

# Alexander Pruss's Blog

This is very attractive because my kids are really into Minecraft. We don't have a Raspberry Pi and they're expensive. However, they do require an HDMI display device. It turns out that there are plugins (e.g., Raspberry Juice for Bukkit) for Minecraft servers that implement (most of) the PI's protocol but it's a bit overkill to run a private server to implement this.

In January, I developed a mod for Minecraft 1.8 and Forge that implements the majority of the Raspberry PI protocol and works with all the Python scripts that work with Minecraft PI Edition. For instance, here's a spiral and a glass torus with water inside.

To install, you'll need Python, Minecraft 1.8, Minecraft Forge, my Raspberry Jam Mod as well as the Minecraft PI Python package. Then:

1. Install Forge for 1.8.
2. Create a Minecraft profile that uses it.
3. Create a mods subdirectory to your Minecraft directory (%appdata%\minecraft on Windows, I believe).
4. Place my mod in the mods directories
5. Create an mcpipy subdirectory to your Minecraft directory.
6. Put the contents of the Minecraft PI Python package into the mcpipy directory.
7. Create a Minecraft profile that utilizes the 1.8 Forge.
8. Run Minecraft and build a world.
9. Use command line to run Python scripts or straight into Minecraft by using the command `/py scriptname`. For instance, `/py_nt7s_sphere` would draw a globe.

The scripts communicate with Minecraft via ASCII messages sent via port 4711.

MINECRAFT CRAFTING The python API is described here. The Raspberry Juice subset is the one I use. There's plenty of information on python programming for Minecraft here (and the author of that site has a book which I've ordered for my kids but it's not yet arrived).