How To Admin

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Files and Commands - Vanilla

> Do note that the information here is based on the default files and folders provided by Mojang

Files

In this section you'll learn what a folder or a file is for.

Importance is divided in the following way: **Low, Medium, High, Essential**

Low: Not something you'll be using at all or doesn't cause issues at all

Medium: Something you may use/the server uses it or may cause a few issues

High: Important information stored within it, deleting may lead to server corruption or other issues

Essential: needed for the server to run, the server won't run without it

File/Folder name	Description	Importance
libraries	A folder. It store libraries for your server, it's preferred to not delete these as they are needed for the server, nothing will happen if you delete them as they'll regenerate themselves. Don't delete while server's running	Low
.cache	A folder. Cache, stores data temporarily, preferrably keep it. Don't delete while server's running	Medium
logs	A folder. Stores your server's logs, by deleting it once in a while you can save up some storage.	Low

versions	A folder. As long as the server.jar is in the main directory, it won't cause issues deleting it. It'll autoregenerate. Don't delete while server's running	Medium
world	A folder. Don't delete it, it contains some player data, datapack if added and your worlds' data.	High
banned-ips.json banned-players.json	Both are files. You usually don't delete these unless you want to unban every person who has been banned in the past	Medium
server,jar	A file. Don't delete, it's your server's core	Essential

Commands

The following table contains "essential" or useful commands which a server administrator should be aware of.

Command	**Description**	**Usage**
/op /deop	Allows you to execute any command available within the server (if `op-permission-level` in `server.properties` is 4 (default value))	/op <username> /deop <username> /op MelonOof /deop MelonOof
/gamemode	Change yout gamemode to one of the following: **survival, creative, spectator** and **adventure**.	/gamemode <gamemode> /gamemode survival /gamemode creative /gamemode adventure /gamemode spectator
/stop	This command will stop your server (works the same way as the stop button in the panel's console)	/stop

/restart	This command will restart your server (works the same way as the restart button in the panel's console)	/restart
/whitelist	The command itself doesn't do anything, you need additional arguments for it to work, you can toggle on/off whitelist, add and remove players from whitelist	/whitelist on || /whitelist off /whitelist add <username> /whitelist add MelonOof /whitelist remove <username> /whitelist remove MelonOof /whitelist list
/worldborder	Manage the world border. With this command you can: Increases or decreases the world border diameter; Recenter the world boundary and a lot more	/worldborder add <diameter> /worldborder set <diameter> /worldborder get
/ban	Ban players permanently from your server	/ban <username> [<reason>] `The ban's reason is optional` /ban MelonOof Too Juicy `with this command, the player MelonOof is getting banned because of the following reason: "Too Juicy"`
/pardon	Unban players from your server	/pardon <username> /pardon MelonOof
/setworldspawn	Set the server's default (re)spawn point the the location you are at	/setworldspawn
/tp /teleport	Teleport to a location, teleport a player to a location or teleport to a player	/tp <x> <y> <z> /tp <username> <x> <y> <z> /tp <username> <username>
/weather	Sets the weather to one of the following **clear|rain|thunder** with an optional duration in ticks (1 second = 20 ticks)	/weather <weather> [<duration>] /weather clear 200 `sets the weather to clear for 10 seconds`
/give	Give yourself or someone else one or multiple items	/give <username> <item> [<amount>]
/help	Get to know about any other command you may need, the ones listed here are the essential ones for a server administrator	/help

Essential plugins for your server - Paper

Server Core

EssentialsX: EssentialsX is a free and open-source plugin, it's been in the community since 2015, it's well known for being feature rich and constantly updated

zEssentials: A paid and open-source alternative, it's been developed in 2024, by Maxlego08. It supports both Paper and Folia, it provides similiar features to EssentialsX's and a modular structure (you enable and disable what you need)

Ban System

AdvancedBan: AdvancedBan is a free and open-source plugin developed since 2015, its last update was on October 2020. It offers database support and discord hooks through addons. It is still compatible with Paper 1.21+

AdvancedBanX: A fork of AdvancedBan, which is also free and open source, as of 2024, it's being actively developed on to provide more features, it works with AdvancedBan's addons.

BanManager: An AdvancedBan(X) free and open-source alternative offering a web interface for both admins and players.

LiteBans; A paid close-source plugin offering a web interface. As of 2024 it is being actively developed on.

Economy

Vault: Vault in itself is not an Economy plugin, rather it allows the usage of various economy plugins by hooking them into it. This plugin is quite essential for today's servers, most economy related plugins use its API as a standard, for actual economy, the `Server Core` plugins support it.

