

GWorld Documentation (EN)

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Introduction

Welcome to GWorld v2

GWorld is a modern, powerful world management system for Spigot and Paper servers. Version 2 has been completely rewritten (recoded) to offer maximum performance, database support, and a clean API.



Features

- **Performance-optimized:** Uses modern Java features and asynchronous database operations.
- **Easy management:** Create, delete, import, and unload worlds via command.
- **Live Flags:** Change settings such as PvP, monster spawning, or weather at runtime—no reload required.
- **MySQL & YAML:** Store world settings centrally in MySQL to standardize configurations across the network.
- **Generator Support:** Full support for custom world generators (e.g., TerraformGenerator).
- **Legacy Import:** Automatic transfer of data from GWorld v1.

- **Native PlaceholderAPI (PAPI) Integration:** Use our placeholders to display beautiful, colored world aliases (e.g., §6Survival) in your scoreboard, chat, or tablist. GWorld comes with built-in PAPI support!

[PlaceholderAPI \(PAPI\) Integration](#)

Requirements

Before you start, make sure your server meets the following requirements:

- **Java:** Java 21 or higher.
- **Server:** Spigot, Paper, or Purpur (1.20.1 - 1.21.x).
- **Database (Optional):** MySQL / MariaDB.

Getting Started

Are you ready?

1. Go to [Administrators \(User-Guide\)](#) to get all the information you need to use GWorld v2.
2. Are you migrating from GWorld v1? Check out the following page for information:
[Migration from v1-legacy to v2](#)
3. Check out the [Command overview](#).

Support & Links

- [GitHub Repository](#)
- [Report Issues](#)
- [Discord Support](#)

Changelog & Version History

Here we document all changes, new features, and bug fixes of **GWorld v2**. We recommend that server administrators take a quick look at this list before every update, especially if changes are made to databases or configuration files ("migrations").

[v2.0.1] - PAPI (PlaceholderAPI) & Aliases

With this small update, PAPI is integrated and aliases are added. It brings native placeholder support and finally allows you to give worlds user-friendly display names!

? Added

- **PlaceholderAPI Support:** GWorld now has an internally registered expansion. The worlds can be accessed in scoreboards and menus via `%gworld_alias%` and `%gworld_name%`.
- **World Aliases:** A world can now be given a display name (incl. color codes via `&`) using `/gset <world> alias <name>`.
- **Automatic Parsing:** Color codes in aliases are converted from `&` to `§` directly upon saving for maximum performance.

? Changed

- **Database Migration to v2:** The MySQL table structure was expanded with the `alias` field. *The plugin performs this migration automatically on the first startup. No manual intervention in the database is necessary!*
 - **YAML Update:** The `worlds.yml` is now saved in the `ConfigVersion: 2` format to manage the alias data cleanly.
 - `/ginfo` now displays the formatted display name in addition to the world name.
-

[v2.0.0] - Complete Recode, DB & Management of Animals and Monsters

In this update, GWorld was completely recoded and a lot of technical debt was removed. In addition to database support, you can now decide individually for all animals and monsters whether they are allowed to spawn.

? Added

- **Automatic Migration:** GWorld automatically migrates your worlds from the legacy version v1.3.3.
- **DB Migration:** If a database is configured and worlds exist in the `worlds.yml`, they will be transferred to the database.
- **Spawning of Animals and Monsters:** Animals and monsters can now be specifically enabled and disabled.
- **New API:** There is a new and completely revised API for developers.

? Changed

- **Source Code:** The entire source code has been recoded.
-

[v1.x.x] - Previous Versions

The history of the older v1 versions (Legacy) can only be found on the [SpigotMC page](#).

Administrators (User-Guide)

Command overview

Commands & Permissions

<required> - To execute the command, this argument must be specified.

[optional] - This argument does not have to be specified and can be omitted. A default value will be selected.

<Name> - The name of the selected world.

If possible, all required parameters are tabbable (can be completed using the tab key).

Command	Arguments	Description	Permission(s)
/gcreate	<Name> [Environment] [Seed] [Generator]	Creates a new world. Environment (Normal/Nether/End) is optional, as are Generator and Seed.	gworld.commands.create
/gimport	<Name> <Environment> [Generator]	Imports an existing world folder into the GWorld system. The environment must be specified. If a generator was used, it must also be specified.	gworld.commands.import
/gclone	<Name> <Name of the cloned world>	Clones a world.	gworld.commands.clone
/gset	[Name] <Flag> <Value>	Changes a world setting. If no world name is specified, the player's current world is selected. For flags, see page: The flags and their possible values	gworld.commands.set

/gdelete	<Name>	Deletes a world and its files irrevocably	gworld.commands.delete
/gworlds	-	Lists all loaded worlds. Teleport to the world by clicking on the entry	gworld.commands.worlds
/gtp	<Name> [playername @all]	Teleports you, another player, or all players to a world.	gworld.commands.tp (base) Permissions for the base must always be set! For specific worlds: gworld.commands.tp.<Name> All worlds: gworld.commands.tp.* Teleporting other players: gworld.tp.other This permission is always required separately For more information, see the page: GTP - Permissions
/ginfo	[Name]	Displays details (seed, environment, flags) of a world. If no world name is specified, the player's current world is selected. For more details, see: /ginfo	gworld.commands.info
/grecrate	<Name> <backup>	Deletes the chunks and regenerates the world with the same seed. A backup can be created in the "old_maps" directory.	gworld.commands.recreate

/gload	<Name>	Loads an existing world.	gworld.commands.load
/gunload	<Name>	Unloads a world without deleting it. Players are teleported.	gworld.commands.unload
/ghelp	[Page]	Displays information about the commands in-game.	gworld.commands.help

Admin permission: **gworld.*** to get started right away

Standard configuration files

Here you will find all configuration and language files that come with GWorld v2.

