

Server settings

This page will never be an exhaustive list of differences from vanilla.

Purpur and the projects it is based on make many fundamental changes to the game which can impact how things behave.

This page lists miscellaneous settings used on the server which differ from their default values. It is not exhaustive but should cover the big things.

View Distance

The simulation distance for the server is **5 chunks**. The view distance is set to **10 chunks**, within which chunks will be visible without ticking.

Difficulty

The base difficulty of the server is **hard**. Some of the changes below reduce or remove some of the vanilla changes this would normally cause.

Mobs

Spawn Range

The mob spawn range is **4 chunks**.

Spawn Limits

Spawn limits apply per player. The below numbers are the mob counts the server aims to reach for each player. These settings also vary by mob type and world. All worlds use Default unless noted otherwise.

| Type | Default | Arena |
|----------|---------|-------|
| Monsters | 21 | 120 |
| Animals | 10 | 0 |

| | | |
|---------------------------|----|---|
| Water Animals | 5 | 0 |
| Underground Water Animals | 3 | 0 |
| Water Ambient | 10 | 0 |
| Axolotls | 3 | 0 |
| Ambient | 1 | 0 |

Activation Range

Mobs will tick less often when beyond a certain distance from any player. These settings also vary by mob type and world. All worlds use Default unless noted otherwise.

| Type | Default | The Nether |
|-----------------|-----------|------------|
| Animals | 32 blocks | 32 blocks |
| Monsters | 32 blocks | 32 blocks |
| Raiders | 64 blocks | 32 blocks |
| Misc. | 16 blocks | Unlimited |
| Water | 16 blocks | 32 blocks |
| Villagers | 31 blocks | 32 blocks |
| Flying Monsters | 48 blocks | 64 blocks |

Tracking Range

Mobs beyond a certain distance will not be sent to players, and will therefore be invisible. These settings also vary by mob type and world. All worlds use Default unless noted otherwise.

| Type | Default | The Nether | Arena |
|----------|-----------|------------|-----------|
| Players | 96 blocks | 48 blocks | 64 blocks |
| Animals | 64 blocks | 48 blocks | 24 blocks |
| Monsters | 96 blocks | 64 blocks | 48 blocks |

| | | | |
|-------|-----------|-----------|-----------|
| Other | 64 blocks | 32 blocks | 32 blocks |
|-------|-----------|-----------|-----------|

Despawn Range

All mob types in all worlds have a soft despawn range of **32 blocks** and a hard despawn range of **72 blocks**.

The Wither

- The Wither will not drop a Nether Star when killed outside of the Arena, but can be spawned anywhere.

Shulkers

- Shulker colours can be changed with dyes.
- Shulkers spawned from shulker bullets will have a random colour.

Endermen

- Endermen can despawn while holding a block

Villagers

- Villagers follow players holding emerald blocks.
- Villagers outside of the entity activation range above are not ticked unless panicking.
- Villagers have a 50% chance of being infected by zombie villagers.

Spawn Variations

- Creepers have a 0.001% chance of spawning charged.
- Guardians have a 0.01% chance of spawning as an Elder Guardian.
- Horses have a 0.5% chance of spawning as a Zombie Horse.
- Rabbits have a 0.01% chance of spawning as Toast, and a 0.000001% chance of spawning as a killer rabbit.
- Wolves have a 10% chance of spawning hostile.
- Vindicators have a 1% chance of spawning as Johnny.

Other Settings

- Only 3 mobs can collide at the same time.
- Phantoms ignore insomniac players holding a torch.
- Hitting a chicken it will cause it to become hostile.
- Pumpkins can be added back to snow golems.
- Skeleton and zombie horses can swim.

- Parrots will not fall off players' shoulders when jumping or falling.
- The Ender dragon always drops full XP and a dragon egg.
- Mobs capable of picking up items can always do so.
- Wandering trader attempts to spawn twice as often with a higher base chance of success.
- Wardens will not drop a sculk catalyst upon their death.

Spawners

- Spawners can be disabled by powering them with redstone.
We strongly recommend using this for farms that are created for an on/off switch.