PlayerPoints: Ever tought to have a second economy? PlayerPoints allows you to do so, offering great management over the economy. The configuration is simple and user friendly.

Permissions

LuckPerms: LuckPerms is a community standard as of 2024, providing seamless permission management through both in-game commands and a web interface.

Tab and Scoreboard

TAB: TAB is a free and open-source plugin developed by Neznamy, it offers various features and supports servers as old as Minecraft Java 1.5.X, it's configuration is easy to understand and with great customizability.

AntiCheat:

Grim: Grim is one of the best free and open-source anticheats available within the community, offering various checks with the least false positive possible.

NoCheatPlus: NoCheatPlus is a great free and open-source plugin, it offers great customizability and various checks with partial support for Geyser (bedrock players).

Vulcan: Vulcan is a paid anticheat sold for about $20, it's said to be one of the best anticheats available on the market

Polar: Polar anticheat is a subscription based anticheat offering great combat checks for 1.8.X

Combat Logging

CombatLogX: CombatLogX is a plugin developed by SirBlobman (affiliated with the AlienUniverse brand). The plugin offers various hooks for plugins such as PlaceholderAPI and WorldGuard.

NPCs

Citizens: Citizens is a feature rich open source plugin, supporting various entities and paths, it hooks into Dnizen for npc scripting and much more.

ZNPCsPlus: ZNPCsPlus is a fork a ZNPCs, ZNPCsPlus is a minimalistic, performance focused plugin, in comparison to Citizens it's much more lightweight, but offers less features. Great for lobbies

Placeholders

PlaceholderAPI: PlaceholderAPI is a community standard plugin, providing support for placeholders hence allowing dynamic values. Most plugins support it, it offers various expansions and is actively developed.

Menu Creation

DeluxeMenus: DeluxeMenus allows administrators to create inventory menus easily with a crystal clear wiki and a great discord based support for fast answers and much more

zMenu: zMenu is a DeluxeMenus alternative offering more or less the same features, it supports most of DeluxeMenus' syntax. In addition it comes with a web based user interface for menu creation.

Disable the Nether and The End

If you want to disable the Nether and the End dimensions on your Minecraft server, follow the steps below based on your server type.

Disabling the Nether

Method 1: Using server.properties (Vanilla & Paper/Spigot)

1. Stop your server.
2. Open the `server.properties` file in a text editor.
3. Locate the following line:

   ```
   allow-nether=true
   ```

4. Change it to:

   ```
   allow-nether=false
   ```

5. Save the file and restart your server.

Disabling the End

Method 1: Using bukkit.yml (Spigot & Paper)

