Fuji Manual

v4.2.0-dev-12a6a1c7b4

sakurawald

October 27, 2024

Contents

| 1 | Cor | $ m_{rcept}$ |
|---|-------------------|--|
| | 1.1 | Configuration File |
| | | 1.1.1 Definition |
| | | 1.1.2 Types |
| | 1.2 | Module |
| | | 1.2.1 Definition |
| | | 1.2.2 Properties |
| | | 1.2.3 Module Path |
| | | 1.2.4 How to enable/disable a module? |
| | 1.3 | Job |
| | | 1.3.1 Definition |
| | | 1.3.2 Cron Expression as Trigger Rule |
| | 1.4 | Regex |
| | | 1.4.1 Definition |
| | | 1.4.2 Reference |
| | 1.5 | Placeholder |
| | | 1.5.1 Definition |
| | | 1.5.2 Example |
| | | 1.5.3 Reference |
| | 1.6 | Identifier |
| | | 1.6.1 Definition |
| | | 1.6.2 Example |
| | | 1.6.3 How to query all identifiers of a type |
| 2 | Don | mission 8 |
| 4 | 2.1 | Definition |
| | $\frac{2.1}{2.2}$ | |
| | $\frac{2.2}{2.3}$ | V I |
| | 2.3 | \mathbf{I} |
| | | 2.3.1 Explanation |
| | 0.4 | 01 |
| | 2.4 | Advanced Usage |
| | ~ ~ | 2.4.1 The string permission is calculated with a context |
| | 2.5 | Reference |

| 3 | Met | \mathbf{a} | | 11 |
|---|-----|---------------|-----------|---------------|
| | 3.1 | Definition | | |
| | 3.2 | Example | | |
| | ~ | | | |
| 4 | | ifiguration | 7.1 | 12 |
| | 4.1 | | | |
| | 4.0 | | | |
| | 4.2 | Module-Contro | ol File | |
| 5 | Mod | dule | | 15 |
| • | 5.1 | | | |
| | 0.1 | | | |
| | | 5.1.2 How it | | |
| | | - | | |
| | | | | |
| | | | , | |
| | 5.2 | | | |
| | 0.2 | | | |
| | | 1 | | |
| | | • | - | |
| | 5.3 | 1 | | |
| | 0.0 | | | |
| | | | | |
| | | 5.3.2.1 | | |
| | | | , | |
| | 5.4 | | | |
| | 5.4 | | | |
| | | - | | |
| | | | | |
| | | | | |
| | | 5.4.3.1 | • | |
| | | | 5.4.3.1.1 | Purpose |
| | | | 5.4.3.1.2 | Feature |
| | | | 5.4.3.1.3 | Configuration |
| | | T 4 9 9 | 5.4.3.1.4 | Example |
| | | 5.4.3.2 | | |
| | | | 5.4.3.2.1 | Purpose |
| | | | 5.4.3.2.2 | Placeholder |
| | | | 5.4.3.2.3 | Configuration |
| | | | 5.4.3.2.4 | Example |
| | | 5.4.3.3 | mention. | |
| | | | 5.4.3.3.1 | Purpose |
| | | | 5.4.3.3.2 | Configuration |
| | | 5.4.3.4 | rewrite . | |
| | | | 5.4.3.4.1 | Purpose |
| | | | 5.4.3.4.2 | Example |
| | | 5.4.3.5 | _ | |
| | | | 5.4.3.5.1 | Purpose |
| | | | 5.4.3.5.2 | Example |

| | | 5.4.3.6 | stripe . | | | | | | | | . 26 |
|------|--------|--------------------------------|-----------|---------------|----|------|------|------|-------|------|------|
| | | | 5.4.3.6.1 | Purpose | | | | | | | . 26 |
| | | | 5.4.3.6.2 | How it work | s? | | | | | | . 26 |
| | | | 5.4.3.6.3 | Example | | | | | | | . 26 |
| | | 5.4.3.7 | spy | | | | | | | | . 27 |
| | | | 5.4.3.7.1 | Purpose | | | | | | | |
| | | | 5.4.3.7.2 | Command . | | | | | | | . 27 |
| | | | | 5.4.3.7.2.1 | | | | | | | |
| | | 5.4.3.8 | history | | , | | | | | | |
| | | | • | Purpose | | | | | | | |
| | | | | Configuratio | | | | | | | |
| 5.5 | cleane | r | | | | | | | | | |
| 0.0 | 5.5.1 | | | | | | | | | | |
| | 5.5.2 | | | | | | | | | | |
| | 0.0.2 | | | ${ m clean}$ | | | | | | | |
| | 5.5.3 | | * | | | | | | | | |
| 5.6 | | _ | | | | | | | | | |
| 0.0 | 5.6.1 | | | | | | | | | | |
| | 5.6.2 | - | | | | | | | | | |
| | 5.0.2 | 5.6.2.1 | | | | | | | | | |
| | | 0.0.2.1 | | Purpose | | | | | | | |
| | | | | | | | | | | | |
| | | r.c.o.o | | Configuratio | | | | | | | |
| | | 5.6.2.2 | | | | | | | | | |
| | | | | Purpose | | | | | | | |
| | | | | Configuratio | | | | | | | |
| 5.7 | | | | | | | | | | | |
| | 5.7.1 | | | | | | | | | | |
| | 5.7.2 | | | | | | | | | | |
| | 5.7.3 | | | | | | | | | | |
| 5.8 | | _ | | | | | | | | | |
| | 5.8.1 | - | | | | | | | | | |
| | 5.8.2 | | | | | | | | | | |
| | | | / | d-attachment. | | | | | | | |
| | 5.8.3 | | | | | | | | | | |
| 5.9 | comma | and bund | dle | | | | | | | | . 36 |
| | 5.9.1 | Purpose | | | | | | | | | . 36 |
| | 5.9.2 | | | | | | | | | | |
| | | 5.9.2.1 | /comman | d-bundle | | | | | | | . 36 |
| | 5.9.3 | Feature | | | | | | | | | . 36 |
| | 5.9.4 | Example | e | | | | | | | | . 37 |
| | 5.9.5 | Reference | e | | | | | | | | . 37 |
| 5.10 | comma | and cool | down | | | | | | | | . 38 |
| | | _ | | | | | | | | | |
| | | _ | | | | | | | | | |
| | | | | | | | | | | | |
| 5.11 | | - | | | | | | | | | |
| 0.11 | | _ | | | | | | | | | |
| | | How it w | | | | | | | • | | 40 |

| | 5.11.3 | Example | | | | 40 |
|------|--------|---------------|-------------------|--------------|-------------|----------|
| 5.12 | comma | and inter | active | | | 41 |
| | 5.12.1 | Purpose | | | | 41 |
| | 5.12.2 | How it w | vorks? | | | 41 |
| | 5.12.3 | Definitio | n | | | 41 |
| | | | | | | 41 |
| 5.13 | | - | | | | 42 |
| | | _ | | | | 42 |
| | | | | | | 42 |
| | 0.10.2 | | | | | 42 |
| | | 0.10.2.1 | | | | 42 |
| | | | | _ | | 42 |
| | | | 0.10.2.1.2 | | | 42 |
| | | | 5 13 2 1 3 | | / | 42 |
| | | 5 13 2 2 | | | | 43 |
| | | 5.15.2.2 | _ | | | 43 |
| | | | | | | 43 |
| | | | 5.15.2.2.2 | | | 43 |
| | | | E 12 0 0 2 | | / | 43 43 |
| | | F 12 0 2 | | | | |
| | | 5.13.2.3 | | | | 44 |
| | | | | - | | 44 |
| | | | 5.13.2.3.2 | | | 44 |
| | | | * 10000 | | / | 44 |
| | | - 1001 | | | | 44 |
| | | 5.13.2.4 | | | | 45 |
| | | | | - | | 45 |
| | | | 5.13.2.4.2 | | | 45 |
| | | | | | / | 45 |
| | | | | | | 45 |
| | | 5.13.2.5 | | | | 46 |
| | | | | - | | 46 |
| | | | 5.13.2.5.2 | Command | | 46 |
| | | | | | / 3 | 46 |
| | | | 5.13.2.5.3 | | | 46 |
| | | | 5.13.2.5.4 | Reference . | | 46 |
| | | 5.13.2.6 | attachmen | t | | 47 |
| | | | 5.13.2.6.1 | Purpose . | | 47 |
| | | | 5.13.2.6.2 | Command | | 47 |
| | | | | 5.13.2.6.2.1 | /attachment | 47 |
| | | | 5.13.2.6.3 | Example . | | 47 |
| | | 5.13.2.7 | | | | 48 |
| | | | 5.13.2.7.1 | Purpose . | | 48 |
| | | | | - | | 48 |
| | | | | | | 48 |
| 5.14 | comma | and pern | | | | 49 |
| | | | | | | 49 |
| | | | | | | 49 |
| | _ | | | | | 49 |
| | | | | | | |

| | 5.14.3 | How it works? | 49 |
|------|--------|----------------------|------------|
| | | | 50 |
| 5.15 | | • | 51 |
| | | | 51 |
| 5.16 | | ± | 52 |
| | | | 52 |
| | | <u>.</u> | 52 |
| | | | 52 |
| | 0.10.0 | | 52 |
| | | , | 52 |
| | 5 16 4 | | 52 52 |
| 5 17 | | | 53 |
| 5.11 | | = 1 V |). 53 |
| | | • |). 53 |
| E 10 | | | 54 |
| 5.18 | | - | |
| | | • | 54 |
| | 5.18.2 | | 54 |
| | | <i>'</i> | 54 |
| | | , 0 | 54 |
| | | | 54 |
| | | / • | 5 4 |
| | | , 0 | 5 4 |
| | | | 54 |
| | | | 5 4 |
| | | | 54 |
| | | | 54 |
| | | | 5 4 |
| | | 5.18.2.11 /ping | 54 |
| | | 5.18.2.12 / realname | 54 |
| | | 5.18.2.13 /nickname | 54 |
| | | 5.18.2.14 /repair | 54 |
| | | 5.18.2.15 /reply | 54 |
| | | | 54 |
| | | 5.18.2.16 /seen | 55 |
| | | | 55 |
| | | | 55 |
| | | , - | 55 |
| | | | 55 |
| | | 5.18.2.20.1 Example | 55 |
| | | * | 55 |
| | | , | 5 5 |
| | | | 56 |
| | | <i>'</i> | 56 |
| | | , 1 1 | 56 |
| | | <i>'</i> | 56 |
| | | / 0 | 56 |
| | | , - | 56 |
| | | | 56 |
| | | 5.18.2.28 /freeze | 'n |