If any sections are missing or need to be transferred manually, you will find them here.

config.yml

```
# Copyright (c) Gilljan 2020-2026. All rights reserved.
# GWorld v2

#General
Prefix: '&eGWorld &8|&7' #prefix of the plugin
Language: 'EN' #avaiable languages: german (de), english (en)
MainWorld: 'world' #while deleting a world the players which are on the world will be
teleported to this world

#Update-Notifications
UpdateNotification: true

#AutoImporter
AutoImport: true #deactivate to stop import of maps provided by other systems

#Storage
Storage:
  Type: 'YAML' #avaiable types: YAML, MYSQL
  Host: 'localhost'
  Username: 'root'
  Password: ''
  Database: 'gworld'
  Port: 3306
```

de_DE.yml

```
#Copyright (c) Gilljan 2020-2026. All rights reserved.
#Plugin written by Gilljan
# %prefix% is a global placeholder for the prefix of the plugin, defined in the config.yml
NoPerm: '%prefix% &cDazu hast du keine Rechte!'
SecurityMessage: '%prefix% &cAus Sicherheitsgründen darf ein Weltenname keine Punkte (.) oder
Schrägstriche (/) enthalten.'
UpdateNotification: '%prefix% &aEs ist eine neue Version von GWorld verfügbar: &e%version%&a.
Link zum Update: &e%link%&a.'
AutoImport: '%prefix% &aDie Welt &e%world% &awurde automatisch von GWorld importiert.'
Create:
  creating: '%prefix% &aDie Welt &e%world% &awird nun erstellt und geladen...'
  success: '%prefix% &aDie Welt &e%world% &awurde erfolgreich erstellt!'
  failed: '%prefix% &cDie Welt &e%world% &ckonnte nicht erstellt werden.'
  use: '%prefix% &cBenutze: /gcreate <Weltname>'
<normal|nether|end|large_biomes|amplified|flat> {seed} {World Generator}'
Import:
  creating: '%prefix% &aDie Welt &e%world% &awird nun importiert und geladen...'
  success: '%prefix% &aDie Welt &e%world% &awurde erfolgreich importiert!'
  failed: '%prefix% &cDie Welt &e%world% &ckonnte nicht importiert werden.'
  use: '%prefix% &cBenutze: /gimport <Weltname>'
<normal|nether|end|large_biomes|amplified|flat> {World Generator}'
Teleport:
  success: '%prefix% &aDu wurdest erfolgreich auf die Welt &e%world% &ateleportiert.'
  failed: '%prefix% &cKonnte nicht Teleportieren.'
  no_perm_world: '%prefix% &cDu hast keine Berechtigung, dich in die Welt &e%world% &czu
teleportieren.'
  no_perm_other: '%prefix% &cDu hast keine Berechtigung, andere Spieler zu teleportieren.'
  failed_console: '%prefix% &cNur Spieler können diesen Befehl ausführen.'
  player_target_success: '%prefix% &aDu wurdest von jemand anderem erfolgreich auf die Welt
&e%world% &ateleportiert.' #Variable %player% ist möglich
  sender_target_success: '%prefix% &aDu hast den Spieler &e%player% &aerfolgreich auf die Welt
&e%world% &ateleportiert.'
  sender_target_all_success: '%prefix% &aDu hast alle Spieler erfolgreich auf die Welt
&e%world% &ateleportiert.' #%count% for number of teleported players is possible
  use: '%prefix% &cBenutze: /gtp <Weltname> {Spielername}'
Clone:
  creating: '%prefix% &aDie Welt &e%world% &awird nun zu &e%targetworld% &ageklont und
```

geladen...'

success: '%prefix% &aDie Welt &e%world% &awurde zu &e%targetworld% &ageklont.'

failed: '%prefix% &cDie Welt konnte nicht geklont werden.'

use: '%prefix% &cBenutze: /gclone <Weltname> <TargetWeltname>'

Delete:

success: '%prefix% &aDie Welt &e%world% &awurde erfolgreich gelöscht.'

failed: '%prefix% &cDie Welt &e%world% &ckonnte nicht gelöscht werden.'

use: '%prefix% &cBenutze: /gdelete <Weltname>'

Worlds:

loadedMaps: '%prefix% &aEs sind folgende Maps geladen.'

noMapsloaded: '%prefix% &cEs sind gerade keine Maps geladen.'

hoverTeleport: '&aKlicke, um dich auf &e%world% &azuteleportieren.'

use: '%prefix% &cBenutze: /gworlds'

Set:

success: '%prefix% &aDie Weltenkonfiguration der Welt &e%world% &awurde erfolgreich geändert.'

changes: '%prefix% &6%flag% &awurde von &6%oldValue% &a auf &e%newValue% &agesetzt.'

add: '%prefix% &aDas Entity &e%value% &awurde zur Liste &6%flag% &ahinzugefügt.'

remove: '%prefix% &aDas Entity &e%value% &awurde von der Liste &6%flag% &a entfernt.'

failed: '%prefix% &cDie Weltenkonfiguration der Welt &e%world% &ckonnte nicht geändert werden. Flag: &e%flag% &ckonnte nicht auf &e%value% &cgesetzt werden.'

invalidEntity: '%prefix% &cDas Entity &e%value% &cist ungültig.'

use: '%prefix% &cBenutze: /gset <Weltname> <flag> <value>'

flags:

timeCycle: 'timeCycle'

time: 'time'

weatherCycle: 'weatherCycle'

weather: 'weather'

pvp: 'pvp'

monsters: 'mobSpawning'

disabledMonsters: 'disabledMonsters'

animals: 'animalSpawning'

disabledAnimals: 'disabledAnimals'

forcedGamemode: 'forcedGamemode'

defaultGamemode: 'defaultGamemode'

difficulty: 'difficulty'

randomTickSpeed: 'randomTickSpeed'

announceAdvancements: 'announceAdvancements'

loadOnStartup: 'loadOnStartup'

enabled: 'aktiviert'

```
disabled: 'deaktiviert'
true: '&true'
false: '&false'
values: '&'
```