1. Stop your server.
2. Open the `bukkit.yml` file in a text editor.
3. Locate the following section:

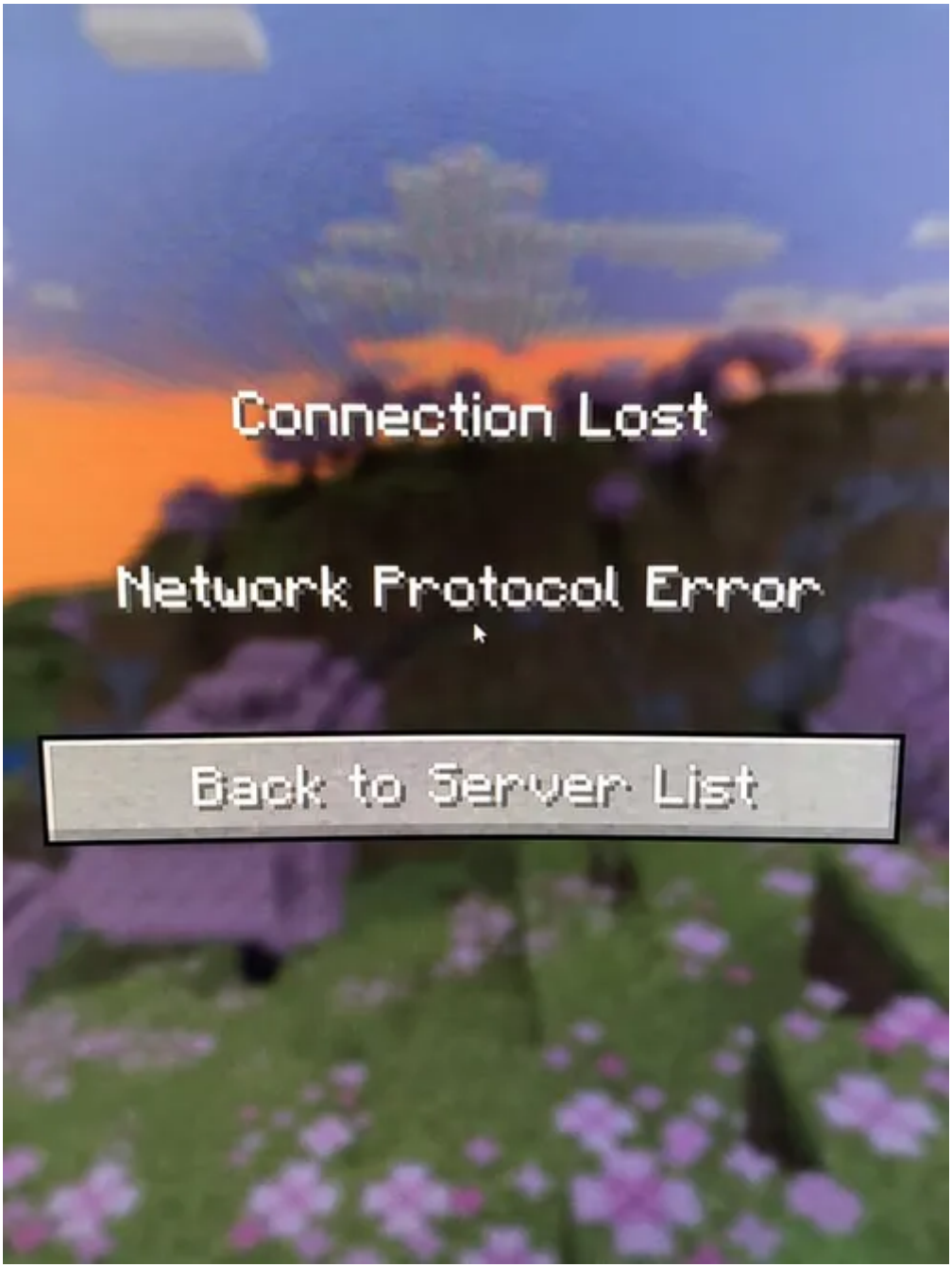
   ```
   settings:
     allow-end: true
   ```

4. Change it to:

```
settings:
  allow-end: false
```

5. Save the file and restart your server.

Network Protocol Error



“Network protocol error” often happens when the version of Minecraft you’re using isn’t matching up with the version the server is running. It might also show up if the server or your connection has issues—like an incorrect IP address, firewall settings blocking your connection, or even a plugin error. Here are a few things you can try:

• Double-check that your Minecraft client has the exact same version as your server. Example: the server is on 1.20, for example, make sure you’re launching Minecraft 1.20.

• Confirm you’re using the right IP and port.

• Make sure your server plugins or mods are updated and support the game version you want to play on.

Server not starting properly

Is your server not starting properly? Here are some possible fixes and steps to find the issue.

1. Check the Console: Look in your Control Panel’s console (our custom panel) for any error messages that appear right before the server goes offline.

2. Review Your Plugins/Mods: If you recently added a plugin or mod, try temporarily removing it. Sometimes outdated or incompatible plugins cause the server to crash.

3. Check Server Settings: Make sure your server is on a compatible version. If it’s a modded server, you’ll want to ensure the mods match the server’s version.

4. Monitor Resource Usage: If your server has a lot of players or mods, it might need a higher plan to give it enough CPU power.

If this didn't help please open a ticket at Alien Universe's Discord Server, under `technical`.

Why use External Databases over Local Databases

In the world of Minecraft server plugins and mods, data management is crucial for everything from player stats tracking to world state saving. Many developers face the decision of choosing between local databases (e.g., SQLite) and external databases (e.g., MySQL, MongoDB) for storing and accessing this data. While each option has its merits, performance is often the deciding factor. In this article, we'll focus on the performance implications of using external databases over local databases for Minecraft plugins.

What are external Databases?

External databases are databases hosted outside of the server. Unlike local databases, which are within the files of your server, external databases use a network connection to handle data. Examples of such databases are MySQL, MariaDB and MongoDB. They are designed to handle large amounts of data and concurrent access, making them ideal for applications that need to manage data from multiple sources or handle heavy loads efficiently.

What are local Databases?

Local databases are databases located within your plugins' files. They are often file-based, storing data directly on the local filesystem, and don't require a network connection for access. Common examples include SQLite, H2, YAML, TOML and JSON. They are usually used by default for your plugins, and work well when handling small amount of data. However, they are generally less suited for high concurrency or large-scale data handling when compared to external databases.

Conclusion

It's preferred for you as a server owner to make use of external databases (One will be provided for free for you to use. If you're unfamiliar with creating databases, please refer to this article for guidance).