| 5.19 | ommand warmup | 57 |
|---------------|---|-----------------|
| | _ · · · · · · · · · · · · · · · · · · · | 57 |
| | * | 57 |
| 5.20 | • | 60 |
| 0.20 | | 60 |
| | | |
| | | 60 |
| | • | 60 |
| 5.21 | | 61 |
| | • | 61 |
| | .21.2 Sub-Module | 61 |
| | 5.21.2.1 chat speed disabler | 61 |
| | 5.21.2.2 move_speed_disabler | 61 |
| | | 61 |
| | | 61 |
| 5 22 | | 62 |
| 0.22 | | $\frac{62}{62}$ |
| | | |
| | | 62 |
| | | 62 |
| | | 62 |
| | | 62 |
| | 5.22.1.5 /send-toast | 63 |
| | 5.22.1.6 /send-chat | 63 |
| | 5.22.1.7 /send-bossbar | 63 |
| | | 64 |
| 5.23 | | 66 |
| J. _ J | · · | 66 |
| | | 66 |
| | | 66 |
| | | |
| | | 66 |
| | 1 0 1 | 66 |
| | 1 0 1 | 66 |
| | / V 1 | 66 |
| | / V 1 0 V1 | 66 |
| | | 66 |
| 5.24 | unctional | 67 |
| | .24.1 Purpose | 67 |
| | | 67 |
| | | 67 |
| | | 67 |
| | | 67 |
| | | 67 |
| | | |
| | | 67 |
| | , 31 0 | 67 67 |
| | | 67 |
| | | 67 |
| | 5.24.2.9 /loom | 67 |
| 5.25 | ameplay | 68 |
| | 25 1 Sub-Module | 68 |

| | | 5.25.1.1 | $multi_obs$ | $idian_platfor$ | m | | | | | | 68 |
|------|--------|------------|--|------------------|-------------------------|---------|------|------|-------|------|----|
| | | | 5.25.1.1.1 | Purpose | | | | | | | 68 |
| | | | | Configuration | | | | | | | |
| | | 5 25 1 2 | | | | | | | | | |
| | | 0.20.1.2 | _ | Sub-Module | | | | | | | |
| | | | 0.20.1.2.1 | 5.25.1.2.1.1 | fake p | | | | | | |
| | | | | 0.20.1.2.1.1 | | | | | | | |
| | | | | | 5.25.1.2 | 2.1.1.1 | Purp | | | | |
| | | | | | | 2.1.1.2 | | | | | |
| | | | | | | 2.1.1.3 | | | | | |
| | | | | 5.25.1.2.1.2 | $better_{\underline{}}$ | _ | | | | | |
| | | | | | | 2.1.2.1 | | | | | |
| 5.26 | head . | | | | | | | | | | 71 |
| | | | | | | | | | | | |
| | | _ | | | | | | | | | |
| | 0.20.2 | | | | | | | | | | |
| | 5 26 2 | | | | | | | | | | |
| F 07 | | _ | | | | | | | | | |
| 5.27 | | | | | | | | | | | |
| | | | | | | | | | | | |
| | 5.27.2 | | | | | | | | | | |
| | | 5.27.2.1 | /home | | | | | | | | 72 |
| | 5.27.3 | Meta | | | | | | | | | 72 |
| 5.28 | kit | | | | | | | | | | 73 |
| | | | | | | | | | | | |
| | | _ | | | | | | | | | |
| | | - | | | | | | | | | |
| | 0.20.0 | | | | | | | | | | |
| | | | , and a second s | | | | | | | | |
| | | | , - | | | | | | | | |
| | | _ | | | | | | | | | |
| 5.29 | _ | ~ | | | | | | | | | |
| | 5.29.1 | Purpose | | | | | | | | | 75 |
| | 5.29.2 | Feature | | | | | | | | | 75 |
| | 5.29.3 | Difference | ce | | | | | | | | 75 |
| 5.30 | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | _ | | | | | | | | | |
| F 01 | | | | | | | | | | | |
| 5.31 | | | | | | | | | | | |
| | | 1 | | | | | | | | | |
| | 5.31.2 | Support | ed Numeric | Types | | | | | | | |
| | 5.31.3 | Example | e | | | | | | | | 77 |
| 5.32 | namet | ag | | | | | | | | | 78 |
| | | _ | | | | | | | | | |
| | | _ | | | | | | | | | |
| | | _ | | | | | | | | | |
| 5 22 | | | | | | | | | | | |
| ჟ.ეე | _ | | | | | | | | | | |
| | | - | | | | | | | | | |
| | 5.33.2 | | | | | | | | ٠ | | |
| | | 5 33 2 1 | /placehold | er | | | | | | | 79 |

| | 5.33.3 Placeholder | 7 |
|-------|---|--|
| | 5.33.4 What's more? | |
| F 9.4 | | |
| 5.34 | predicate | |
| | 5.34.1 Purpose | |
| | 5.34.2 Definition | |
| | 5.34.3 How it works? | |
| | 5.34.4 Example | |
| F 0F | | |
| 5.35 | profiler | |
| | 5.35.1 Purpose | 8 |
| | 5.35.2 Command | 8 |
| | | 8: |
| 5 26 | , - | |
| 5.50 | pvp | |
| | 5.36.1 Purpose | |
| | 5.36.2 Command | 8 |
| | $5.36.2.1 \text{ /pvp} \dots \dots \dots$ | |
| 5.37 | rtp | |
| 5.01 | | |
| | 5.37.1 Purpose | |
| | 5.37.2 Feature | |
| | 5.37.3 Command | 8 |
| | 5.37.3.1 /rtp | |
| | , = | |
| | | |
| | 5.37.4 Configuration | |
| | 5.37.5 What's more? | |
| 5.38 | skin | 8 |
| | 5.38.1 Purpose | |
| | 5.38.2 Command | |
| | | |
| | | |
| | 5.38.3 Configuration | |
| | 5.38.4 Example | 8 |
| 5.39 | system message | |
| | 5.39.1 Purpose | |
| | | |
| | 5.39.2 How it works? | |
| | 5.39.3 Example | |
| 5.40 | tab_list | 8 |
| | 5.40.1 Purpose | |
| | 5.40.2 Configuration | |
| | ~ | |
| | 5.40.3 Sub-Module | |
| | | |
| | 5.40.3.1.1 Purpose | |
| | 5.40.3.1.2 How it works | |
| | | |
| | | |
| | | |
| | | $\operatorname{ync}_{-}\operatorname{game_profile} \ \dots \ \dots \ 9$ |
| | 5 | .40.3.1.4.1.1 Purpose 9 |
| | $5.40.3.2$ faker \ldots | |
| | | |
| 5 /11 | teleport warmup | |
| 0.41 | 5.41.1 Purpose | 0 |
| | | |

| | 5.41.2 | Configuration | 92 |
|------|--------|--------------------|----------|
| 5.42 | temp | ban | 93 |
| | | | 93 |
| | | 1 | 93 |
| | 011212 | | 93 |
| | 5 42 3 | / - | 93 |
| 5 42 | | * | 94 |
| 0.40 | | | 94 94 |
| | | 1 | 94 94 |
| | 0.45.2 | | |
| F 44 | | / | 94 |
| 5.44 | | | 95 |
| | | • | 95 |
| | 5.44.2 | | 95 |
| | | | 95 |
| | 5.44.3 | | 95 |
| 5.45 | tpa | (| 96 |
| | 5.45.1 | Purpose | 96 |
| | 5.45.2 | Command | 96 |
| | | | 96 |
| | | | 96 |
| | | / - | 96 |
| | | / 1 1 | 96 |
| | | , 1 | 96 |
| | 5 45 3 | / 1 | 96 |
| 5.46 | | | 90 97 |
| 5.40 | | | 91 97 |
| | | 1 | 91 97 |
| | 5.46.2 | | |
| | | / | 97 |
| | | | 97 |
| 5.47 | | | 98 |
| | 5.47.1 | 1 | 98 |
| 5.48 | works | | 99 |
| | 5.48.1 | Purpose | 99 |
| | 5.48.2 | Concept | 99 |
| | 5.48.3 | Command | 99 |
| | 5.48.4 | Configuration | 99 |
| 5.49 | | | 00 |
| | | Purpose | |
| | | Command | |
| | 0.20.2 | 5.49.2.1 /world | |
| | 5 49 3 | Concept | |
| | | Configuration | |
| | | | |
| E E0 | | To Table 1 | - |
| 0.50 | | downloader | |
| | | Purpose | |
| | 5.50.2 | Command | |
| | | 5.50.2.1 /download | |
| | 5.50.3 | Configuration |)2 |

| 6 | Q&A | 103 |
|---|---|-----|
| | 6.1 Where is the configuration files? | 103 |
| | 6.2 What is .json file? | |
| | 6.3 How can I edit a configuration file? | |
| | 6.4 What is .dat file? | |
| | 6.5 How to update fuji to a new version? | |
| | 6.5.1 Backup the data | 104 |
| | 6.5.2 Test the new version in your test-environment | 104 |
| | 6.5.3 Apply the changes to production-environment | |
| | 6.6 Fuji conflits with one of my mods | 104 |
| | 6.7 Can I ask the forge or neoforge support? | 104 |
| | 6.8 How can I report bugs or suggest new features? | 104 |
| 7 | Transformer | 105 |
| | 7.1 Command Transformer | 105 |
| | 7.2 Command Generator | |
| 8 | Development | 108 |
| | 8.1 Setup the development environment | 108 |
| 9 | Suggestion | 109 |
| • | 9.1 Suggestion on server-side mods | |
| | 9.1.1 Explanation | |
| | 9.1.2 Server-side mode list | |

Chapter 1

Concept

1.1 Configuration File

1.1.1 Definition

All files inside config/fuji directory are named configuration file

1.1.2 Types

Note: The types of configuration files

- 1. Control File A control file is used to control behaviours.
 - 1.1. Main-Control File The main-control file refers to the config/fuji/config.json file, which is used to enable/disable a module.
 - **1.2.** Module-Control File Some modules will have their own control file, which is used to control the behaviour of the module.
- 2. User-Data File User-data files are used to store the data generated by the user.

1.2 Module

1.2.1 Definition

A module is used to provide a specific purpose.

Example: The purpose of modules

- 1. ChatModule provides chat-format customization.
- 2. TpaModule provides /tpa command.

1.2.2 Properties

The properties of a module are as follows:

- 1. Can be disabled You can disable a module completely in main-control file by setting the value of its enable key to false.
- 2. Can work standalone The code of a module is self-contained, there is no symbol reference to other modules.

1.2.3 Module Path

A module is identified by a unique module path.

Example: What a module-path looks like?

The module path of the module tpa is tpa.

The module path of the module history whose parent module is chat, is chat.history.

You will see a list of enabled modules identified by their module path at the server-startup process.

A module can have sub-module.

The relationship between parent-module and sub-module is relative, and there is nothing special about sub-module.

1.2.4 How to enable/disable a module?

You can enable/disable a module in config/fuji/config.json by setting the value of its enable key to true/false.

A module will be enabled if the following conditions are met:

- $1. \ \, {\rm The} \,\, {\rm value} \,\, {\rm of} \,\, {\rm common.debug.disable_all_modules} \,\, {\rm is} \,\, {\rm false}.$
- 2. The required dependency mods are installed.
- 3. Its parnet-module is enabled.
- 4. The value of its enable key is true.