Info:

```
failed: '%prefix% &cDie Welt &eworld% &ckonnte nicht gefunden werden.'
failed_world: '%prefix% &cDie Welt auf der du dich befindest, wurde nicht importiert.'
use: '%prefix% &cBenutze: /ginfo <Weltename>'
header: '&---- &eGINFO& ----'
footer: '&---- &eGINFO& ----'
name: '&6Weltnamen &: '
generator: '&6generator &: '
flags:
  type: '&6type &: '
  environment: '&6environment &: '
  timeCycle: '&6timeCycle &: '
  time: '&6time &: '
  weatherCycle: '&6weatherCycle &: '
  weather: '&6weather &: '
  pvp: '&6pvp &: '
  mobs: '&6mobs &: '
  disabledMobs: '&6disabledMobs &: '
  animals: '&6animals &: '
  disabledAnimals: '&6disabledAnimals &: '
  forcedGamemode: '&6forcedGamemode &: '
  defaultGamemode: '&6defaultGamemode &: '
  difficulty: '&6difficulty &: '
  randomTickSpeed: '&6randomTickSpeed &: '
  announceAdvancements: '&6announceAdvancements &: '
  keepSpawnInMemory: '&6keepSpawnInMemory &: '
  loadOnStartup: '&6loadOnStartup &: '
  true: '&true'
  false: '&false'
  values: '&e%value%'
  none: '&keine'
```

Recreate:

```
creating: '%prefix% &aDie Welt wird basierend auf der &eworld% &aneu erstellt und geladen.'
success: '%prefix% &aDie Welt &eworld% &awurde neu erstellt und geladen.'
failed: '%prefix% &cDie Welt &eworld% &ckonnte nicht neu erstellt werden.'
use: '%prefix% &cBenutze: /grecreate <Weltename> <speichern (true:false)>'
```

Unload:

unloading: '%prefix% &aDie Welt &e%world% &awird nun entladen.'

success: '%prefix% &aDie Welt &e%world% &awurde erfolgreich entladen.'

alreadyUnloaded: '%prefix% &cDie Welt &e%world% &cist nicht geladen.'

failed: '%prefix% &cDie Welt &e%world% &ckonnte nicht entladen werden.'

teleport_players: '%prefix% &cDa die Welt &e%world% ¢laden wurde, wurdest du auf die Standard Welt teleportiert!'

use: '%prefix% &cBenutze: /gunload <Weltenname>'

Load:

loading: '%prefix% &aDie Welt &e%world% &awird nun geladen.'

success: '%prefix% &aDie Welt &e%world% &awurde erfolgreich geladen.'

alreadyLoaded: '%prefix% &cDie Welt &e%world% &cist bereits geladen.'

failed: '%prefix% &cDie Welt &e%world% &ckonnte nicht geladen werden.'

use: '%prefix% &cBenutze: /gload <Weltenname>'

Help:

header: '&eGWorld &8- &eWorld Managementsystem &8(&eSeite %site%&8/&e%maxsite%&8)'

use: '%prefix% &cBenutze: /ghelp <Seitenzahl>'

gclone: '&8/&egclone <Weltname> <TargetWeltname> &8- &7Klone eine Welt mit den gesetzten Flags und dem Gebauten'

gcreate: '&8/&egcreate <Weltname> <normal|nether|end|large_biomes|amplified|flat> {seed} {World Generator} &8- &7Erstelle eine Welt. Wähle optional einen Seed oder einen WorldGenerator aus.'

gdelete: '&8/&egdelete <Weltname> &8- &7Lösche eine Welt.'

gimport: '&8/&egimport <Weltname> <normal|nether|end|large_biomes|amplified|flat> {World Generator} &8- &7Importiere eine Welt. Wurde diese mit einem WorldGenerator erstellt, muss dieser angegeben werden, damit die Welt funktional bleibt.'

ginfo: '&8/&eginfo <Weltname> &8- &7Gibt die Werte der Flags für die angegebene Welt aus. Als Spieler ist es möglich, den Weltenname wegzulassen (dann wird die aktuelle Welt gewählt).'

gload: '&8/&egload <Weltname> &8- &7Lädt eine importierte, aber ungeladene Welt.'

gcreate: '&8/&egrecreate <Weltname> <speichern (true:false)> &8- &7Erstellt die Welt auf Basis des Seeds und Generators neu. Es besteht die Möglichkeit, die alte Welt sichern zu lassen.'

gset: '&8/&egset <Weltname> <Flag> <Value/Wert> &8- &7Setzt die Flags für eine bestimmte Welt. Als Spieler ist es möglich, den Weltenname wegzulassen (dann wird die aktuelle Welt gewählt).'

gtp: '&8/&egtp <Weltenname> {Spielername} &8- &7Teleportiert dich oder einen anderen Spieler auf eine Welt.'

gunload: '&8/&egunload <Weltenname> &8- &7Entlade eine importierte Welt, ohne diese zu löschen. Als Spieler ist es möglich, den Weltenname wegzulassen (dann wird die aktuelle Welt gewählt).'

gworlds: '&8/&egworlds &8- &7Liste alle geladenen Welten. Per Klick teleportierst du dich auf die gewählte Welt.'

en_EN.yml

```
#Copyright (c) Gilljan 2020-2026. All rights reserved.
#Plugin written by Gilljan
# %prefix% is a global placeholder for the prefix of the plugin, defined in the config.yml
NoPerm: '&cYou do not have the permission for that!'
SecurityMessage: '&cFor security reasons, a world name may not contains dots (.) or slashes (/).'
```

world &e%world%&a.' #count% for number of teleported players is possible

use: '%prefix% &cUse: /gtp <world name> {playername}'

Clone:

creating: '%prefix% &aThe world &e%world% &ais now cloned and loaded to
&e%targetworld%&a...'

success: '%prefix% &aThe world &e%world% &awas cloned to &e%targetworld%&a.'

