Results and changes for 1.18 Stress Test

This is a summary of the changes we will be implementing for the RTGame Minecraft 1.18.2 Stress Test Video Game Gaming Server (8MB) (for PlayStation®2), following the feedback from the recent survey. 80 of you responded and your feedback is valued.

Some of the changes we are making here may be surprising, but we are willing to experiment with them due to unexpectedly strong support in the survey results. The Stress Test is after all the ideal time for experimentation and a subsequent survey will help us to determine if the changes should stay for the full 1.18 Survival Server. We would appreciate you keeping an open mind.

What is staying the same

Whilst some things are changing, many are staying the same. The below list of settings, mechanics and plugins all received strong support in the survey and will be returning unchanged in the 1.18 Stress Test Server.

- **Difficulty (70% supported)**
  The existing mix of hard base difficulty with normal elements will remain

- **Gamerules**
  - **doInsomnia enabled (64% supported)**
    Phantoms will continue to spawn

  - **forgiveDeadPlayers enabled (91% supported)**
    Angry mobs will forgive dead players

  - **universalAnger disabled (85% supported)**
    Angry mobs will only target the player who attacked them

  - **doImmediateRespawn disabled (89% supported)**
    You will need to click the respawn button to respawn

  - **doPatrolSpawning enabled (96% supported)**
    Pillager patrols will spawn as before

- **disableRaids disabled (85% supported)**
  Raids will remain a thing

- **keepInventory disabled (80% supported)**
  Inventory contents will still be dropped on death

- **doWeatherCycle enabled (100% supported)**
  Weather will continue to happen

- **Server settings**
  - **nerf-spawner-mobs disabled (84% supported)**
    Mobs spawned from spawners will continue to have AI.

  - **flat-bedrock enabled (93% supported)**
    Bedrock will once again generate as a flat layer.

  - **EndermenMoveBlocks enabled (78% supported)**
    Endermen will retain their block moving abilities.

  - **use-better-mending enabled (97% supported)**
    XP will continue to repair your most damaged mending enchanted equipment first.

  - **shift-right-click-repairs-mending enabled (95% supported)**
    Sneak-right-clicking will use some of your current XP to repair mending enchanted equipment, as before.

  - **break-individual-slabs-when-sneaking enabled (99% supported)**
    As in 1.17 Survival Server, breaking a double slab whilst sneaking will instead only break the targeted half.

  - **lootables.auto-replenish enabled (100% supported)**
    Lootable containers will retain their regeneration abilities for newly looting players.

  - **sign.allow-colors enabled (97% supported)**
    Using formatting codes to colour text on signs will remain possible.

  - **sign.right-click-edit enabled (100% supported)**
    The ability to edit signs by right clicking them with another sign will also be retained.

  - **chicken.retaliate true (78% supported)**
    Chickens will continue to attack players that have attacked them.

- **Sleeping (68% supported)**
  The length of the night will continue to vary based on the number of currently sleeping players. Due to performance issues with the plugin we were using for this in the 1.17

Survival Server, we have swapped it for a different solution in the 1.18 Stress Test Server. The overall mechanic should remain the same.

- **Item despawning (91% supported)**
  The existing custom item despawn times will remain. All non-junk items will despawn after 24 hours, and junk items after 15 minutes. Rotten flesh will also continue to despawn after 5 minutes.

- **World border wrapping (83% supported)**
  The famously robust and bug free wraparound world border will remain in place on any worlds that have a border.

- **Arena world (86% supported)**
  The arena world will be returning for the 1.18 Stress Test Server.

- **Amplified world (96% supported)**
  The amplified world is also returning for the 1.18 Stress Test Server.

- **Claims will never expire**
  Claims remain forever once created unless abandoned. Staff can still remove claims based on their own judgement upon request.
- **Some claim trust restrictions**
  Opening wooden doors (84% supported) and **Reading lecterns (92% supported)** will remain possible without trust in a claim. **Using ender pearls (68% supported)** will continue to require access trust.

- **Some Nether things**
  - **Nether roof travel allowed (95% supported)**
    Travelling via the Nether roof will remain possible

  - **Only trusted players can edit the directory (74% supported)**
    Trusted players will remain in charge of the Nether directories
- **All plugins and datapacks**
  All plugins and datapacks mentioned in the survey will be returning for the 1.18 Stress Test Server after receiving the support of over 80% of survey respondents.