Example: How to enable a sub-module?

To make the module chat.display enabled, you need to enable chat module first.

1.3 Job

1.3.1 Definition

A job is some things will be done repeatedly.

1.3.2 Cron Expression as Trigger Rule

A language named cron language is used to define when a job should be triggered.

Tip: Don't write cron expression by hand. Use generator!

A cron expression looks like 0 * * ? * *, means trigger the job every minute. You can use the generator to generate a cron expression: https://www.freeformatter.com/cron-expression-generator-quartz.html

1.4 Regex

1.4.1 Definition

Regex is a language used to define the pattern of strings.

```
Some modules that use regex:
See command_warmup
See command_rewrite
See command_cooldown
See teleport_warmup
```

See cleaner

1.4.2 Reference

```
1. https://regexr.com/
```

2. https://regex101.com/

1.5 Placeholder

1.5.1 Definition

A placeholder is a string which will be replaced based on context.

Tip: What is the placeholder api in fabric platform?

There is a plugin named PlaceholderAPI in bukkit platform.

Also, there is a mod named Text Placeholder API in fabric platform.

They are different projects, but provides the same purpose.

1.5.2 Example

Example: Replace player name by context

The placeholder "player:name" will be replaced by the name of the contextual player.

1.5.3 Reference

- 1. https://placeholders.pb4.eu/user/default-placeholders/
- 2. https://placeholders.pb4.eu/user/mod-placeholders/

1.6 Identifier

1.6.1 Definition

An identifier is a string to name an object in minecraft.

1.6.2 Example

Example: The identifier of items

The identifier of apple is "minecraft:apple". The identifier of diamond is "minecraft:diamond".

Example: The identifier of entities

The identifier of zombie is "minecraft:zombie".

1.6.3 How to query all identifiers of a type

Example: Query all identifiers of entity

/summon ...

Example: Query all identifiers of block

/setblock ...

Example: Query all identifiers of item

/give ...

Chapter 2

Permission

2.1 Definition

A permission is used to decide whether a player can do something or not.

2.2 Types

To make the discussion clearer, we define the types of permission as follows:

- 1. level permission A permission level is a non-negative number used in vanilla minecraft. The higher number means the higher authority.
- 2. string permission Usually, a string permission is introduced by a permission plugin, such as luckperms.

2.3 What is the permission system used by fuji?

2.3.1 Explanation

Fuji use the mojang's vanilla permission system, which is based on level permission.

As a convention, most of the commands registered by fuji, requires level permission to be 0 to use. Only a few of the commands require the level permission to be 4 to use.

Tip: Modify the default requirement of all commands registered by fuji

See Configuration

2.3.2 Set a string permission for a command

By default, fuji only use the level permission as the requirement of a command. However, if you want to use string permission for a command, you can use command_permission module, which is used to override the requirement of an existing command.

Example: Allow players to use /seed command

The command /seed provided by mojang requires level permission to be 3 to use. If you want to allow players to use /seed command, but you don't want to grant op for them. Then in this situation, you can grant the string permission for them: /lp group default permission set fuji.permission.seed true, which means that: set the requirement of command /seed to string permission fuji.permission.seed.

Example: Dis-allow players to use /list command

The command /list provided by mojang required level permission to be 0 to use. If you want to dis-allow players to use /list command, but because this command requires no string permission to use, so it's impossible to ban it via luckperms. In this situation, you can grant a string permission: /lp group default permission set fuji.permission.list false for them, which means that: set the requirement of command /list to string permission fuji.permission.list.

Example: Unset the override of requirement of the command

To undo the operation in the first example, just issue /lp group default permission unset fuji.permission.seed

2.4 Advanced Usage

2.4.1 The string permission is calculated with a context

The luckperms mod provides the context to calculate a string permission. A context is a predicate which accepts a player, and output a boolean value according to its conditions. Luckperms pre-define some useful context like:

- 1. world context: the player should in a specified world, so that this string permission is valid.
- **2. temporal context** : current time should not exceed the expiration time, so that this string permission is valid.

2.5 Reference

1. https://minecraft.fandom.com/wiki/Permission_level

Chapter 3

Meta

3.1 Definition

A meta is a key-value pair.

Note:

Note that meta is introduced by luckperms mod, there is no meta in vanilla minecraft.

3.2 Example

Example: Set a meta for a gruop.

The home module supports the meta fuji.home.home_limit, which controls how many homes a player can create. To set the max homes limits to 3: /lp group default meta set fuji.home.home_limit 3

Example: Query all metas for a group.

/lp group default info

Chapter 4

Configuration

4.1 Main-Control File

4.1.1 Configuration

core The core options inside config/fuji/config.json will influence all modules.

debug

disable_all_modules Used to test the compatibility between fuji and other mods.
log_debug_messages Whether to log the debug level messages into the console. Use this only for debug purpose, or it will cause console spam.

backup Fuji will back up the config/fuji directory automatically before it loads any module.

max slots How many backup should we keep?

skip The list of path resolver to skip in backup.

Insert modules/head means skip the folder config/fuji/modules/head.

language

 ${\bf default_language}$ The default language to use.

Tip: Enable multi-language support for fuji

See language

permission

all_commands_require_level_4_permission_to_use_by_default By default, most of commands registered by fuji requires level 0 permission to use. (e.g. /afk, /home, /warp). Some commands requires level 4 to use. (e.g. /fly, /god, /more). Enable this option will cause all commands registered by fuji require level 4 permission to use.

quartz Fuji use quartz library as scheduler, all the Job are managed by quartz. Quartz library use a language called cron language to define when to trigger a job.

logger_level The logger level for quartz. The logger level from high to low are: OFF,
FATAL, ERROR, WARN, INFO, DEBUG, TRACE, ALL.

Example: Enable all logs for quartz

Set the value to ALL to display all the messages from quartz. It's recommended to set at least WARN level, to avoid console spam.

4.2 Module-Control File

You can read more about module-control file for each module in Module

Tip: Use /fuji reload command to hot reload the configuration files.

The /fuji reload command is provided by fuji module. See fuji

Chapter 5

Module

5.1 afk

5.1.1 Purpose

This module provides afk detection, afk event, afk name customization and afk effects.

5.1.2 How it works?

For each player, we have an input counter to track the last input time.

An input is as allows: mine blocks, movement.

The afk checker defined by cron will run and compare 2 consecutive value of the input counter associated with the player, if it's the same, then the player is considered as in afk.

In other words, if the afk checker is defined to run every 5 minutes, a player flagged as in afk is actually no input for 5--10 minutes.

5.1.3 Command

5.1.3.1 /afk

5.1.4 Configuration

format The tab list name format when a player is afk

```
afk checker
```

cron The cron to define how the afk checker is triggered.

afk event Execute commands on afk events.

```
Example: Kick a player if he enters afk state

"on_enter_afk": [
  "send-broadcast <gold>Player %player:name% is now afk",
  "kick %player:name% You are kicked beacause of afk."
]
```

event Afk effects are applied if a player enters afk state.

invulnerable Immune to all damage?

targetable Can be targeted by a hostile entity?

moveable Can be moved if in afk state?

5.2 anti build

5.2.1 Purpose

This module allows you to ban the interaction with some item/block/entity.

5.2.2 Anti Types

The types supported by this module are as follows:

- ${\bf 1.~break_block}$
- 2. place block
- 3. interact_item
- 4. interact block
- 5. interact_entity

Tip: Query identifiers

See How to query all identifiers of a type

5.2.3 Exapmle

Example: Ban TNT

add minecraft:tnt into place block list

Example: Ban TNT but allow a specific player to use

/lp user <player> permission set fuji.anti_build.place_block.bypass.minecraft:tit

5.3 back

5.3.1 Purpose

This module allows player to teleport back to last teleport point or death point.

5.3.2 Command

5.3.2.1 /back

5.3.3 Configuration

ignore_distance If the player's teleportation destination is close enough, we ignore this teleportation.

5.4 chat

5.4.1 Purpose

This module provides chat related customization.

Note: The compatibility with styled-chat mod and other chat-related mods

All submodules except the chat.style module are designed to work with styled chat mod and other chat-related mods. You are free to use these modules with them!

5.4.2 Reference

- 1. Text Placeholder API default placeholders
- 2. Luckperms prefix, suffix and meta

5.4.3 Sub-Module

5.4.3.1 style

5.4.3.1.1 Purpose

Customize global chat style, and also allow players to use /chat style to set their per-player chat style.

5.4.3.1.2 Feature

- 1. You can use mini-message language to define complex format.
- 2. Besides the server chat format, each player can also set their per-player chat format.
- 3. This module doesn't **break** the vanilla chat events, so it can work with other chat related mods.

Tip: Write complex style using mini-language

You can use mini-language to write complex text.

See more:

- 1. https://docs.advntr.dev/minimessage/format.html
- 2. https://placeholders.pb4.eu/user/quicktext

5.4.3.1.3 Configuration

style The style for chat message.

Example: Set prefix and suffix for players

Luckperms is required to set prefix and suffix.

After you installed luckperms mod, just issue /lp group default meta setprefix <yellow>[awesome] to assign prefix.

Don't forget to insert %fuji:player_prefix% and %fuji:player_suffix% in sender option in configuration file, and issue /fuji reload

5.4.3.1.4 Example

Example: Set per-player chat style

/chat style set prefix + %message% + suffix

Example: Reset per-player chat style

/chat style reset

Example: Use chat stripe module to control the style tags usage

By default, the chat style module allows any player to use any style tags in chat message, including "<click>" tag.

See stripe

5.4.3.2 display

5.4.3.2.1 Purpose

Allow players to share their item in hand, items in inventory and items in ender chest.

5.4.3.2.2 Placeholder

- 1. %fuji:item% display player's main-hand item.
- 2. %fuji:inv% display player's inventory.
- 3. %fuji:ender% display player's ender-chest.

5.4.3.2.3 Configuration

expiration_duration_s For each display data, how long should we save in the memory. Note that if a player shares its inventory items, then fuji will save a copy of his inventory data in the memory.

replace_pattern Define the **patterns** to be replaced in chat message. By default, you can insert "[item]", "[inv]" and "[ender]" to create displays.

5.4.3.2.4 Example

Example: Use chat rewrite module to create a shortcut

See rewrite

5.4.3.3 mention

5.4.3.3.1 Purpose

Insert the player name in the chat message, and the target player will be mentioned and sound notified.

5.4.3.3.2 Configuration

mention_player If you insert Steve in chat message, then the player named Steve will get audio mention.

sound The type of sound used to notify the mentioned player.

Tip: Query all identifiers of sound

/playsound ...

volume

pitch

repeat _ count The sound repeat count.

interval ms The interval between each repeat.

5.4.3.4 rewrite

5.4.3.4.1 Purpose

Allow you to define regex to replace chat message sent by players.