failed: '%prefix% &cThe world could not be cloned.'

use: '%prefix% &cUse: /gclone <world name> <target world name>'

Delete:

success: '%prefix% &aThe world &e%world% &awas successfully deleted.'

failed: '%prefix% &cThe world &e%world% &ccould not be deleted.'

use: '%prefix% &cUse: /gdelete <world name>'

Worlds:

loadedMaps: '%prefix% &aThe following maps are loaded:'

noMapsloaded: '%prefix% &cThere are no maps loaded currently.'

hoverTeleport: '&aClick to teleport to &e%world%&a.'

use: '%prefix% &cUse: /gworlds'

Set:

success: '%prefix% &aThe world configuration of the world &e%world% &awas successfully
changed:'

changes: '%prefix% &6%flag% &ahas been set from &6%oldValue% &ato &e%newValue%&a.'

add: '%prefix% &aThe entity &e%value% &ahas been added to the list &6%flag%&a.'

remove: '%prefix% &aThe entity &e%value% &ahas been removed from the list &6%flag%&a.'

invalidEntity: '%prefix% &cThe entity &e%value% &cis invalid.'

failed: '%prefix% &cThe world configuration of the world &e%world% &ccould not be changed.'

use: '%prefix% &cUse: /gset <world name> <flag> <value>'

flags:

timeCycle: 'timeCycle'

time: 'time'

weatherCycle: 'weatherCycle'

weather: 'weather'

pvp: 'pvp'

monsters: 'mobSpawning'

disabledMonsters: 'disabledMonsters'

animals: 'animalSpawning'

disabledAnimals: 'disabledAnimals'

forcedGamemode: 'forcedGamemode'

defaultGamemode: 'defaultGamemode'

difficulty: 'difficulty'

```
randomTickSpeed: 'randomTickSpeed'
announceAdvancements: 'announceAdvancements'
loadOnStartup: 'loadOnStartup'
enabled: 'enabled'
disabled: 'disabled'
true: '&true'
false: '&cfalse'
values: '&e'
```

Info:

```
failed: '%prefix% &cThe world &e%world% &ccould not be found.'
use: '%prefix% &cUse: /ginfo <world name>'
header: '&8---- &eGINF0&8 ----'
footer: '&8---- &eGINF0&8 ----'
name: '&6World name &8: '
generator: '&6generator &8: '
flags:
  type: '&6type &8: '
  environment: '&6environment &8: '
  timeCycle: '&6timeCycle &8: '
  time: '&6time &8: '
  weatherCycle: '&6weatherCycle &8: '
  weather: '&6weather &8: '
  pvp: '&6pvp &8: '
  mobs: '&6mobs &8: '
  disabledMobs: '&6disabledMobs &8: '
  animals: '&6animals &8: '
  disabledAnimals: '&6disabledAnimals &8: '
  forcedGamemode: '&6forcedGamemode &8: '
  defaultGamemode: '&6defaultGamemode &8: '
  difficulty: '&6difficulty &8: '
  randomTickSpeed: '&6randomTickSpeed &8: '
  announceAdvancements: '&6announceAdvancements &8: '
  keepSpawnInMemory: '&6keepSpawnInMemory &8: '
  loadOnStartup: '&6loadOnStartup &8: '
  true: '&true'
  false: '&cfalse'
  values: '&e%value%'
  none: '&cnone'
```

Recreate:

creating: '%prefix% &aThe world is newly created and loaded based on the &e%world%&a.'
success: '%prefix% &aThe world &e%world% &awas newly created and loaded.'
failed: '%prefix% &cThe world &e%world% &ccould not be recreated.'
use: '%prefix% &cUse: /gcreate <worldname> <keepSaved (true:false)>'

Unload:

unloading: '%prefix% &aThe world &e%world% &ais now unloading.'
success: '%prefix% &aThe world &e%world% &awas successfully unloaded.'
alreadyUnloaded: '%prefix% &cThe world &e%world% &cis not loaded.'
failed: '%prefix% &cThe world &e%world% &ccould not be unloaded.'
teleport_players: '%prefix% &cAs the world &e%world% &chas been unloaded, you have been teleported to the default world!'
use: '%prefix% &cUse: /gunload <worldname>'

Load:

loading: '%prefix% &aThe world &e%world% &ais now loading.'
success: '%prefix% &aThe world &e%world% &awas successfully loaded.'
alreadyLoaded: '%prefix% &cThe world &e%world% &cis already loaded.'
failed: '%prefix% &cThe world &e%world% &ccould not be loaded.'
use: '%prefix% &cUse: /gload <worldname>'

Help:

header: '&GWorld &8- &eWorld management system &8(&epage %site%&8/&e%maxsite%&8)'
use: '%prefix% &cUse: /ghelp <page number>'
gclone: '&8/&egclone <worldname> <targetworldname> &8- &7clone a world with the flags set and the built'
gcreate: '&8/&egcreate <worldname> <normal|nether|end|large_biomes|amplified|flat> {seed} {World Generator} &8- &7Create a world. Optionally select a seed or a world generator.'
gdelete: '&8/&egdelete <worldname> &8- &7Delete a world.'
gimport: '&8/&egimport <worldname> &8- &7<normal|nether|end|large_biomes|amplified|flat> {World Generator} - Import a world. If this was created with a WorldGenerator, it must be specified to keep the world functional.'
ginfo: '&8/&eginfo <worldname> &8- &7Output the values of the flags for the specified world. As a player it is possible omit the world name (then the current world is selected).'
gload: '&8/&egload <worldname> &8- &7Loads an imported but unloaded world.'
gcreate: '&8/&egcreate <worldname> <save (true:false)> &8- &7Creates the world based on the seed and generator new. There is an option to have the old world saved.'
gset: '&8/&egset <worldname> <flag> <value/value> &8- &7Sets the flags for a given world. As a player, it is possible to, omit the world name (then the current world is selected).'
gtp: '&8/&egtp <worldname> {playername} &8- &7Teleports you or another player to a world.'
gunload: '&8/&egunload <worldname> &8- &7Unload an imported world without deleting it. As a player it is possible to omit the world name (then the current world is selected).'

gworlds: '&8/&egworlds &8- &7List all loaded worlds. Click to teleport to the selected world.'