What will be changing

Fire Spread will be enabled outside claims

We received surprisingly mixed feedback regarding fire spread, with only 33% of players wishing for fire spread and damage to remain disabled everywhere.

Option	Votes	Percentage

Fire never spreads or damages blocks (NO)	25	33.78%
Fire spreads everywhere, but does not damage claimed blocks (NOCDM)	10	13.51%
Fire spreads everywhere, but does not damage blocks (NODM)	4	5.41%
Fire spreads outside of claims, but does not damage blocks (WNODM)	12	16.22%
Fire spreads and damages blocks outside of claims (WYES)	14	18.92%
Fire spreads and damages blocks everywhere (YES)	5	6.76%
Other	4	5.41%

As you can see there is no clear winner, with over 60% of players wanting fire spread but not agreeing on how far to go. 3 of the 4 "other" responses also indicated support for fire spread. In the end we decided to experiment with enabling full fire spread and destruction outside of claims, which retains the utility of claims for protecting against fire as well as allowing for the more dynamic world desired by some of the above responses.

There is of course the risk that this does not go to plan, either resulting in excessive griefing or server performance issues due to ticking a bunch of fire. Naturally if this becomes a problem we will consider alternatives such as removing the block damage whilst retaining the spread, or disabling spread again. In any case we will of course not take kindly to people abusing this change to upset others.

Explosions will be enabled outside claims

Another surprise can be found in the responses for explosion damage. The most popular choice is to allow explosion damage above ground outside claims, rather than only underground as it is now.

Option	Votes	Percentage
Explosions only damage blocks outside claims, unless /claimexplosions is toggled for a claim (CLAIM)	33	44.59%

Explosions only damage blocks underground outside claims, unless /claimexplosions is toggled for a claim (CLOW)	20	27.03%
Explosions only damage blocks underground (LOW)	11	14.86%
Explosions never damage blocks (NO)	3	4.05%
Explosions damage blocks everywhere (YES)	4	5.41%
Other	3	4.05%

Whilst not quite a majority on its own, it is significantly higher than all other options, and becomes a slim majority when considering the 4 players voting for explosions everywhere. As a result we will be giving this a go in the Stress Test. As with fire if it proves problematic we can revert this change for the final 1.18 server.

PvP will be enabled on an opt-in basis

The PvP question presents more interesting results, with opt-in PvP not far behind the existing PvP approach and neither having a majority.

Option	Votes	Percentage
PvP possible only in designated areas/arenas or worlds (AREAS)	32	43.24%
No PvP at all (NO)	1	1.35%
PvP possible everywhere on an opt-in basis (OPTI)	27	36.49%
PvP possible everywhere on an opt-out basis (OPTO)	3	4.05%
PvP possible only outside of claims (WILD)	4	5.41%
PvP possible everywhere (YES)	4	5.41%
Other	3	4.05%

Based on the above we will be experimenting with an opt-in PvP system. This isn't guaranteed to make it in for the start of the Stress Test, but we would like to introduce it at some point to see how it goes.

Some actions will no longer require trust in claims

Based on the survey results we will be removing trust requirements for the below actions which previously required trust on the 1.17 Survival Server. As with all other changes we can revisit this at a later time if necessary.

- **Opening wooden trap doors (74% supported)**
- **Opening gates (66% supported)**
- **Trading with villagers (74% supported)**
- **Triggering raids (58% supported)**

Additional datapacks will be added

We received a few comments requesting bundles be obtainable on the 1.18 Survival Server. We will therefore be trying out the VanillaTweaks **Craftable Bundles (Rabbit Hide)** datapack on the 1.18 Stress Test Server, which as you may expect allows you to craft bundles with rabbit hide.

Separately to this we have also decided to add the **Rotten Flesh to ~~Leather~~ Rabbit Hide** datapack to allow smelting of rotten flesh to create rabbit hide and from there leather. You can then craft this leather into horse armour, and some other items of much lesser importance.

The /afk command will be removed

This is not strictly speaking related to the survey, but is nonetheless a change we feel needs to be made. The original purpose of the /afk command was to allow players to indicate their afkness to other players without having to wait for the afk timer to detect them. However we have noticed that players have started using this feature to avoid needing to sleep and in some cases to avoid taking damage. This is pretty clear abuse of the afk mechanism and isn't fair to the players who are playing the game as originally intended.

Because of this we will be removing the /afk command. The afk system will remain and players detected as afk will remain excluded from sleep calculations as before, but manual toggling will no longer be possible.