5.4.3.4.2 Example

```
Example: Rewrite the "item" into "[item]" as a shortcut.

{
    "regex": "(?<=^|\\s)item(?=\\s|$)",
    "replacement": "[item]"
}</pre>
```

```
Example: Rewrite badwords as a message filter.

{
    "regex": "(bad-word)|(bad-word-2)|(bad-word-3)",
    "replacement": "<st>***</st>"
}
```

5.4.3.5 replace

5.4.3.5.1 Purpose

Allow you to define regex to replace chat text with a given text before it's sent to the player.

Note: The difference with chat rewrite module

The chat rewrite module operates on string level, while chat replace module operates on text level. The chat rewrite module rewrites the chat string received from the client, and pass this string to the chat string processor, the chat string processor will yield the final chat text, which is ready to sent to the receiver player. This module will replace the final chat text using the defined rules.

5.4.3.5.2 Example

```
Example: Define a shortcut to evaluate a placeholder

{
    "regex": "(?<=^|\\s)uuid(?=\\s|$)",
    "replacement": "<green>my uuid is %player:uuid%</green>"
}
```

5.4.3.6 stripe

5.4.3.6.1 Purpose

Stripe the style tags in chat message sent by players based on permissions.

5.4.3.6.2 How it works?

This module will strile all style tags in chat message sent by a player, and only allows to use a specified style tag if the player has corresponding permission for the tag.

5.4.3.6.3 Example

Example: Allow players to use "<blue>" tag

/lp group default permission set fuji.style.chat.blue

Example: Allow players to use "<>>" tag

/lp group default permission set fuji.style.chat.b

Example: Allow players to use all tags

All tags also including dangerous tags like "<click>" tag which can run commands on clicked! /lp group default permission set fuji.style.chat.*

5.4.3.7 spy

5.4.3.7.1 Purpose Spy on specified chat types.

5.4.3.7.2 Command

5.4.3.7.2.1 /chat spy

5.4.3.8 history

5.4.3.8.1 Purpose

Store ${\tt chat}$ ${\tt messages}$ as a history, and send them to a player joined the server.

5.4.3.8.2 Configuration

buffer_size How many chat messages should we save, so that we can send for a new-joined player.

5.5 cleaner

5.5.1 Purpose

This module provides the entity cleaner to remove specified entities automatically.

Note: Only use this module to clean some edge-case entity

Since the vanilla minecraft also has a cleaner to remove the item stack in the ground, so it's recommended to only use this module to clean some weak-loading entities, like: the sand item stack ...

5.5.2 Command

5.5.2.1 /cleaner clean

Note: The cleaner will keep silent if cleans nothing

If the cleaner cleans nothing, then it will keep silent. (Which means you will not see any message in console, or in-game chat)

Tip: See what is cleaned in cleaner broadcast.

Hover your mouse on the cleaner broadcast, you can see what has been removed.

5.5.3 Configuration

cron The cron used to define the job to trigger /cleaner clean.

key2age The key is translatable key, which you can query in en_us.json language file in minecraft

The translatable key of entity starts with entity.minecraft.

The translatable key of item starts with item.minecraft and block.minecraft.

The age is the existence time of the entity, the unit of age is game tick, which means 20 age = 20 ticks = 1 second.

The cleaner will only remove the entities whose translatable key equals key, and age greater equals the defined age, and the entity must not in the ignore list.

Example: Clean the sand-block entity lives longer than 60sec

"block.minecraft.sand": 1200

ignore Entities match the ignore list will not be cleaned.

ignore item entity Should we ignore all item entity.

ignore living entity Should we ignore all living entity?

If you want the cleaner to remove monster or animals, you should enable this option.

```
ignore_named_entity Should we ignore named entity.(With name tag, or name changed
    by anvil.)
ignore_entity_with_vehicle Like entity riding in some other entity, e.g. minecraft, pig or
    spider
ignore_entity_with_passengers
ignore_glowing_entity
ignore_leashed_entity
```

Note: The built-in safety rule

The cleaner will always ignore the following types:

- 1. player
- 2. any block attached entity (e.g. leash_knot)
- 3. any vehicle entity (e.g. minecart, boat ...)

5.6 color

5.6.1 Purpose

This module provides colorize for things.

5.6.2 Sub-Module

5.6.2.1 Sign

5.6.2.1.1 Purpose

Colorize the sign.

5.6.2.1.2 Configuration

requires _corresponding _permission _to _use _style _tag By default, any player can use all style tags. Enable this options requires the player to has corresponding permission to use style tag. e.g. "fuji.style.sign.<style-tag>"

Example: Write colorful text in sign

- <red>This is the first line
- <rb>The second line
- <bol><bold>The third line
- <i>The last line

5.6.2.2 Anvil

5.6.2.2.1 Purpose

Colorize the anvil.

5.6.2.2.2 Configuration

requires _corresponding _permission _to _use _style _tag By default, any player can use all
 style tags. Enable this options requires the player to has corresponding permission to use style
 tag. e.g. "fuji.style.anvil.<style-tag>"

CHAPTER 5. MODULE

5.7 command alias

5.7.1 Purpose

This module allows you to define command alias, which redirect to the existing command node.

```
Note: A command node is identified by path

See also: https://minecraft.fandom.com/wiki/Commands
```

5.7.2 Example

```
Example: Shorten a existing command

The configuration create a command alias from /r to /reply

{
    "from": [
    "r"
    ],
    "to": [
    "reply"
    ]
}
```

```
Example: Shorten a existing command

The configuration create a command alias from /sudo to /run as fake-op

{
    "from": [
    "sudo"
    ],
    "to": [
    "run",
    "as",
    "fake-op"
    ]
}
```

5.7.3 What's more?

Tip: How can I define complex commands?

As you can see, the command alias module only support to redirect a simple command into another simple command. In other words, you can only use this module to create alias to a existing command node. Also, it's not allow to define variable inside a command alias.

If you want to define complex commands, use command bundle module.

5.8 command attachment

5.8.1 Purpose

This module allows you to attach commands into itemstack.

5.8.2 Command

5.8.2.1 /command-attachment

Note: The same item-stack shares the-same instance

If you hold stick * 64 in your main-hand, then all the sticks share the same attached commands.

5.8.3 Example

Example: Make a magic-stick which heals the player on clicked.

Hold a stick item in your main hand.

/command-attachment attach-item-one heal

Example: Make a magic-stick which gives one dimaond on left clicked with use limit 3 and gives one gold ingot on right clicked with use limit 5.

Hold a stick item in your main hand.

```
/command-attachment attach-item-one --maxUseTimes 3 --interactType LEFT give
%player:name% minecraft:diamond 1
/command-attachment attach-item-one --maxUseTimes 5 --interactType RIGHT
give %player:name% minecraft:gold_ingot 1
```

Example: Make a magic-stick which gives one apple on clicked with use limit 3 without destroying the item.

Hold a stick item in your main hand.

/command-attachment attach-item-one --maxUseTimes 3 --destroyItem false give
%player:name% minecraft:apple 1

Example: Query the attached commands in the mainhand item.

/command-attachment query-item

Example: Let an entity says hello on right click

/command-attachment attach-entity-one <entity-id> say hello %player:name%

Example: Say hello if you steppd on a specific block

/command-attachment attach-block-one 0 0 0 --interactType STEP_ON say hello
%player:name%

Example: Make a portal on a specific block

```
/command-attachment attach-block-one 0 0 0 --interactType STEP_ON tppos --targetPlayer %player:name% --dimension minecraft:the_end --x 0 --y 66 --z 0 %player:name%
```

5.9 command bundle

5.9.1 Purpose

This module allows you to create bundle commands, input one command, output many commands.

5.9.2 Command

5.9.2.1 /command-bundle

The root command of this module.

5.9.3 Feature

- 1. a user-friendly DSL to create new custom commands easily, with the interoperation of variables, placeholders and selectors.
- 2. support complex command argument type: required argument, literal argument and even the optional argument with a default value.
- 3. a powerful type-system to ensure the type-safe input, with fully command suggestion.

Tip: To query all type strings

/fuji inspect argument-types

4. register and un-register commands on the fly, without the server restart!

Example: Reload the bundle commands

Each time you modify the configuration file, you should issue /fuji reload, this will unregister all bundle commands in the server, and register the bundle commands defined in the file into the server.

Also, you can use the /command-bundle un-register and /command-bundle register manually.

5.9.4 Example

```
Example: Combine commands into one command

{
    "requirement": {
        "level": 0,
        "string": null
},
    "pattern": "composite-heal",
        "bundle": [
        "say before heal %player:name%",
        "run as fake-op %player:name% particle minecraft:heart ~ ~2 ~"
        "run as player %player:name% heal",
        "say after heal %player:name%"
        ]
}
```

```
Tip: Assign a string permission for a bundle command

See Permission
```

5.9.5 Reference

- 1. https://www.gamergeeks.net/apps/minecraft/particle-command-generator
- $2. \ https://learn.microsoft.com/en-us/minecraft/creator/documents/particleeffects?\\ view=minecraft-bedrock-stable$

5.10 command cooldown

5.10.1 Purpose

This module provides:

- 1. unnamed cooldown: per command cooldown after the command execution
- 2. named cooldown: support to associate a named cooldown with commands.

```
Tip: How to write regex language?
```

See: Regex

5.10.2 Placeholder

- 1. %fuji:command_cooldown_left_time <named-cooldown>% the left time for specified named cooldown
- 2. %fuji:command_cooldown_left_usage <named-cooldown>% the left usage for specified named cooldown

5.10.3 Example

Example: Create a named cooldown

/command-cooldown create example 3000

Example: Test a named cooldown

```
/command-cooldown test example <player> --onFailed "say false
%fuji:command_cooldown_left_time 1%/%fuji:command_cooldown_left_usage 1%"
say true
```

Example: Reset a named cooldown for a player

Note that this will only reset the timestamp associated with the player, the usage associated with the player will not be reset.

/command-cooldown reset example <player>

Example: Create a named cooldown with 3 max usage and $15 \sec$ cooldown

/command-cooldown create example 15000 --maxUsage 3

Example: Create a named global cooldown for all players

A named global cooldown means that, all players shares the same cooldown, instead of per-player.

/command-cooldown create example 3000 --global true

Example: Create a non-persistent named cooldown

A non-persistent named cooldown means that, the timestamp associated with a player will not be persisted into the storage. That's to say, a server restart will forget all timestamp, but the usage associated with a player will always be persisted.

/command-cooldown create example 99999999999 --persistent false

Taken this example, it means that each time the server restarted, the cooldown will be available only once.

5.11 command event

5.11.1 Purpose

Execute commands on specific events.

5.11.2 How it works?

When an event occurs, this module will execute commands as console with the contextual player. The contextual player will be used to parse placeholders.

5.11.3 Example

5.12 command interactive

5.12.1 Purpose

This module allows you to write commands in **sign block**.

5.12.2 How it works?

When a player right click a sign block, this module will check if the sign block contains the character "/". If contains, then we treat as the player issue the command followed by the character.

