PM Generator Specification

MC Microprocessor Development

Revision 0.1

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# Changelog

|  |  |
| --- | --- |
| **Version** | **Commentary** |
| 0.1 | Initial draft of specification |

# Dependencies

Java 17 or above - <https://www.oracle.com/java/technologies/downloads/>

PicoCLI - <https://www.picocli.info/> (added to lib automatically)

nbt - <https://github.com/BitBuf/nbt> (added to lib automatically)

gson - <https://github.com/google/gson> (dependency for nbt, added to lib automatically)

# Installation

The MC-Microprocessor series of programs can be installed via

> git clone https://github.com/JonathanUhler/MC-Microprocessor

Move the contents of PM-Generator/bin to someplace in the system $PATH. Make sure the PMGen script and lib directory are also included. Run PMGen --help to get started.

# Command Line Information

## Options

|  |  |
| --- | --- |
| **Option** | **Commentary** |
| -f, --force | Overwrite existing content in the output file, if -o is specified. If not specified, content is appended. |
| -h, --help | Display help message and exit. |
| -l, --length <LENGTH> | Specify length (in lines) of the program memory. Default 64. NOTE: an error will be thrown if the number of instructions in the IN\_FILE > --length. |
| -o, --outfile <OUT\_FILE> | Specify the location of an output file. If not specified, output is printed to stdout. |
| -u, --unpacked | Return unpacked NBT data instead of packed bytes. Not recommended for use with -o or -z, as unpacked data is human-readable only. |
| -V, --version | Display the version and exit. |
| -w, --width <WIDTH> | Specify width (in bits) to expect of each instruction in the IN\_FILE. Default 25. NOTE: this is an **unchecked operation**; if instructions in the IN\_FILE are a different width, they will be **truncated or expanded**. |
| -z, --zip | Zip the output file with gzip, if -o is specified. |

## Arguments

|  |  |
| --- | --- |
| **Argument** | **Commentary** |
| IN\_FILE | Input file with assembled instructions. |