hosting, all provide server hosting cappabilities as a service. Some hosts even offer a low-power free version, too! Picking between hosts is left to the reader's discretion, as each provider has unique pros and cons that differentiate them from the competition.

Hosting services, hereafter reffered to as hosts, typically have their own guides on how to go about configuring modded Minecraft servers. Instead of explaining how to go about setting up each possible host's servers, instead we will just discuss the options available to you.

Minecraft comes in two major editions. The "classic" version is the Java edition, having a wider range of mod options and a long history of mod compatibility, many stick with it through thick and thin. Bedrock edition is the younger brother to Java edition, starting as a port of Minecraft Pocket Edition (PE) for smart phones, Bedrock offers a narrower selection of mods, simply due to its younger age. Bedrock edition provides a different feel to the Minecraft experience, Mojang tweaking how elements play out to better fit the playerbase. Chosing which edition to play on comes down to personal preference at the end of the day. If you already know which version you plan on using, simply select it from the two options down below.

Java Edition>

Bedrock Edition>

Minecraft DIY Server Guide

A complete gudie to hosting your own server,
from Java to Bedrock.

If you want it done right you've got to do it yourself! As a bounus, it's free! (Probably. It really depends on how you do it). While a DIY solution is certainly the most free-form of options, it falls on you when something goes wrong. Ideally, nothing will go wrong, but you never know, especially when working with mods. If you want to run a server that you also will be playing on, your best bet is to use a secondary computer to do all of the hosting. Minecraft is a big game and takes a lot of resources to keep running. If you want to play and host at the same time, doing it on one machine requires a beefy PC. Doing it on a laptop is a no-go.
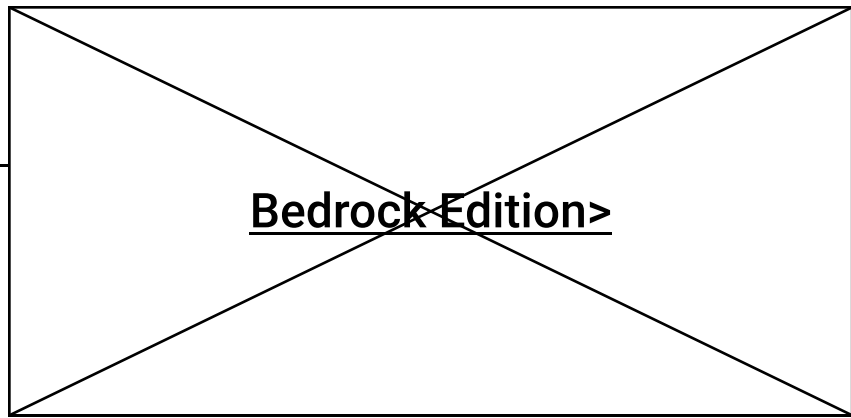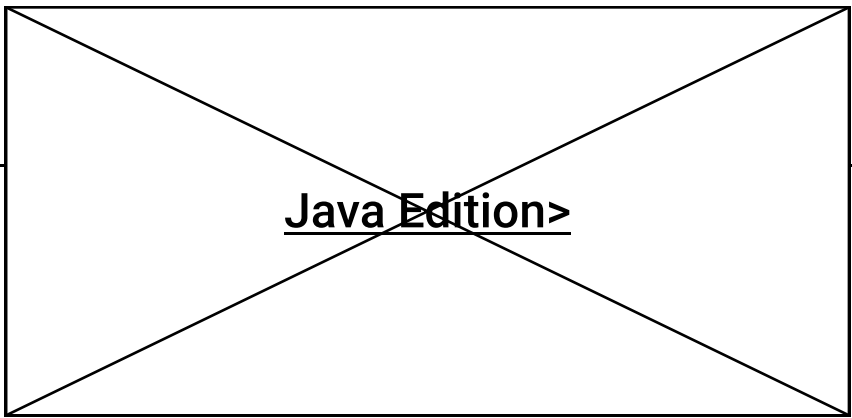
   To ensure a stable connection, you will want to have the host computer to be plugged in to your internet via an Ethernet cable. This keeps data rates consistent and helps prevent sudden disconnects. The next big step is deciding how the networking will work. By default, servers try and communicate on a specific port, a designated gap in your router's connection to the outside world. In order to communicate with computers on other networks (other routers), you need to port forward the port your server will be using. (By default, this is 25565). If you only expect to use the server locally, you can skip this step.

   Minecraft (at least Java edition) supports this natively, allowing anyone to turn any singleplayer world into a temporary local area network (LAN) server. However, you may want a server that can run without you being in the world yourself. Having a server you run yourself, often reffered to as a dedicated server, allows you to keep a server up as long as you want to.

   Another option, for those who want to avoid port forwarding, is using a third party application to create a virtual "portal" that connects others to your network. Imagine your friend's computer connects to your computer, which then communicates to your router. This creates a virtual LAN, allowing servers to work wihtout extra router setup.

   Finally, the most common solution: port forwarding your router. While this process differes with every router make and model, each router's configuration page should have an option labeled something along the lines of Port Forwarding. There, you setup the port 25565 to relate to the computer's internal IP address for TCP/UDP traffic. Once that is setup, computers outside of your network can communicate with applications on your PC using that port. To have your friends connect to your server, you will need to have them connect to your public IP address. This should change every time your router reboots, unless you have a more complex setup. Use a service such as www.whatismyip.com to find this information out. This is the IP you give to your friends.

   Now for the splitting point of the guide. Will you be playing on Java edition or on Bedrock edition? This will most likely be determined by which version you own, but playing with mods is more often then not on the Java version of Minecraft. That isn't to say that Bedrock doesn't mods, it has many! Speak with your friends and find out which version all of you have and plan on playing on. Once you know, simply select the edition out of the two below.

Java Edition>

Bedrock Edition>

This guide is more of a proof-of-concept, being built for a class assignment. As such, bits and bobs within the website might not work as intended. Without external help, it is also possible that information here and there might fall out of date. If that is the case, please do not hesitate to send me an email or other message to let me know! I would appreciate the help.

I often had trouble remembering the exact steps I needed to take when setting up Minecraft servers for my friends and I to use. How do I go about installing mods? Which version of Forge do I need? What the heck is Fabric? If it wasn't obvious, I haven't explored newer versions of the game in quite some time. I still find Java edition 1.12.2 new and exciting! Crazy how the game is already nearing version 1.17 at the time of writing this. I wanted to make this guide, offering step-by-step instructions for people whether they were working on their hundredth server or if they were making a modded server for the very first time. It felt like every guide I went to was only providing instuctions for some hosting service's product.

Again, if you see anything wrong with the information in this guide, please shoot me an email! I would appreciate it! You can contact me at itscaseyr+MMCSS@gmail.com whenever you like.

Contact Form