5.12.3 Definition

A sign block that contains the character "/" is named an interactive sign block.

Note: How can i edit an interactive sign block?

You need to press shift + right click to edit an interactive sign.

5.12.4 Example

Example: Basic usage

/say hi %player:name%

line 2 empty

line 3 empty

line 4 empty

Example: Add a prefix description text

prefix /say first

/say the second

/say hi %player:name%

/say the last command

Example: Concat commands between lines

prefix /say this is

the first /say and the

second

line 4 empty

5.13 command meta

5.13.1 Purpose

This module provides commands to operate on commands.

5.13.2 Sub-Module

5.13.2.1 run

5.13.2.1.1 Purpose

This module provides /run command, which can run a command with context.

5.13.2.1.2 Command

5.13.2.1.2.1 /run

5.13.2.1.3 Example

Example: Give random diamonds to online players

/run as console give @a minecraft:diamond %fuji:random 8 32%

Example: Give online players random diamonds

/run as console foreach give %fuji:escape player:name% minecraft:diamond
%fuji:escape fuji:random 8 32 1%

Example: Execute a command as a player

/run as player <player> back

Example: Execute a command as fake-op

/run as fake-op <player> give %player:name% minecraft:apple 1

5.13.2.2 for each

5.13.2.2.1 Purpose

This module provides /foreach command. If a command is only targeted for single player, you can use /foreach to apply it for each player online.

5.13.2.2.2 Command

5.13.2.2.2.1 /foreach

5.13.2.2.3 Example

Example: Say hello to online players

/foreach say hello %player:name%

Tip: Escape the placeholder properly

If you use foreach in scheduler module, then you should escape (Write "fuji:escape player:name" instead of "player:name") the placeholder.

It's because the command-scheduler module will try to parse the placeholder, and you need to escape the placeholder, so that the placeholder can be parsed by /foreach command. Here is an example about escape the foreach command in scheduler command list: /foreach give %fuji:escape player:name% minecraft:diamond 16

5.13.2.3 chain

5.13.2.3.1 Purpose

A chain command allows you to run another 2 commands, the first is any command, and the second is the chain command.

Note: The return value of a command

In vanilla minecraft, the return value of command, is an integer:

- 1. < 0 failed
- 2. = 0 passed
- 3. > 0 success

5.13.2.3.2 Command

5.13.2.3.2.1 /chain

5.13.2.3.3 Example

Example: A nested chain.

/chain say 1 chain say 2 chain say 3

Example: A breakable chain.

/chain bad command here chain say 2

Example: Use chain command with predicate command

/run as player <player> chain test-level-perm %player:name% 4 chain say
value is true

5.13.2.4 delay

5.13.2.4.1 Purpose

Delay command allows you to execute a command in specified seconds.

Note: Delay command is only used for short term job

The command <code>/delay</code> is only used to perform short-term job, and will not be persisted on server shutdown. If you want to define long-term job, using <code>command_scheduler</code>

5.13.2.4.2 Command

5.13.2.4.2.1 /delay

5.13.2.4.3 Example

Example: A basic usage

/delay 3 say three seconds passed

Example: A nested delay

/delay 1 delay 2 delay 3 say 6 seconds passed.

5.13.2.5 json

5.13.2.5.1 Purpose

Provides a unified json editor.

5.13.2.5.2 Command

5.13.2.5.2.1 /json

$\mathbf{5.13.2.5.3} \quad \mathbf{Example}$

Example: Read a key

/json read "config/fuji/config.json" "\$.core.quartz.logger_level"

Example: List keys

/json read "config/fuji/config.json" "\$.modules.keys()"

Example: Set a key

/json write "config/fuji/config.json" "\$.core.quartz.logger_level" STRING INFO"

5.13.2.5.4 Reference

1. https://goessner.net/articles/JsonPath/

5.13.2.6 attachment

5.13.2.6.1 Purpose

Provides a unified attachment facility, which can attach any data to any object.

5.13.2.6.2 Command

5.13.2.6.2.1 /attachment

5.13.2.6.3 Example

Example: Set a attachment

/attachment set news today hello world

Example: Get a attachment

/attachment get news today

5.13.2.7 shell

5.13.2.7.1 Purpose

This module provides /shell command, which executes the command line in the host shell.

Danger: This is a dangerous module

This module is a powerful and dangerous module, not recommended to enable it.

5.13.2.7.2 Configuration

enable_warning A precautionary option to prevent this module is enabled.

security The security options for this module.

only_allow_console Only allow the console to execute /shell command.

allowed player names Only allow the specified players to execute /shell command.

5.13.2.7.3 Example

Example: Create a file using placeholder

/shell touch %player:name%.dangerous

Example: Execute a program in the host os

/shell emacs

Example: Backup the data of your server

You can use shell module with command scheduler module as a combo: define a job to execute the shell command in os to execute a program to backup the data of your server.

See more: https://rdiff-backup.net/

Example: Possible to download a virus from Internet and execute it!

/shell ...

5.14 command permission

5.14.1 Purpose

This module provides the customization of the requirement of all commands.

5.14.2 Command

5.14.2.1 /command-permission

5.14.3 How it works?

The vanilla minecraft use a command system named brigadier.

All the commands are registered, parsed and executed by brigadier.

In this system, all commands are build into a tree structure, that is to say, all commands are a direct or in-direct child of the **root command node**.

Example: What is the path of a specific command node?

For example, the command /gamemode creative Steve is composed by 3 command node:

- 1. "gamemode" = a literal whose name is "gamemode"
- 2. "creative" = an argument whose type is gamemode, its name is "gamemode" and its value is "creative"
- 3. "Steve" = an argument whose type is player, its name is "target", and its value is "Steve"

We say that the command path of /gamemode creative Steve, is ["gamemode", "gamemode", "target"].

Tip: How to query the name of an argument

You can issue /help gamemode which will display the name of arguments. Or you can issue /fuji inspect server-commands to query the command path of all commands registered in the server.

Also, each **command node** has its **requirement**, which is a **predicate** to check if the **command source** can use the command node.

Tip: Query the command path of a command.

```
/lp group default permission set fuji.permission...
or /command-permission
or /fuji inspect server-commands
```

5.14.4 Example

Example: Allow everyone to use /gamemode command

/lp group default permission set fuji.permission.gamemode true

Tip: Allow the client-side to use gamemode switcher menu

After you assign the /gamemode command permission for players, the client-side also requires to install a mod to bypass the client-side permission checking: https://modrinth.com/mod/switcher

Example: Allow everyone to use /gamemode command except the player Alice

/lp group default permission set fuji.permission.gamemode true /lp user Alice permission set fuji.permission.gamemode false

Example: Only allow everyone to use /gamemode spectator

It's impossible to assign a single gamemode, since the command path of /gamemode creative and /gamemode spectator are both "gamemode.gamemode".

Notice that the first "gamemode" in the command path, means the literal argument "gamemode".

The second "gamemode" in the command path, means an argument, whose type if gamemode. This gamemode argument contains all the 4 gamemodes: adventure, creative, spectator and survival. That's the real reason why we can't assign a single gamemode for the command /gamemode.

If you really want to assign only 1 single game mode for everyone, you can use command_bundle to create a new command, which only switch the game mode of player into spectator.

Example: More examples

See Permission

5.15 command_rewrite

5.15.1 Purpose

This module allows you to use regex language to rewrite the command line a player issued.

5.16 command scheduler

5.16.1 Purpose

Define jobs using cron expression to execute commands.

5.16.2 How it works?

A Job is defined by crons, with conditions like left times.

A job will be triggered if current time meets any of its cron expressions.

A commands will be chosen randomly from the commands list of the job and executed if the following conditions are meet:

- 1. The enable of the job is true
- 2. The left times of the job >= 0

The commands will be executed as console.

5.16.3 Command

5.16.3.1 /command-scheduler trigger

Immediately trigger a job.

5.16.3.2 /command-scheduler list

List all defined jobs.

5.16.4 Example

```
Example: Define a job that executes commands 32 times on every minute

{
    "name": "example_job",
    "enable": true,
    "left_times": 32,
    "crons": [
    "0 * * ? * * * *"
    ],
    "commands_list": [
    [
        "say 1 minute passed"
    ],
    [
        "say 60 seconds passed"
    ]
    ]
}
```

5.17 command_spy

5.17.1 Purpose

Log command execution event into the console.

5.17.2 Configuration

ignore Ignore the command that matches regex.

spy on console should we spy the command execution of the console?

5.18 command toolbox

5.18.1 Purpose

This module provides some simple commands. (misc commands)

5.18.2 Sub-Module

- **5.18.2.1** /bed
- 5.18.2.2 /extinguish
- **5.18.2.3** /feed
- 5.18.2.4 /fly
- 5.18.2.5 /god
- **5.18.2.6** /hat
- 5.18.2.7 /sit
- 5.18.2.8 /heal
- **5.18.2.9** /lore

Example: Set lore for item in mainhand

/lore set <rainbow>the first line<newline><bold><green>the second

- **5.18.2.10** /more
- 5.18.2.11 /ping
- **5.18.2.12** /realname
- 5.18.2.13 /nickname
- 5.18.2.14 /repair
- 5.18.2.15 /reply

5.18.2.15.1 How it works?

When a player use the command /msg or /tell, we track the usage, and allow the target player to use /reply to send message to the player recently meg he.

Tip: Create a command alias like /r

You can use command alias module to create a command alias from /r to /reply.

```
5.18.2.16 /seen
```

5.18.2.17 /suicide

5.18.2.18 /top

5.18.2.19 /trashcan

5.18.2.20 /tppos

5.18.2.20.1 Example

Example: Teleport to offline location of a player

/tppos offline <player>

Example: Specify another player as the target player

/tppos --targetPlayer <player>

Example: Use fixed teleport mode

When any of the following args is specified, the /tppos command will do a fixed teleport. /tppos --x 32 --y 64 --z 128 --yaw 60 --pitch 90 --dimension minecraft:overworld

Example: Use random teleport mode

The /tppos command will do a random teleport if not doing a fixed teleport.

/tppos --centerX 0 --centerZ 0 --circle true --minRange 512 --maxRange 2048

--minY 32 --maxY 128 --maxTryTimes 8 --dimension minecraft:overworld

5.18.2.21 /warp

5.18.2.21.1 Example

Example: Set a display name for a warp

/warp set-name <warp> <blue>This is the display name

Example: Set a lore for a warp

/warp set-lore <warp> <blue>This is the first line|<red>This is the second line

| 5.18.2.22 | /burn |
|-----------|-------|
|-----------|-------|

5.18.2.23 /help-op

5.18.2.24 /near

 $\mathbf{5.18.2.25} \quad /\mathbf{jump}$

5.18.2.26 /compass

5.18.2.27 /glow

5.18.2.28 /freeze

5.19 command warmup

5.19.1 Purpose

This module adds a cooldown before command execution.

Note: The difference between command warmup and command cooldown

command warmup is before command execution, while command cooldown is after that.