Nether claims will be removed

Whilst Nether claims did receive strong support in the survey, with 61% preferring them to stay and 31% having no preference, we are proceeding with their removal as they continue to pose additional challenges we do not have satisfactory solutions for.

The main issue with Nether claims is how they interact with Nether portals. If a player creates a portal in the Overworld which happens to correspond with the location of a claim in The Nether, a portal will be created within that claim and the incoming player will be unable to remove it. This could easily be seen as griefing by the claim owner and would induce extra moderation overhead for server staff.

Previously this issue has been avoided by disallowing claims within the area of The Nether corresponding with the overworld border, but this has its own problems when the size of the world border changes. The 1.17 Survial Server also suffered occasional issues with explosions not damaging blocks in the unclaimable area of The Nether, due to the large admin claim required in this area to prevent regular claims being created, which will often forget that /claimexplosions is enabled.

The other reason for removing Nether claims is that they simply weren't used much. In the entire lifetime of the 1.17 Survival Server there have been a total of 10 Nether claims, and some of these appear to be accidental or abandoned as they were not protecting anything notable.

Overall the maintenance burden of allowing Nether claims does not seem to be worthwhile when the feature has had so little use. We are however aware that certain farms may desire claims as a means of protection, so we will consider creating claims for these areas on a case by case basis.

Settlements will be allowed on the Nether directories

After receiving the support of 78% of survey responses, Settlements will be joining Towns, Farms and Points of Interest as an allowable directory listing.

The Nether Hub design is changing

We will be trying a smaller and simpler Nether Hub design this time round after reviewing the survey comments. Some players disliked the travel time from ice highway to portal in the 1.17 iteration of the Nether Hub, so the 1.18 Stress Test Nether Hub will use a roundabout design as shown below (materials not final).
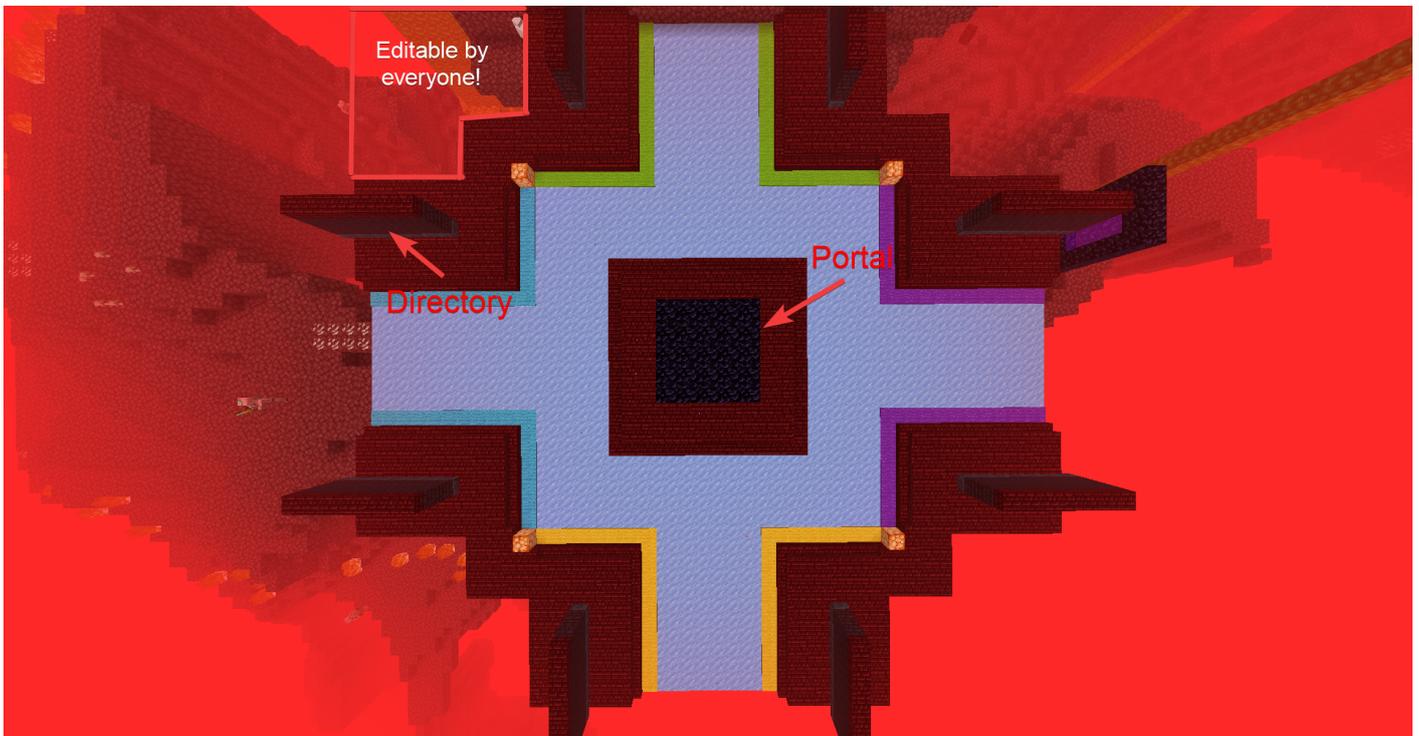
This design retains the ability to switch between highways without leaving your boat, but reduces the travel time between highway and portal by keeping them both on the same level.