Blocks

Signs

[Colour codes](#) can be used on signs, just replace "\$" with "&".

Bee Nest / Beehive

- Right clicking on a Beehive will tell you how many bees are contained within.
- Picked up Beehives have additional lore showing the same information.

Other Settings

- Crying obsidian can be used in nether portals.
- Farmland cannot be trampled.

Items

- Holding shears while sprinting will cause damage.
- Eating glow berries will cause you to glow for five seconds.
- Holding a compass will show a boss bar indicating cardinal directions.

Effects

The duration of some effects inflicted by mobs have been reduced to their normal difficulty values:

- Bee Sting Poison: 18 -> **10** seconds
- Cave Spider Poison: 15 -> **7** seconds
- Wither Skull Wither II: 40 -> **10** seconds

Loot

- Lootable containers will replenish if empty
This will only occur when the container is empty and will happen once per player, at a random time after the previous loot.

XP

The amount of XP dropped upon death has been increased from default values. The exact XP drop amount is $\text{xp level} * \text{xp level} + (6 * \text{xp level})$, limited to a max of **5500**.

Mending

- Mending now prioritises the most damaged equipped item over anything else.
- Shift-right clicking will spend 10 XP to repair mending items.

Armor Stands

Armor Stands do not tick. This eliminates their server performance impact but also prevents them being affected by gravity.

Item frames

Item frames do not tick. This eliminates their server performance impact. This means that item frames can float indefinitely if the block behind them is broken.

Note that the impact on client performance remains unchanged, so use responsibly.

Invisible item frames

8 item frames + 1 lingering potion of invisibility (either type)



The resulting item frames will be invisible once an item is placed within them. Please use responsibly.

Glow invisible item frames

Existing Invisible item frame + Glow ink sac.



The resulting item will both be invisible and glow.

Item despawning

Most items exist in the world for **24 hours** in a loaded chunk, before despawning.

We have a junk list of items which despawn after **15 minutes**:

- Cobblestone
- Eggs
- Spider eyes
- Sweet berries
- Kelp
- Bones
- Cod (Uncooked)
- Wheat Seeds
- Arrows
- All types of saplings
- Flint
- Sticks
- Pumpkins
- Melon slices
- Sugar cane
- Bamboo
- Cactus
- Stone
- Granite
- Andesite

- Diroite
- Prismarine shards
- End stone
- Dirt
- String
- Gunpowder
- Ink sacs
- Glow ink sacs
- Netherrack

In addition Rotten Flesh will despawn after **5 minutes**, so you should use this if you have a redstone contraption that depends on vanilla despawn times.

PvP

PvP can be toggled by players with a plugin. See the [PvP documentation](#) for more details.

VanillaTweaks

The following VanillaTweaks datapacks are enabled on the server:

- **More Mob Heads:** Mobs will sometimes drop their head
- **[Wandering Trades](#):** Adds mini blocks to the Wandering Trader's trades
- **More Trapdoors:** 6 wood crafts 12 trapdoors, instead of 3
- **More Bark:** 4 logs now craft 4 bark blocks, instead of 3
- **Back to Blocks:** Stairs and slabs can be crafted back into full blocks
- **Craftable Gravel:** 4 flint can be crafted into a gravel block
- **Double Slabs:** 2 slabs can be crafted from a single block
- **More Bricks:** 4 clay bricks now crafts 4 bricks instead of 1
- **More Stairs:** 6 wood now crafts 8 stairs instead of 4
- **Craftable Coral Blocks 3x3:** 3x3 coral tubes/fans can be crafted into a coral block
- **Sandstone Dyeing:** Red dye and sandstone can be crafted into red sandstone
- **Unpackable Ice:** Packed/blue ice crafting can be reversed
- **Unpackable Nether Wart:** Nether wart block crafting can be reversed
- **Universal Dyeing:** Dyed blocks can be redyed, or undyed with ice (except wool and concrete)
- **Unpackable Wool:** Wool can be crafted into 4 string
- **Craftable Bundles:** Bundles can be crafted from rabbit hide
- **Rotten Flesh to Rabbit hide:** Rotten flesh can be smelted into rabbit hide