5.19.2 Example

```
Example: Set warmup for all commands

{
    "command": {
        "regex": ".+",
        "ms": 3000
},

    "interruptible": {
        "enable": true,
        "interrupt_distance": 3.0,
        "interrupt_on_damaged": true,
        "interrupt_in_combat": true
}
}
```

CHAPTER 5. MODULE

58

Example: Set warmup for all commands except the /back command with a special setup

```
Since the rules are matched from up to down in order, you can just put the special case above.
```

```
{
        "command": {
            "regex": "back",
            "ms": 10000
        },
        "interruptible": {
            "enable": true,
            "interrupt_distance": 3.0,
            "interrupt_on_damaged": true,
            "interrupt_in_combat": true
        }
    }
        "command": {
            "regex": ".+",
            "ms": 3000
        },
        "interruptible": {
            "enable": true,
            "interrupt_distance": 3.0,
            "interrupt_on_damaged": true,
            "interrupt_in_combat": true
        }
    }
]
```

CHAPTER 5. MODULE

59

Example: Set warmup for all commands except the /back command Use negative lookahead to exclude a string that starts with "back". { "command": { "regex": "(?!back).+", "ms": 3000 }, "interruptible": { "enable": true, "interrupt_distance": 3.0, "interrupt_on_damaged": true, "interrupt_in_combat": true } }

```
Example: Share the same setup for multiple commands

Use the or clause to share the same setup.

{
    "command": {
    "regex": "(back)|(heal)|(feed)",
    "ms": 3000
},
    "interruptible": {
    "enable": true,
    "interrupt_distance": 3.0,
    "interrupt_on_damaged": true,
    "interrupt_in_combat": true
}
}
```

5.20 deathlog

5.20.1 Purpose

This module logs the inventory on player death.

5.20.2 Command

1. /deathlog

5.20.3 Example

Example: Query the logs for a player

/deathlog view <player>

Tip: The death log index number is clickable

You can click the number to quickly restore the logged inventory to your inventory.

Example: Restore a death log from a player for a player

/deathlog restore <player> 0 <player>

5.21 disabler

5.21.1 Purpose

This module provides disablers to disable checkers inside vanilla minecraft.

5.21.2 Sub-Module

5.21.2.1 chat speed disabler

Disable Kicked for spamming.

${\bf 5.21.2.2 \quad move_speed_disabler}$

Disable player moved too quickly and vehicle moved too quickly.

5.21.2.3 move wronlyy disabler

Disable player moved wrongly.

Warning: The movement anti-cheat inside vanilla minecraft is bad

Inside the vanilla minecraft server, there is a checker used to check if the player moves correctly. However, this checker usually makes wrong detection, and force setback the player, which makes the client-side gameplay feel lagged.

5.21.2.4 max_player_disabler

Disable the max players limit of the server.

5.22 echo

This module provides commands to send echo to players.

Note: Many other modules require this moudle

Other modules may generate a default configuration including the commands provided by echo module. If the echo module is disabled, then these echo commands will not exist, causing a command syntax error while executing these commands.

5.22.1 Sub-Module

5.22.1.1 /send-message

```
Example: Say hello to a player

/send-message <player> Hello %player:name%
```

5.22.1.2 /send-broadcast

```
Example: Say hello to all players

/send-broadcast Hello %player:name%
```

5.22.1.3 /send-actionbar

```
Example: Say hello to a player

/send-actionbar <player> Hello %player:name%
```

5.22.1.4 /send-title

```
Example: Send title to a player

/send-title <player> --mainTitle "<rainbow>Hello" --subTitle "<blue>World"
--fadeInTicks 60 --stayTicks 60 --fadeOutTicks 60
```

```
Example: Send title to online players

/foreach send-title %player:name% --mainTitle "<rainbow>Hello %player:name%"
```

5.22.1.5 /send-toast

```
Example: Send toast to a player

/send-toast <player> --icon minecraft:golden_carrot <rb>eat this carrot
```

5.22.1.6 /send-chat

```
Example: Send chat as a player

/send-chat Steve i am steve.
```

```
Example: Send chat as a player for online players

/foreach send-chat %player:name% i am %player:name%
```

5.22.1.7 /send-bossbar

```
Example: A simple exapmle

/send-bossbar <player> Hello World
```

```
Example: All in one exapmle
```

```
/send-bossbar <player> --stepType BACKWARD --totalMs 5000 --color PURPLE --style NOTCHED_6 --notifyMeOnComplete true --commandList "say the player %player:name% is healed|heal %player:name%" <rb>Healing is coming [elapsed_time]/[total_time]/[left_time]
```

5.22.1.8 /send-custom

```
Example: Create a custom text
Create a plain text file named "guide" in config/fuji/modules/echo/send custom/custom-
text/guide with content:
<br/>
<br/>
diue>==== custom text =====
Hello <orange>%player:name%</orange>, you are in
<hover:show_text:'you see me!'>Hover me</hover>
<click:run_command:'/back'>click me to run `/back` command</click>
<u><i><click:change_page:'3'>click me to the third page (this only works
\hookrightarrow inside a book)</click></i></u>
<newpage><blue>This is the second page!
<click:suggest_command:'/back'>click me to suggest /back command (This

→ doesn't work inside a book)</click>

<insert:'hello'>shift + click me to insert "hello" (This doesn't work inside

→ a book)</insert>

<click:open_url:'https://placeholders.pb4.eu/user/text-format/'>click me to
\hookrightarrow open the url</click>
<newpage>This is the third page!
<bold><click:change_page:'1'>click me to the first page</click></bold>
<orange>You can press `<keybind:'key.jump'>` key to jump!</orange>
<gradient:red:green:blue>This is gradient text.
<rb>The rainbow text</rb>
<newpage>The end.
```

```
Example: Send custom text as a book
```

```
/send-custom as-book <player> guide --author "alice" --title "<rb>The Guide"
--giveBook true --openBook true
```

Example: Send custom text as a message

/send-custom as-message <player> guide

5.23 fuji

5.23.1 Purpose

This module provides the command /fuji, which includes some operations on fuji itself.

5.23.2 Command

5.23.2.1 /fuji reload

Reload all configuration files and all modules.

Note: Module itself can't be hot reloaded

After you enable or disable a module, you must restart the server.

5.23.2.2 /fuji about

Open a gui to display the about, including the mod version and contributor list.

5.23.2.3 /fuji inspect modules

Inspect all the enabled/disabled modules.

5.23.2.4 /fuji inspect server-commands

Inspect all the registered commands in the server.

5.23.2.5 /fuji inspect fuji-commands

Inspect all the commands registered by fuji mod.

Note: This will not show the requirement override from command permission module

The requied level permission and required string permission are the default value set by fuji. If you are using command_permission module, then this gui will not show the overrided requirement of a command.

5.23.2.6 /fuji inspect argument-types

Inspect all the registered argument types.

5.23.2.7 /fuji inspect configurations

Inspect all the loaded configuration files.

5.24 functional

5.24.1 Purpose

This module allows players to open a virtual gui of functional-block.

5.24.2 Sub-Module

- 5.24.2.1 /workbench
- **5.24.2.2** /enchantment
- 5.24.2.3 /grindstone
- 5.24.2.4 /stonecutter
- **5.24.2.5** /anvil
- 5.24.2.6 /cartography
- 5.24.2.7 /enderchest
- 5.24.2.8 /smithing
- **5.24.2.9** /loom

5.25 gameplay

5.25.1 Sub-Module

5.25.1.1 multi obsidian platform

5.25.1.1.1 Purpose

This module makes every **ender portal frame** generates its own **obsidian platform** (Up to 128 in survival-mode).

You can even use creative-mode to build more ender portal frame and more obsidian platform.

Note: All the obsidian platforms are vanilla-respect

All the extra obsidian platforms have the same behaviour as the vanilla one which locates in (100,50,0).

5.25.1.1.2 Configuration

factor The coordination-conversion factor between overworld and the _end. In vanilla minecraft, the factor between overworld and the _nether is 8.

5.25.1.2 carpet

5.25.1.2.1 Sub-Module

5.25.1.2.1.1 fake player manager

5.25.1.2.1.1.1 Purpose

Enable this module requires carpet-fabric mod installed. This module provides some management for fake-player.

5.25.1.2.1.1.2 Command

- 1. /player who query the owner of the fake-player
- 2. /player renew renew all of your fake-players

5.25.1.2.1.1.3 Configuration

caps limit rule How many fake-player can each player spawn (in different time)?

The tuple means (day_of_week, minutes_of_the_day, max_fake_player_per_player).

The range of day of week is [1,7].

The range of minutes of the day is [0, 1440].

For example: (1, 0, 2) means if the days_of_week >= 1, and minutes_of_the_day >= 0, then the max_fake_player_per_player now is 2.

Besides, you can add multi rules, the rules are checked from up to down.

The first rule that matches current time will be used to decide the $\max_{fake_player_per_player}$.

You can issue /player who to see the owner of the fake-player.

Only the owner can operate the fake-player. (Op can bypass this limit)

renew_duration_ms How long should we renew when a player issue **/player renew** The command /player renew allows the player to manually renew all of his fake-player. If a fake-player don't gets renew, then it will expired and get killed. Use-case: to avoid some long-term alive fake-player.

transform_**name** The rule to transform the name of fake-player. Use-case: add prefix or suffix for fake-player.

use <u>local_random_skins_for_fake_player</u> Should we use local skin for fake-player? Enable this can prevent fetching skins from mojang official server each time the fake-player is spawned. This is mainly used in some network situation if the network to mojang official server is bad.

${\bf 5.25.1.2.1.2}\quad {\bf better_info}$

5.25.1.2.1.2.1 Purpose

Add nbt query for /info block command. Add the command /info entity.

5.26 head

5.26.1 Purpose

This module allows players to buy decorative heads from a head-database.

5.26.2 Command

5.26.2.1 /head

5.26.3 Configuration

economy_type Can be ITEM or FREE

cost_type This option is used when economy type is ITEM, to specify which item as the currency.

cost_amount This option is used when economy type is ITEM, to specify the amount of currency to buy a head.

5.27 home

5.27.1 Purpose

This module allows players to set a teleportation point as their home.

5.27.2 Command

5.27.2.1 /home

5.27.3 Meta

1. fuji.home.home_limit The home number per player limit.

5.28 kit

5.28.1 Purpose

This module allows you to make kits.

5.28.2 Concept

A kit is a set of itemstack.

5.28.3 Command

5.28.3.1 /kit editor

Open the kit editor gui.

5.28.3.2 /kit give

Give a kit to a player.

5.28.4 Example

Example: Create a kit

Use /kit editor to create a kit.

Note: The item slot position will keep

The item put inside the kit will keep its original position, so you can put armors in the right position.