In addition to this we have reduced the overall size of the Nether Hub to the bare minimum required for the portals, highways and directories. We have also implemented redirection of portals to the central nether hub portal, if they would have been created inside the nether hub area. This means the large overworld spawn area is no longer required, other than to protect the building itself and to provide space for future necessary structures. As a result we will be reducing the spawn size to 100x100 centered on the spawn point, **96% smaller** than the 1.17 Survival Server spawn.

Finally this iteration of the Nether Hub will not be square. The cut off corners you see above will not be protected and can be edited by all players. We hope this will inject a bit of the 1.13 Nether Hub sprit where players had a larger say in how the Nether Hub looked.

Anti-xray settings will be changed in The Nether

In response to the lag issues in the 1.17 Nether many players reported in the survey, we are adjusting our anti-xray approach for the 1.18 Stress Test. The main cause of lag in The Nether is the saturation of a player's connection due to large chunk packets being sent to them. The Nether's chunks are particularly large due to the anti-xray technique we are using, which inserts random ore blocks into the chunk to confuse xray clients and mods.

This randomisation is effective but also makes the chunks harder to compress and therefore larger. In The Nether this randomisation also covers a larger height range due to the spawning patterns of Ancient Debris, which can spawn as high as Y=119. The fact that players are often moving very quickly in The Nether due to using ice highways also adds to the bandwidth use as many chunks are sent in quick succession when the player travels through them.

For players on slower connections this can become a problem if their connection cannot keep up with the large chunks being sent to them. When this occurs other packets will be delayed, which means the player's actions may take longer to be acknowledged by the server. In extreme cases the "keep alive" packets which are frequently exchanged will also be delayed, causing the server or client to disconnect after assuming the other side is no longer there.

To alleviate this we are switching to a different anti-xray approach specifically in The Nether, which avoids randomising blocks and therefore vastly reduces chunk size. After testing this in the 1.17 Nether along the green ice highway we saw a 70% drop in bandwidth usage. Hopefully this will prove sufficient to improve The Nether experience for everyone.

Withers will be spawnable outside of the Arena but will not drop Nether Stars

We are relaxing some of the restrictions we implemented in the 1.17 server regarding Wither spawning. Whilst Nether Stars will remain obtainable only via Withers in the arena to avoid

cheesing, Withers will once again be spawnable in other dimensions to allow the creation of Wither Rose farms and for nametagging areas.

The Mall is being moved to the Overworld spawn

We received a range of comments mentioning how the 1.17 Mall world felt less used or more disconnected from the rest of the server than previous Mall iterations. Some suggested that the Mall return to the Nether, an option we discussed but couldn't find an acceptable solution for. As with Nether claims the main issue with a Nether mall is that Nether portals may be created within it causing unintentional griefing. Expanding the Overworld spawn to avoid this would be impractical due to Nether scaling making over 1000 blocks in all directions necessary for full protection.

As a middle ground we will be attempting an Overworld Spawn Mall in the 1.18 Stress Test, which will hopefully restore the community feel. The spawn area has also been simplified to reduce bandwidth usage to hopefully avoid losing the advantages a dedicated mall world had for those on slower connections.