Migration from v1-legacy to v2

GWorld v2 features intelligent migration systems that make the transition from older versions or the change between storage media (files to database) as easy as possible.

Are you looking for a way to switch from YAML to MySQL? Then please follow this link: [Switch from YAML \(File\) to MySQL \(DB\)](#)

Migration from GWorld v1 to v2

When you upgrade from the first version of GWorld to v2, the plugin will automatically detect this during the first start.

How it works

- **Detection:** The plugin looks for an existing `worlds.yml` where...
 - the `ConfigVersion` field is missing
 - the `LoadWorlds` list exists
 - the `Worlds` list exists
- **Automatic Backup:** Before changes are made to the datasets, GWorld renames the old file to `worlds_legacy_backup.yml`.
- **Data Conversion:** The `LegacyMigrator` reads all old world definitions and transfers them into the new, structured **v2 format**. Missing new fields are filled with default values.
- **Seed Repair:** Since seeds were not saved in v1, GWorld v2 automatically detects missing seeds when the world is first loaded, reads the correct seed from the world files, and corrects the entry.

Note: During the migration, the console will inform you about the progress. Once the `worlds.yml` file contains a `ConfigVersion: 1`, the process is complete. This will also be output in the console.

After a successful migration, GWorld v2 starts normally and all worlds are loaded.

Security Measures & Prerequisites

To ensure a smooth migration, please note the following points:

Prerequisites (see [Introduction](#))

- **Java Version:** GWorld v2 strictly requires at least **Java 21**, as modern language features are used.

Checklist

- ☐ Create a manual backup of your entire plugin folder before upgrading.
- ☐ After the migration, check with the command `/gworlds` whether all worlds are listed correctly.
- ☐ Check the server console for error messages during the first start.

Example worlds.yml Configurations

worlds.yml (v1)	worlds.yml (v2.0.0)
-----------------	---------------------

```
#Copyright (c) Gilljan 2020-2022. All
rights reserved.
```

```
#Plugin written by Gilljan
```

```
LoadWorlds:
```

- world
- world_nether
- world_the_end

```
Worlds:
```

```
world:
```

```
generator: 'null'
type: normal
timeCycle: true
time: 6000
weatherCycle: true
weather: sun
pvp: true
mobs: true
animals: true
forcedGamemode: false
defaultGamemode: SURVIVAL
difficulty: NORMAL
randomTickSpeed: 3
announceAdvancements: true
```

```
world_nether:
```

```
generator: 'null'
type: nether
timeCycle: true
time: 6000
weatherCycle: true
weather: sun
pvp: true
mobs: true
animals: true
forcedGamemode: false
defaultGamemode: SURVIVAL
difficulty: NORMAL
randomTickSpeed: 3
announceAdvancements: true
```

```
world_the_end:
```

```
ConfigVersion: 1
```

```
Worlds:
```

```
world:
```

```
Environment: NORMAL
Alias: $bMy world
Type: NORMAL
Seed: 541091381232416907
AllowPvP: true
KeepSpawnInMemory: true
AnimalSpawning: true
DisabledAnimals:
- cow
MonsterSpawning: false
DisabledMonsters:
- spider
WeatherCycle: false
WeatherType: CLEAR
TimeCycle: false
Time: 6000
DefaultGamemode: false
GameMode: ADVENTURE
Difficulty: HARD
LoadOnStartup: true
RandomTickSpeed: 3
AnnounceAdvancements: true
```

```
world_nether:
```

```
Environment: NETHER
Alias: $cThe nether
Type: NORMAL
Seed: 541091381232416907
AllowPvP: true
KeepSpawnInMemory: true
AnimalSpawning: true
DisabledAnimals: []
MonsterSpawning: true
DisabledMonsters: []
WeatherCycle: true
WeatherType: CLEAR
TimeCycle: true
Time: 0
```

This documentation refers to GWorld version 2.0.1.

Switching from YAML (file) to MySQL (DB)

GWorld v2 features intelligent migration systems that make transitioning from older versions or switching between storage media (files to database) as easy as possible.

Looking for information on migrating from v1 to v2? Then please follow this link: [Migration from v1-legacy to v2](<https://books.gilljan.de/books/gworld-dokumentation-de/page/migration-von-v1-legacy-zu-v2>) "Migration from v1-legacy to v2")

Switching from YAML to MySQL

If you no longer want to store your world data locally in a file, but centrally in a MySQL database, GWorld v2 offers an automatic transfer service.

Steps for the changeover

1. Stop your server.
2. Open `config.yml` and set `Storage.Type` to `MYSQL`.

If `Storage.Type` is missing, please update your `config.yml`. See: [Standard configuration files](<https://books.gilljan.de/books/gworld-dokumentation-de/page/standard-konfigurationsdateien>) "Standard configuration files")

3. Enter your database access data in the `MySQL` section.
4. Restart the server.

What happens at startup?

- **Data transfer:** GWorld detects that MySQL is enabled, but a local `worlds.yml` file with data still exists.
- **Import:** The plugin reads all worlds from the file and writes them to the corresponding MySQL tables.
- **Completion:** To prevent duplicate imports, the local file is renamed to `worlds.yml.imported` after successful completion.
- **Security:** If a world already exists in the database, it is not migrated for security and integrity reasons.

Security measures & requirements

To ensure a smooth migration, please note the following points:

Requirements

- **Database availability:** If MySQL is configured, the plugin will abort the startup process if no connection can be established to prevent data loss.

Checklist

- ☐ Ensure that the database user has permissions to create tables (`CREATE`), insert (`INSERT`) and modify (`UPDATE`) data.
- ☐ Before switching, create a manual backup of your entire plugin folder.
- ☐ After switching, use the `/gworlds` command to check that all worlds are listed correctly.