Example: Give a kit to a player

/kit give <player> <kit-name>

Note: The giving function behaviour

- 1. try to insert the item in the specified slot
- 2. try to insert the item in any slot
- 3. drop the item in the ground with the player as its thrower

Example: Associate a cooldown to a kit

To associate a cooldown with commands: see command cooldown

Create a named cooldown with 60sec cooldown and infinite usage: /command-cooldown create example-kit-cooldown 60000

Test the named cooldown, giving the kit to the player if the test is success:/command-cooldown test example-kit-cooldown <player> --onFailed "send-message %player:name% wait a moment" kit give %player:name% example-kit|send-message %player:name% kit received.

Now, create a new command using command bundle module to execute the test command

```
Example: The config to create a new command for cooldown test command to give a kit if the test is success
```

Example: Claim a specific kit automatically for online players

You can use **command_scheduler** module to execute the **/claim-example-kit** for online players automatically every minute.

Example: Give a kit to newbie player automatically

See command event

5.29 language

5.29.1 Purpose

This module provides client-side multi-language support.

Note: What is client-side language?

When the client joins a server, it will send its client options, including the client-side language value. The server can send messages in language used by the client later.

5.29.2 Feature

- 1. Client-Side Respect The client-side language will be respected if possible.
- 2. Lazy-load Only load the necessary language into the memory.

5.29.3 Difference

Disabled: All the players use the default_language.

Enabled: Fuji will try to respect the player's client-side language, if the server-side supports.

5.30 motd

5.30.1 Purpose

This module provides motd customization.

5.30.2 Example

Example: Configure server icons

You can put 64x64 pixels .PNG images into the directory config/fuji/modules/motd/icon, this module will pick up a random image as the icon of the server to respond the server status request.

Example: Configure random motd text

You can write multiple motd text in the configuration, the motd text will be chosen randomly.

5.30.3 Reference

1. https://colorize.fun/en/minecraft

5.31 multiplier

5.31.1 Purpose

This module provides some numeric multiplier.

5.31.2 Supported Numeric Types

- 1. damage damage to player
- 2. experience experience a player gained

5.31.3 Example

Example: Double the damage from zombie to a player

/lp group default meta set fuji.multiplier.damage.minecraft:zombie 2

Example: Cancel the fall damage

/lp group default meta set fuji.multiplier.damage.minecraft:fall 0

Example: Double all damage to a player

/lp group default meta set fuji.multiplier.damage.all 2

Example: Double all experience a player gained

/lp group default meta set fuji.multiplier.experience.all 2

Example: Half all damage to a player

/lp group default meta set fuji.multiplier.damage.all 0.5

5.32 nametag

5.32.1 Purpose

This module provides nametag customization.

5.32.2 Configuration

update cron The cron used for the job to update the properties of display entity.

style Define the style for the nametag display entity.

render Define the nametag render behaviour.

Note: The explanation of each field in style and render

You can refer to the minecraft wiki about **display entity**: https://minecraft.wiki/w/Display

5.32.3 Example

Example: Set background to blue color

"background": -16776961

Example: Set half transparency

"text_opacity": 128

Example: Scale the size of text into double

```
"scale": {
    "x": 2.0,
    "y": 2.0,
    "z": 2.0
},
```

5.33 placeholder

5.33.1 Purpose

This module provides more placeholder for Text Placeholder API mod.

5.33.2 Command

5.33.2.1 /placeholder

5.33.3 Placeholder

- 1. %fuji:player_mined% sum of mined blocks of a player
- 2. %fuji:server_mined% sum of mined blocks of a server
- 3. %fuji:player_placed% sum of placed blocks of a player
- 4. %fuji:server_placed% sum of placed blocks of a server
- 5. %fuji:player_killed% sum of killed entities of a player
- 6. %fuji:server_killed% sum of killed entities of a server
- 7. %fuji:player_moved% sum of moved distance of a player
- 8. %fuji:server_moved% sum of moved distance of a server
- 9. %fuji:player_playtime% sum of playtime of a player
- 10. %fuji:server_playtime% sum of playtime of a server
- 11. %fuji:health_bar% the health bar of a player
- 12. %fuji:rotate hello% rotate the string hello
- 13. %fuji:has_permission% check luckperms permission
- 14. %fuji:has_meta% get luckperms meta
- 15. %fuji:random_player% get a random online player
- 16. %fuji:random 1 5% get a random number from 1 to 5
- 17. %fuji:escape% escape a placeholder from the parser. An optional number argument is used as the levels to escape.
- 18. %fuji:protect% protect a string from the parser.
- 19. %fuji:date% get current date.

An optional string argument is used to set the **date formatter**, for example, %fuji:date HH:MM%.

See also: https://docs.oracle.com/javase/8/docs/api/java/text/SimpleDateFormat.html

- 20. %fuji:player_prefix% player luckperms prefix
- 21. %fuji:player_suffix% player luckperms suffix
- 22. %fuji:pos% player current position

5.33.4 What's more?

Tip: Use placeholder in language file

It's allowed to write placeholders in language file.

Note: Some other mods that provide more placeholders

https://placeholders.pb4.eu/user/mod-placeholders/

5.34 predicate

5.34.1 Purpose

This module provides predicate commands.

5.34.2 Definition

A command that suffixes with the character "?" is named predicate command. e.g. The has-perm? command.

5.34.3 How it works?

The return value is represented in an integer provided by vanilla minecraft command return layer. This command will return 1 if test is success, and -1 if test is failed.

See more: https://minecraft.fandom.com/wiki/Commands/return

5.34.4 Example

```
Example: Test a condition and then run a command

See more in chain
/run as player <player> chain has-perm? %player:name% 4 chain say value is true
```

5.35 profiler

5.35.1 Purpose

This module shows server health status, such as os, vm, cpu, ram, tps, mspt and gc.

Warning:

Enable this module requires spark mod installed.

5.35.2 Command

5.35.2.1 /profiler

5.36 pvp

5.36.1 Purpose

This module provide pvp state toggle.

5.36.2 Command

5.36.2.1 /pvp

5.37 rtp

5.37.1 Purpose

Provides random teleportation.

5.37.2 Feature

- 1. Per dimension configurable.
- 2. Ignore fluid blocks, such as water and lava.
- 3. Ignore powered snow.

5.37.3 Command

5.37.3.1 /rtp

5.37.3.1.1 Argument

1. --dimension target dimension

5.37.4 Configuration

setup Teleport setup per dimension. Dimensions that are not in the list will be disabled to rtp.

5.37.5 What's more?

Tip: Improve the performance on rtp

It's highly recommended to pre-gen the world chunks. To gen a new chunk during rtp requires about 2-10 seconds. If a chunk is pre-gen, then it will be fast.

5.38 skin

5.38.1 Purpose

This module provides skin customization.

5.38.2 Command

5.38.2.1 /skin

5.38.3 Configuration

default skins The default skin used for player who has no skin set.

5.38.4 Example

Example: Set a skin from mojang

/skin set mojang dream

Example: Set a skin from url

/skin set web slim "https://s.namemc.com/i/bd53d152d0cd91d0.png"

Example: Use default skins

/skin use-default-skins

Example: Use online skin

/skin use-online-skin

5.39 system message

5.39.1 Purpose

This module provides system message customization.

5.39.2 How it works?

The server will send translatable text to the client, by default, the client will display the translatable text in the language used in client-side. This module will hijack the pre-define translatable text in the server-side, and sends the client a customized text directly. As a loss of this approach, the client will always receive the customized text defined in the server, instead of the translatable text defined in the client.

Note: What is translatable text?

For example:

- 1. player join and leave server message
- 2. player advancement message
- 3. player death message
- 4. player command feedback
- 5. player whitelist message

Note: How to query the translatable text?

See mojang's official language file, all keys inside the file are for translatable text. Note that, some keys in the file are client-side only translatable text, which means that the server will never send this type of translatable text to the client.

Warning: Possible conflicting with StyledChat

If you are using this module with **StyledChat** mod installed, you need to remove the conflicting **language keys** in **key2value** configuration.

See also: https://github.com/sakurawald/fuji/issues/65

5.39.3 Example

```
"system_message": {
    "enable": true,
    "key2value": {
        "multiplayer.player.joined": "<rainbow>+ %s",
        "multiplayer.player.left": "<dark_gray>%s leeeeeeeeft the game"
    }
},
```

```
Example: Custom messages in a container

"key2value": {
    "container.chest": "<rb>I see you opening the chest!"
}
```

CHAPTER 5. MODULE

88


```
"system_message": {
    "enable": true,
    "key2value": {
        "multiplayer.player.left": "<dark_gray>%s leeeeeeeeft the game"
    }
},
```

```
"system_message": {
    "enable": true,
    "key2value": {
        "multiplayer.player.left": null
     }
},
```

5.40 tab_list

5.40.1 Purpose

This module provides tab list customization.

5.40.2 Configuration

update_cron The cron used for the job to update the tab list.
style The style for tab list.

5.40.3 Sub-Module

5.40.3.1 sort

5.40.3.1.1 Purpose

If enable this module, the player names in tab list will be sorted by weight.

The default weight is 0, the range of weight is [0, 675], which means you can set at most 676 sort groups.

5.40.3.1.2 How it works

The tab list sort method is client-side decided. So the workaround is to send virtual-player entry to the client-side, and hide the real player in client-side's tablist.

In this case, the client-side will find that, all command target selector will display the virtual-player. And you can see the virtual-player in client-side's Player Reporting UI.

Note: The virtaul player has no perforamnce issue

The virtual-player is just an entry listed in tab list, when the client ask the server tab list, the server lie with the virtual-player list.

There is not a real player entity in the server side, so no extra performance problem.

The sync method is event-based, and cached, so the performance is good.

5.40.3.1.3 Example

Example: Set a weight in a group

Issue the command /lp group default meta set fuji.tab_list.sort.weight 1 After you set a new weight, you should issue /fuji reload or re-connect to refresh the tab-list.

5.40.3.1.4 Sub-Module

5.40.3.1.4.1 sync game profile

5.40.3.1.4.1.1 Purpose

Whether to copy the game profile from real-player to virtual-player.

$\mathbf{5.40.3.2} \quad \mathbf{faker}$

$\mathbf{5.40.3.2.1} \quad \mathbf{Purpose}$

This module is used to send random fake data to client.

5.41 teleport warmup

5.41.1 Purpose

This module adds a warmup cooldown before player-teleportation.

5.41.2 Configuration

warmup second The second to wait before the teleportation.

interrupile Should we interrupt this teleporation if some conditions meet?

dimension Per dimension configuration.

blacklist Only apply teleport warmup in the following dimensions.

Warning: Dimensions that created by other mods may have special behaviour

Some other mods will add extra dimension (like, the mod the-bumblezone-fabric). Their dimension portal may work in a different way, so this module may not be compatible with these mods.

In the default options, we only allow this module works in the vanilla minecraft dimensions.

$5.42 \quad temp_ban$

5.42.1 Purpose

This module provides temp-ban.

5.42.2 Command

5.42.2.1 /temp-ban

5.42.3 Example

Example:

/temp-ban player <player> 1s2m3h4d5w6M7y bad boy

5.43 tester

5.43.1 Purpose

This module is only used for development. If you are a developer, you can register new commands into this module for test-purpose.