Amplified portals will be added

We heard from players choosing to live in the Amplified world that they feel disconnected from the rest of the server, with no easy way to travel. To resolve this we have implemented Amplified portals. These portals work the same as vanilla Nether portals, but are built out of **basalt** instead of obsidian. Amplified portals can be used in both the Overworld and The Nether to take players to Amplified, and in Amplified itself to return players to the Overworld. Nether portals can be used in Amplified to reach The Nether. Coordinate scaling between Amplified and The Nether is the same as the Overworld (1:8). This also means that coordinates for the Overworld and Amplified are 1:1.
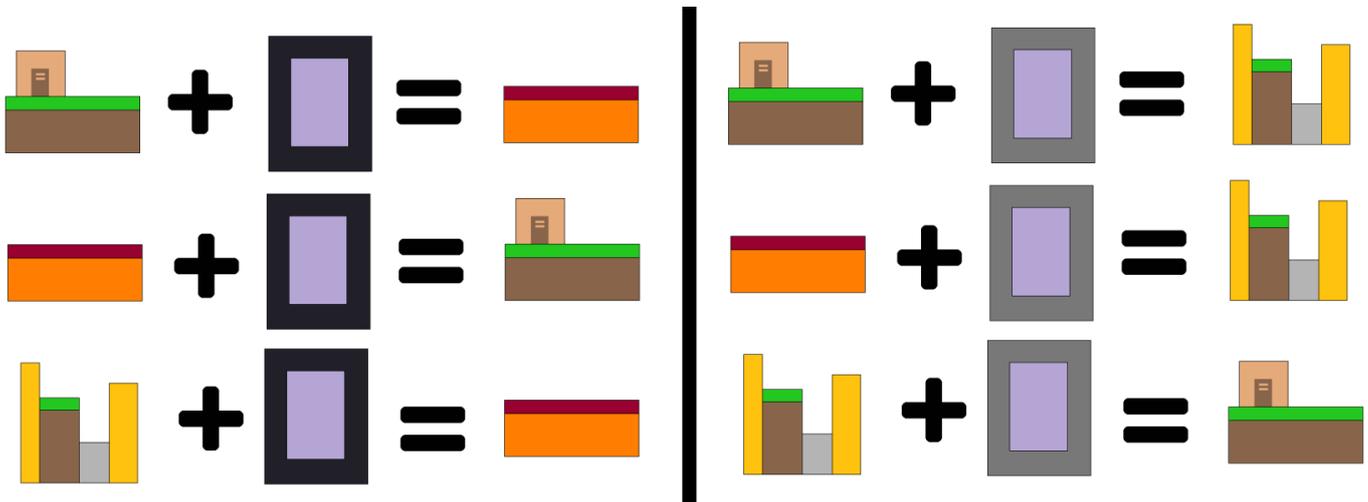
The claim block limit will be increased

We are aware that some of the above changes may prompt players to claim more of the things they choose to build. To aid with this we will be doubling the claim block limit from 20,000 blocks to **40,000**. The earn rate will remain the same at 200 blocks per active hour, meaning 200 hours will be required for the full allotment to be usable.

Additional claim blocks will be purchasable

In addition to the above higher block limit, we are also introducing the ability to purchase more claim blocks. An **additional 40,000** blocks will be available to each player for purchase, meaning a theoretical total of **80,000** blocks are available. The exact price is subject to change, but we are currently working with a cost of **1 diamond for 50 blocks**.

Some farm and block limitations will be removed

Finally, we are going to relax some of the farm and block restrictions we have previously had in place on the 1.17 Survival Server. The survey showed rather mixed results on the importance of performance vs creative freedom and the comments featured some passionate arguments for allowing additional freedom or finding a better balance.

For the Stress Test we will be doubling both the **Hopper** and **Piston** limits from 16 to **32** per chunk to see if performance remains acceptable. We will not rule out reducing it again if performance suffers too much, but we will also not rule out increasing it further if results are promising. A limit of some form will always remain in place however to avoid needing to clean up 880 hopper monstrosities that half the TPS when enabled.

Creeper and **Enderman** drops and XP will also be **restored to their vanilla amounts**, to reduce grinding. **Spawner based farms** will also have all their **block based restrictions removed.** We now accept that reducing drops and limiting these farms does not actually solve the problem of needing farms and just increases player frustration.

Despite the above we will however still maintain our position on Iron and Raid farms. We will continue to not allow raid farms due to the extreme amount and variety of items they provide via abuse of a mechanic that is supposed to be a challenge to the player. The fact that they make use of a demanding mob also does not help. Iron Golems will also still drop a reduced amount of iron due the Iron Golem's role as a protective mob which shouldn't be targeted, a stance Mojang themselves have taken in the past when breaking previous iron farms. In any case iron is everywhere in 1.18, you'll be fine.

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