This documentation refers to GWorld version 2.0.1.

The flags and their possible values

Here you will find an overview of all possible flags and the values that can be selected for them.

Flag	Values	Description
ALIAS	Text (String) Colorcode with & are supported and automatically translated	Choose a display name for a World (for PAPI)
WEATHER_CYCLE	true - Weather change active false - Static weather, weather from WEATHER is set	Control whether the weather should change
WEATHER	clear - No rain/thunderstorms thunder - Thunderstorms rain - Rain	Set the weather for the world Applies when WEATHER_CYCLE is set to false
TIME_CYCLE	true - Time continues to run false - Static time, time from TIME is set	Control whether time should continue to run
TIME	Integer value between 0 and 24000	Set the time for the world Applies when TIME_CYCLE is false
DIFFICULTY	peaceful - Peaceful easy - Easy normal - Normal hard - Hard = Minecraft Difficulty	Set the difficulty level for the world
PVP	true - PVP is active false - PVP is disabled	Control whether PVP should be possible
MONSTERS	true - Monsters spawn false - Monsters no longer spawn	Control whether monsters are allowed to spawn in general
DISABLED_MONSTERS	Monsters that exist in the current version of Minecraft Find all possibilities by tabbing through the values	If MONSTERS is set to true , individual monsters can be deactivated (and reactivated) here.

ANIMALS	true - Animals spawn false - Animals no longer spawn	Control whether animals are allowed to spawn in general
DISABLED_ANIMALS	Animals that exist in the current version of Minecraft Find all possibilities by tabbing through the values	If ANIMALS is set to true , individual animals can be deactivated (and reactivated) here.
FORCED_GAMEMODE	true - Force a game mode in this world false - Do not force a game mode in this world	Control whether a game mode should be enforced in a world
DEFAULT_GAMEMODE	= Minecraft Gamemode	Force/set a game mode in a world Only applies if FORCED_GAMEMODE is set to true
RANDOM_TICK_SPEED	Integer value	Set the tick speed of a world
ANNOUNCE_ADVANCEMENTS	true - Achievements are displayed in chat false - Achievements are not displayed in chat	Control whether achievements are displayed
LOAD_ON_STARTUP	true - The world is loaded when the server starts false - The world is not loaded by default	Control whether a world should be loaded when the server starts The default world cannot be unloaded and must be loaded by default

PlaceholderAPI (PAPI)

Integration

GWorld v2 offers **native support** for [PlaceholderAPI](#). This means you do not need to download an additional expansion via the PAPI-eCloud. Once PlaceholderAPI is installed on your server, GWorld registers its placeholders automatically.

Available Placeholders

All GWorld placeholders use the prefix `%gworld_`.

Placeholder	Description	Example Output
<code>%gworld_alias%</code>	The formatted display name (alias) of the world the player is currently in.	<code>\$6Survival</code>
<code>%gworld_alias_<worldname>%</code>	The formatted display name of a specifically named world.	<code>%gworld_alias_world_the_end%</code> → <code>\$5The End</code>
<code>%gworld_name%</code>	The technical folder name of the world the player is currently in.	<code>world_survival_v2</code>
<code>%gworld_name_<worldname>%</code>	Returns the technical name of the requested world. Useful for scripts or validations.	<code>%gworld_name_lobby%</code> → <code>lobby</code>

Fallback Info: If a world has no alias set, the technical world name is returned automatically. If the player is offline or the placeholder is called incorrectly, an empty string (`""`) is output so it doesn't break the layout of your tab list or scoreboard.

Warning: If the world is not managed by GWorld, an empty string (`""`) is also output!

Examples

Here are some examples of how you can use the placeholders in other plugins:

1. In the Tab List / Scoreboard

You want to show your players where they currently are. Use the alias placeholder for this, as it supports color codes (e.g. &a):

```
Current world: %gworld_alias%
```

2. In Chat Formats

Insert the placeholder into your chat format to display the world as a prefix before the player's name:

```
chat-format: "[%gworld_alias%] %player_name%: %message%"
```

3. In GUI Menus

If you are building a worlds menu, you can use the nice **alias** for the item icon, but you must use the **technical name** for the teleport command in the background:

```
items:
  survival_world:
    material: GRASS_BLOCK
    display_name: 'Teleport to: %gworld_alias_farmworld%'
    left_click_commands:
      - '[player] gtp %gworld_name_farmworld%'
```

/gcreate - Create Worlds

Create worlds

Creating worlds is one of the main functions of GWorld. The command is more powerful than it appears at first glance.

The command in detail

```
/gcreate <Name> [Environment] [Seed] [Generator]
```

Parameters explained

1. **Name (required):** The name of the world. This is also used as the folder name.
 - *Allowed:* Letters, numbers, underscores, hyphens.
 - *Not allowed:* spaces, special characters.
2. **Environment (required):** Determines whether it is an overworld, nether, or end.
 - NORMAL (default world)
 - NETHER
 - THE_END
3. **Seed (Optional):** The starting value for world generation.
 - Omit the argument if there is no generator.
 - Example: TerraformGenerator, PlotSquared

To use a generator, you must have the corresponding plugin installed!

Examples

1. Standard Survival World

Simply create a normal world:

```
/gcreate MyWorld NORMAL
```

2. World with generator

Creating a world with a generator:

```
/gcreate MyWorld NORMAL TerraformGenerator
```

3. World with generator and seed

Create a world with a generator and seed:

```
/gcreate MyWorld NORMAL 12345678 TerraformGenerator
```

/gset - Configure worlds

With the command `/gset`, you can change the properties of your worlds in real time.

The big advantage: **All changes are active immediately** without having to reload the server or the world. At the same time, they are saved in the database/config.