5.43.2 Command

5.43.2.1 /tester

Warning:

You should not use this module at the production-environment, because it almost does nothing useful.

5.44 top chunks

5.44.1 Purpose

This module compute a **laggy score** for all loaded chunks, and return the topN lagged chunks. Higher score means more lagged.

5.44.2 Command

5.44.2.1 /chunks

5.44.3 Configuration

top The top chunks to show in /chunks command

nearest_distance For a chunk, how much the radius used to search the nearest player around the chunk.

hide_location Should we hide the chunk-position for a lagged-chunk? Hide chunk location to avoid grief or privacy purpose.

type2score The dict to define how lagged a type(entity_entity_block) should be. For example:

Example: What is the meaning of type2score field?

The configuration means that if there are 15 zombies inside a chunk, then the chunk gets score 15 * 4 = 60. Any other types not specified in type2score will use the score defined for type **default**.

```
"type2score": {
    "entity.minecraft.zombie": 4,
    "default": 1
}
```

5.45 tpa

5.45.1 Purpose

This module provides teleport request for players.

5.45.2 Command

- 5.45.2.1 /tpa
- **5.45.2.2** /tpahere
- 5.45.2.3 /tpaacept
- 5.45.2.4 /tpadeny
- 5.45.2.5 /tpacancel

5.45.3 Configuration

 ${f timeout}$ Tpa request expiration duration, unit is second.

mention_player See 5.4.3.3.2

5.46 view

5.46.1 Purpose

This module provides the player slot editor.

5.46.2 Command

- **5.46.2.1** /view inv
- 5.46.2.2 /view ender

5.47 whitelist

5.47.1 Purpose

This module makes the mojang vanilla whitelist system only compares the ${\bf username}$ and ${\bf ignore}$ ${\bf UUID}.$

Warning: Only enable this module in offline-mode server

If you are hosting a online-mode server, you will never need to enable this module.

5.48 works

5.48.1 Purpose

This module provides a bill-board gui for players to show their works.

5.48.2 Concept

A work is a teleporation point.

The types of work are as follows:

- 1. Non-Production-Work the project don't produce any resource (e.g. bone, string, coal).
- 2. Production-Work the project produce some resource.

Note: The main difference between non-production work and production-work

For a production-work, fuji provides the production sample to count the hopper and minecart-hopper

Tip: About the production counter

- 1. You can use the production counter provided by production work to sample the output.
- 2. This module works with carpet-fabric's hopper counter. You can use both of them at the same time.
- 3. The hopper counter provided by this module will not destroy the item.

5.48.3 Command

1. /works

5.48.4 Configuration

```
sample time ms For a production-work, how long should we sample it?
```

sample_distance_limit For a production-work, how large the radius should we considered as the work's production.

sample counter top n For a production-work, we only display the topN output items.

5.49 world

5.49.1 Purpose

Provides a unified world management.

5.49.2 Command

5.49.2.1 /world

5.49.3 Concept

Note: What is the difference between world, dimension and dimension type?

Well, in the early stage of minecraft, a **world** only support **single-dimension**, which means 1 world only contains 1 dimension.

But now, 1 world supports multi dimension. Sometimes, you will see **world** and **dimension** means the same thing.

But clearer, we say: 1 world can contain 1 or more dimension, and each dimension has its dimension type.

Usually, you can say a mod adds extra dimension type and creates an extra dimension with that dimension type instead of creating extra world.

See also: https://minecraft.wiki/w/Dimension_definition See also: https://minecraft.wiki/w/Dimension_type

Note: The dimension and dimension types in vanilla minecraft

In vanilla minecraft, 1 world contains 3 dimensions:

- 1. minecraft:overworld
- 2. minecraft:the nether
- 3. minecraft: the end

You can see the dimensions of a world in world/level.dat file.

A dimension type is used to create dimensions, the vanilla minecraft has the following dimension type:

- 1. minecraft:overworld
- 2. minecraft:overworld caves
- 3. minecraft:the nether
- 4. minecraft:the end

The file server properties is used for the only and default world.

5.49.4 Configuration

blacklist The dimensions in the blacklist will not be operated by this module. Use blacklist to avoid mis-operation.

5.49.5 Example

Example: Create an extra the nether dimension

/world create my_nether minecraft:the_nether

Example: Delete the extra dimension

/world delete fuji:my_nether

Example: Reset the extra dimension with random seed

/world reset fuji:my_nether

Example: Specify a seed for an extra dimension.

/world create my_nether --seed 1234567890 minecraft:the_nether
/world reset --useTheSameSeed true fuji:my_nether

Tip: Make a resource-world that automatically reset every day

You can use command scheduler module to execute /world reset command automatically.

5.50 world downloader

5.50.1 Purpose

This module allows a player to download nearby chunks.

5.50.2 Command

5.50.2.1 /download

5.50.3 Configuration

url_format The url format used to broadcast.

port The port used for downloader http-service.

bytes_per_second_limit Max download speed for each connection.

context_cache_size Max download request saved in the memory.

Q&A

6.1 Where is the configuration files?

As a convention, all the files are placed in config/fuji/ directory.

6.2 What is .json file?

A json file is a text file, whose name normally ends with $\boldsymbol{.json}.$

6.3 How can I edit a configuration file?

To ensure the readable and transparent, most of the files are saved as pure text format. You can open them with a text editor.

Tip: Use a moderen text editor.

Some files may have a large number of lines, so it's highly recommended to use a modern text editor, which can highlight symbols and reveal the structure of the file, such as:

- 1. Visual Studio Code
- 2. Visual Studio Code Web Online Editor
- 3. Vim
- 4. Emacs
- 5. Sublime Text

6.4 What is .dat file?

The file whose name ends with .dat are the vanilla minecraft NBT format file. To open such a file, you need to use a NBT Editor, such as NBTExplorer.

CHAPTER 6. Q&A

6.5 How to update fuji to a new version?

6.5.1 Backup the data

Back up the config/fuji directory.

6.5.2 Test the new version in your test-environment

Put the new version of fuji into mods/ directory, start the server, and adjust the configuration to what you want.

Warning: Don't test new changes directly in your production-environment

It's highly recommended to setup a test-environment for a network-maintainer, so that you can test and tweak installed mods into what you want, and avoid un-expected situations.

6.5.3 Apply the changes to production-environment

Now, it's ready to apply the changes to your production-environment.

6.6 Fuji conflits with one of my mods.

You can disable the conflicting module. If possible, create an issue at fuji issue page, so that we can solve this later.

6.7 Can I ask the forge or neoforge support?

We have no plan for forge or neoforge platform. However, you can try running this mod via **sinytra-connector** mod. It's tested the mod works in the following environment (104/104 modules works):

Loader: NeoForge v21.0.167 for Minecraft 1.21 Mods:

- connector-2.0.0-beta.1+1.21-full
- forgified-fabric-api-0.101.2+2.0.10+1.21
- fuji-1.6.3-release-1914a82a84

6.8 How can I report bugs or suggest new features?

You can create an issue at fuji issue page

Transformer

7.1 Command Transformer

The following commands can be transformed:

```
1. /blockcycling = /give <player> minecraft:debug_stick
```

- 2. /blockinfo = use the command /info block provided by carpet mod.
- 3. / blocknbt = / data get block
- 4. /entityinfo = /data get entity
- 5. /entitynbt = /data get entity
- 6. /customrecipe = recipe editor
- 7. $/\exp = /\exp(-i\alpha x)$
- 8. /gm, /gms, /gms = /gamemode
- 9. /findbiome = /locate biome
- $10.\ /\mathrm{tempfly} = \mathrm{use}\ \mathtt{luckperms}\ \mathtt{temporal}\ \mathtt{permission}$
- 11. /flyspeed = /attribute <player> minecraft:generic.flying speed
- 12. /walkspeed = /attribute <player> minecraft:movement_speed
- 13. /maxhealth = /attribute <player> minecraft:generic.max health
- 14. /groundclean = /kill @e[type=...]
- 15. /spawner = interact spawner block with spawn egg
- 16. /spawnmob = /summon
- 17. /shoot = /summon with motion
- 18. /smite, /thunder = /summon minecraft:lighting bolt

- 19. /stats, /statsedit = all stats files are located in world/stats
- $20.\ /\mathrm{tree} = \mathrm{use}\ \mathrm{tree}\ \mathrm{brush}\ \mathrm{from}\ \mathrm{world-edit}\ \mathrm{mod}$
- 21. /unbreakable = /enchant <player> minecraft:unbreaking
- 22. /item_editor = /give with command generator, or use some client-side mod to edit items with commands.
- 23. /replaceblock = /setblock
- 24. chunks loading/unloading commands = These commands will not bring performance improvements.
- 25. /note = /attachment get note
- 26. $/\dots$ all = /foreach \dots
- 27. / cuff = use anti-build module with string permission
- 28. /cheque = use command-attachment module to make magic item

Tip: Use command bundle module to create transformed commands

See command bundle

7.2 Command Generator

You can generate complex and powerful commands using:

- 1. https://www.digminecraft.com/generators/
- 2. https://minecraft.tools/en/public-gallery.php

Development

8.1 Setup the development environment

```
1. Clone the source:
```

```
git clone https://github.com/sakurawald/fuji.git
```

2. Change the working-directory:

```
cd fuji
```

3. Compile the source:

./gradlew build

Suggestion

9.1 Suggestion on server-side mods

9.1.1 Explanation

Here are some mods that existing and recommended to use, which can make your life easier in fabric server-side crafting.

Note that fuji doesn't require these mods installed to work, and some of these mods have the same functionality as fuji.

If you want to taste something different, and if some of the mods provides a better experience than fuji, then you can just disable the module in fuji, and go use it.

Tip: Decide according to your situation

The suggestion is personal, you should make decision according to your preference.

9.1.2 Server-side mode list

- 1. blue map
- 2. anti xray
- 3. melius commands
- 4. vanilla permission
- 5. vanish
- 6. villager config
- 7. world-edit
- 8. essential commands
- 9. missions
- 10. luckperms
- 11. tab
- 12. armor stand editor
- 13. ban hammer
- 14. image2map
- 15. polydecorations
- 16. sleep warp
- 17. styled chat
- 18. styled nickname
- 19. styled player list
- 20. styled sidebar
- 21. universal graves
- 22. universal shop
- 23. goml
- 24. polydex
- 25. polymania
- 26. head index
- 27. inv view
- 28. ledger

- 29. falling tree
- 30. double doors
- 31. skin restorer
- 32. husk homes
- 33. yet another world protector
- 34. krypton
- 35. sit
- 36. stack deobf
- 37. lithium
- 38. let me despawn
- 39. carpet
- $40. \mod \text{viewer}$
- 41. simple voice chat
- 42. mini motd
- 43. spark
- 44. polyfactory
- 45. ouch
- 46. chunky
- 47. afk plus
- 48. taterzens