The command

```
/gset [name] <flag> <Value>
```

Parameters explained

1. **Name (optional):** The name of the world.
 - It is possible to omit the world name. In this case, the current world will be selected.
 - The world must be known to GWorld and managed (created/imported).
2. **Flag (required):** Specifies which setting of the world should be changed.

With the command For more information on all flags, see the flag page
3. **Value (required):** Specifies the value to which the flag should be set
 - For more information on all flags and possible values, see the flag page

All flags and their values: [The flags and their possible values](#)

Examples

1. Ban/allow a monster/animal

Prohibit a specific animal or monster, in this case the **monste** Pillager

```
/gset DISABLED_MONSTERS pillager
```

If the animal/monster is allowed, it will be banned and vice versa (toggle)

For an animal (cow) analogously:

```
/gset DISABLED_ANIMALS cow
```

2. Disable PVP

Prohibit PVP in a Minecraft world called “MyWorld”:

```
/gset MyWorld PVP false
```

3. Set the world to “peaceful”

Set the difficulty level to “peaceful”:

```
/gset DIFFICULTY peaceful
```

4. Set a display name (alias)

Set the alias of a world to "&bMy world":

```
/gset ALIAS &bMy world
```

/gimport - Import existing worlds

Do you already have a world from another server or from single player? With `/gimport` you can import it into the GWorld system.

Preparation

1. Stop the server (recommended, but not mandatory).
2. Copy your world folder to the root directory of your server (where `server.properties` is located).

Important: The folder must not contain any spaces!

☐ `My awesome world`

☐ `My_awesome_world`

The command

```
/gimport <FolderName> <Environment> [Generator]
```

Parameters explained

1. **FolderName (required):**
 - Must match the folder name exactly.
2. **Environment (required):**
 - Helps GWorld assign the correct type (e.g., for ceiling height in the Nether). This argument must be specified.
3. **Generator (optional):**
 - Must be specified if the world was created with a generator.

To use a generator, you must have the appropriate plugin installed!

Example

You have uploaded a folder named `Lobby_Backup`.

1. Execute the command:

```
/gimport Lobby_Backup NORMAL
```

2. GWorld recognizes the files (`level.dat`, region files).
3. The world is registered and loaded immediately.
4. You can now teleport there: `/gtp Lobby_Backup`.

Note about the database: If you have MySQL enabled, the imported world is automatically entered into the database and is also available on other servers after a restart (provided the files are also located there or are synchronized).

/grecreate - Reset a world to its original state

Sometimes it can be useful to reset a world to its original state. For example, to reuse a farm world.

The command in detail

```
/grecreate <name> <backup>
```

Parameters explained

1. **Name (required):** The name of the world.
 - The world must be known and managed by GWorld (created/imported).
2. **Backup (required):** Whether a backup of the world should be created before it is deleted and recreated.
 - **Possible values:** true, false
 - **true:** A backup of the world is created in the “old_maps” directory
 - **false:** No backup is created

Examples

1. Recreate a world with backup

The world “MyWorld” will be recreated, but first a backup must be created:

```
/grecreate MyWorld true
```

2. Recreate a world without backup

The world “MyWorld” is recreated without creating a backup:

```
/grecreate MyWorld false
```

/ginfo - Informationen about a world

Sometimes it can be helpful to see all the information and settings for a world at a glance. The command `/ginfo` is available for this purpose.

The command in detail

`/ginfo [name]`

Parameters explained

1. **Name (optional):** The name of the world
 - If the name is left blank, the user's current world will be selected.
-

Screenshot from the game

```
---- GINFO ----  
World name : worldLargeBiomes  
generator : Minecraft  
alias : My world  
environment : NORMAL  
type : LARGE_BIOMES  
timeCycle : true  
time : 6000  
weatherCycle : true  
weather : CLEAR  
pvp : true  
mobs : true  
disabledMobs :  
- none  
animals : true  
disabledAnimals :  
- none  
forcedGamemode : false  
defaultGamemode : SURVIVAL  
difficulty : NORMAL  
randomTickSpeed : 3  
announceAdvancements : true  
keepSpawnInMemory : true  
loadOnStartup : true  
---- GINFO ----
```

Examples

1. Information about the current world

Get information about the current world:

```
/ginfo
```

2. Information about another world

Get information about the world “MyWorld”:

/ginfo MyWorld

/gtp - Teleport between worlds

Teleporting between worlds is also an important function.

The command may seem a little complicated due to the various permissions, but it is easier than you might think.

The command in detail

```
/gtp <name> [player name|@all]
```

Parameters explained

1. **Name (required):** The name of the world to which the player should be teleported.
2. **Player name/@all (optional):**
 1. **Player name:** The name of the player to be teleported.
 2. **@all:** Teleport all players except yourself to the desired world.

Permissions

Basic permission: `gworld.commands.tp`

The basic permission is **ALWAYS** required for the command to be used and automatically completed.

Teleport to all worlds: `gworld.commands.tp.*`

This permission is required if you want to be able to teleport to all worlds.

Teleport to specific worlds: `gworld.commands.tp.< world-name>`

With this permission, a user may only teleport to the world specified within the permission.

Teleport other players: `gworld.tp.other`

Attention: This permission differs from the others!

With this permission, the user can teleport all players to other worlds by using the player name itself or @all.

Examples

1. Teleport to a world

In this example, you want to teleport to the world “MyWorld”:

```
/gtp MyWorld
```

2. Teleport a player to a world

In this example, the user “MyUser” should be teleported to “MyWorld”:

```
/gtp MyWorld MyUser
```

3. Teleport all players to one world

In this example, all users are to be teleported to the world “MyWorld”:

```
/gtp MyWorld @all
```

Developers (API)

GWorld v2 offers a modern API for managing and creating worlds and changing settings (flags) programmatically.

Version v2.0.1

1. Setup & Integration

To use GWorld v2 in your plugin, you must add it as a dependency.

1. Maven Dependency

Add the `core` module from GWorld to your `pom.xml`. Since the API is provided by the server at runtime, we use the `provided` scope.

```
<dependency>
  <groupId>de.gilljan</groupId>
  <artifactId>gworld-core</artifactId>
  <version>2.0.1-SNAPSHOT</version>
  <scope>provided</scope>
</dependency>
```

We use the GitHub Maven Package Registry. To use it, please refer to the GitHub documentation: <https://docs.github.com/en/packages/working-with-a-github-packages-registry/working-with-the-apache-maven-registry#installing-a-package>

2. plugin.yml

To ensure that your plugin can access GWorld, it must be loaded *after* GWorld. To do this, add the entry to your `plugin.yml`:

```
depend: [GWorld]
# Alternatively, if GWorld is optional:
# softdepend: [GWorld]
```

3. Access to the API

The main entry point is the `GWorldAPI` interface. You can obtain the instance using the static method of the main class.

```
import de.gilljan.gworld.GWorld;
import de.gilljan.gworld.api.GWorldAPI;
import de.gilljan.gworld.api.IWorldManager;

public class MyPlugin extends JavaPlugin {

    private IWorldManager worldManager;

    @Override
    public void onEnable() {
        if (Bukkit.getPluginManager().isPluginEnabled("GWorld")) {
            // Retrieve API instance
            GWorldAPI api = GWorld.getInstance();

            // Load the manager for worlds
            this.worldManager = api.getWorldManager();
        }
    }
}
```

2. Create worlds (Builder)

In GWorld v2, new worlds are created using the **builder pattern**. This separates the **configuration** (registration) from the **generation** (load).

Step 1: The Builder (Registration)

With the `WorldCreationBuilder` you define all the properties of the world. Calling `.build()` registers the world in the database, but does not yet physically create it.

```
import de.gilljan.gworld.api.IManageableWorld;
import de.gilljan.gworld.enums.WorldTypeMapping;

// Start the builder
IManageableWorld newWorld = worldManager.createBuilder("MeineEventWelt")
    .worldType(WorldTypeMapping.NORMAL) // Environment: Normal, Nether, End, Large Biomes,
    Amplified, Flat
    .generator("PlotSquared")           // Optional: Custom Generator Name
    .seed(987654321L)                   // Optional: Set seed
    .build();                           // -> Saves the world to Config/DB
```

Note: The `.build()` method internally calls `addWorldFromBuilder`. The world is then known (registered), but still unloaded.

Step 2: Load (generation)

```
// Creates the bukkit world and loads chunks
boolean success = newWorld.createMap();

if (success) {
    getLogger().info("World is ready!");
}
```

```
}
```

The same applies to imports. Use the folder name of the world and use the `importMap()` method instead of `createMap()`.

Why two steps?

1. **Performance:** You can register worlds when the server starts, but only load them when a player starts a minigame.
2. **Security:** You can set flags (e.g., PvP off) before the first player enters the world.

3. Management & Control

The `IWorldManager` manages all worlds, while the `IManegeableWorld` object allows control over a specific world.

Retrieve worlds

```
// Retrive a single world
Optional<IManegeableWorld> worldOpt = worldManager.getWorld("Lobby");

// Retrive all worlds
List<IManegeableWorld> allWorlds = worldManager.getWorlds();
```

World actions

Each `IManegeableWorld` object provides methods for control:

Method	Description
<code>loadMap()</code>	Loads the world from the hard drive (Bukkit World Init).
<code>unloadMap()</code>	Unloads the world and teleports players to the main spawn.
<code>deleteMap()</code>	Irrevocably deletes the world (files & database entry).
<code>reCreate(boolean save)</code>	Deletes the world and regenerates it (reset). Optionally with backup (true) or without (false).
<code>clone(String name)</code>	Creates a copy of the world under a new name.

Example: Performing a world reset

```
worldManager.getWorld("Farmworld").ifPresent(world -> {
    // Reset world and keep copy of old world
    world.reCreate(true);
});
```

Example: Remove world (from the system)

If you want to remove a world from GWorld (including deleting the files):

```
// Option A: Directly via the object (recommended)
```

```
world.deleteMap();
```

```
// Option B: Over the manager
```

```
worldManager.removeWorld(world);
```

4. Flags & Properties

GWorld allows you to change world settings (flags) programmatically. These settings are stored persistently.

Set flags

You can change flags directly on the `IManageableWorld` object or set them during creation in the builder.

```
// Example: Disable PVP and set difficulty to hard
world.setAllowPvP(false);
world.setDifficulty(Difficulty.HARD);

// IMPORTANT: Save changes to disk. Ensures data integrity after a restart.
world.saveProperties();
```

Available settings

Here is an overview of the most important methods in `IManageableWorld` interface:

Category	Methods (Getter / Setter)	Description
PVP	<code>isAllowPvP</code> , <code>setAllowPvP</code>	Global PvP on/off.
Spawning	<code>isMonsterSpawning</code> , <code>setMonsterSpawning</code>	Spawning monsters.
	<code>isAnimalSpawning</code> , <code>setAnimalSpawning</code>	Spawning animals.
Environment	<code>isWeatherCycle</code> , <code>setWeatherCycle</code>	Whether the weather changes.
	<code>isTimeCycle</code> , <code>setTimeCycle</code>	Whether the time of day is advancing.
	<code>getTime</code> , <code>setTime</code>	Current time in ticks.
Player	<code>getGameMode</code> , <code>setGameMode</code>	Default game mode of the world.
System	<code>isLoadOnStartup</code> , <code>setLoadOnStartup</code>	Should the world be loaded when the server starts?
	<code>isAllowPvP</code> , <code>setAllowPvP</code>	Keep spawn chunks in RAM.

Use in the Builder

When creating a world, you can also set flags generically via `WorldProperty`:

```
import de.gilljan.gworld.data.properties.WorldProperty;

manager.createBuilder("Lobby")
    .property(WorldProperty.PVP, false)
    .property(WorldProperty.ANIMALS, false)
    .build();
```