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State public server proposal

By ATMmachine#9132

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Foreword

The state experiment is something which is great, it shows who we really can be, even though a lack of consequences can amplify that behaviour. But there is only limited participants in the official experiments, all of which are hand picked, that is why ish13c acted to begin development of a public server for the masses. As we now look at the thousands of people who have gathered interest, we must take hastier action to release a public state.

The following proposal will highlight ideas which have been talked about and make sense as well as giving a platform for a few of my thoughts to be considered, this streamlining of ideas should help make the state experiment public server come about faster.

Intent

State is originally a sociatal experiment where anything goes, and to prevent absolute chaos participants are hand picked to choose those who are of good will and wish to develop society and not turn to chaos. That is where the public server differs, players cannot be hand picked, therefore setting up state exactly as before becomes impossible due to multiple shortcomings. But there is still a way to filter players to have only those who will 'play by state' even if it isn't fully effective. This is where ish13c's idea of a 'public whitelist' comes into play.

Ish proposed that to prevent malicious players, that there would be a form of application process where you filled out a discord username and minecraft username, which then automatically adds the applicant to the server. The logic behind this idea was that only actual players would bother to apply, I think that this wouldn't deter those who hold any form of grudge, in fact this would more likely deter genuine players, but to quote Feyko#9105,

It just requires extra steps and effort, which should quell some of the more basic hackers, exploiters, but also legitimate players, who aren't mature enough to go through 2 minutes of giving a discord name and minecraft name, which are likely players who also wont be mature enough to act in good faith on the server anyway

which is entirely true. But either way, this is a thought to consider.

Another anti-malicious player scheme that Gilan#0395 thought of was to use what Hypixel is starting to do with competitive games, which is to blacklist anyone who doesn't have a cape, this would be effective somewhat, but what also disallow new players who have just purchased minecraft from joining, and people with malice can still join under alt accounts if those accounts had a cape, the solution to the new players was a ticket system which would work by verifying the unquity of the applicant. However this would likely hog staff resources, especially after all old accounts are migrated, as new players are likely to be non-migratory, tickets would also put off a large number of players from joining.

My suggestion was too have a form of 2FA, in which the player would join the server, probably a limbo server whilst it takes place, then they would be asked for their Discord Username, the server would then get a discord bot to DM a unique single use six digit code to that discord account, which the player would then have to type in before it

expires, say 15 minutes. A further security measure to this would be to have the bot check the age of the discord account and if it were under a day then to alert staff members. The discord side could also be performed (optionally) on Matrix instead of discord.

AvatarKris#3148 suggested flagging accounts which originated from the same IP, but this was quickly shot down due to siblings, libraries, schools, ISP's sharing IP's etc. Others expanded by mentioning anti-VPN and alt limiting, but overall i feel as if this would not be good for a server.

Zse#0001 (0*22) then mentioned it was possible to fingerprint minecraft installs and provided the example of <https://github.com/jonasstrehle/supercookie> I met this with mentioning that resource packs can be denied however it is possible in modern versions of the game to force the resource pack even more then it used to be able to be. But a resource pack for no reason would seem a bit suspicious and malicious players would figure it out eventually, so i add to this suggestion to incorporate actual resources into the texture pack, e.g. creating the pumpkin head overlay graphic to show a Waiting in queue sign (if there is a queue), and another NBT tag which changes it to a walk through of another suggestion such as my 2FA suggestion, this would be overall a good idea and make it seem like it has purpose.

That concludes the intent section which covers ways to prevent malicious behaviour from reaching the server.

Claims

Claims are the most disputed part of the public state experience, they aren't true to 'the state experience' but yet they are so neccassary to a thriving server, but we musn't make claims limiting otherwise we will become just another factions/towny server, this is why we should be designing and developing our own claims system carefully catered to state.

I will cover region and claiming ideas here.

To start us, we shall be covering the fixed region system, this system is commonly used in strategy games, and state is arguably a strategy game. This system would work by having a set predefined regions, likely of natural shape and following the landscape which a group would be able to claim.

Next up we have the CK3 System, suggested by Raven#0563 categorises land into forms of subdivisions from Empire, to Kingdom, to Duchy, to County, to Barony, --highest to lowest-- this system would likely operate with predefined regions too.

Triogami#0001 suggested this system:

- 1) Every player is given the ability to claim (4) chunks of land, they must all be connected.
- 2) There will be 4 levels of groups, each scaling with the player population of the group. Nations, Cities, Town and (Group), each level will have additional chunks to claim and each member will add their (4) chunks to the groups total, i.e. A nation has (50) chunks they can claim and every person will add their own (4) chunks.

- 3) **Conflict:** Each group, no matter the size will be required to have an attacking window, where they are venerable to being attacked. This window increases as the size/level of the group increases. All declarations of war for territory must be declared by an adjourning

group. For non-mutual warfare for territory/resources, the attacking group must first declare war (10) minutes beforehand, which will inform the defending group that an attack is imminent. When all the players have died or abandoned their land victory is achieved and all the territory goes to the winning faction. For mutual warfare, where both agree to go to war, there is no time limit for how long they each group is venerable, the war will be decided by either a peace treaty or surrender. When a group surrenders all land will go to the winners of the war after (5) minutes. There is a (24) hour cooldown until war can be declared again.

4) **Combining claims:** When a town decides to join a nation, this will be done by the players. (This is all subject to change but probably not) Or we have a system where towns are part of a nation, but have their own leader name still.

Which overall is possibly the best system.

According to sources, ish suggested chunk claims which is a simple system and I believe wouldn't give near enough flexibility for claiming and warring.

Feyko#9105 suggested to put claims to a national level instead of above regional level, this would be good except that large nations would easily be able to have rouges access significant areas of land for griefing purposes, this would incentivise as Triogami mentioned larger nations, but there would also need to be a reason for local administration he mentioned too. Feyko had earlier mentioned a way of internal borders which I think if this system were perfected it would be a viable option.

Seraphim_Here#6689's idea in their paper also has some viable options, Firstly the idea of power is mentioned which I myself don't think is a good idea but what I do think is a good idea is cost to form a state, cost to hold claim to land, and upkeep to said claims. But the way to 'collect' upkeep and also deciding what should be paid is complex, I myself expand upon their idea of a treasury to say that any chest named <State name> Treasury should act as a contributor toward a virtual tally of the treasury, of which the upkeep and cost of claims and states is drawn out of, but to form a treasury you need a state, but a state is formed via treasury so this creates a paradox which I would recommend solving by having personal treasuries which can be used to pay tax if the state has any. A point of claims becoming more expensive to uphold one some ratio is met is a good idea, as i am against power i would suggest (area*players)/claims to be a total cost of upholding a state. When upkeep is failed to be paid, the smallest, outermost territory is removed from the state's possessions.

There was also a KOTH style idea which operates exactly as but with fixed regions which the state with the most players in maintains ownership of that region.

Many more proposed systems exist and as i find them i shall add them, but claims is an exhaustive subject.

Minecraft Networking

Sharding has been confirmed and fully developed by now, but I still feel as if we will be limited to 800 players for our first couple months while we gather income to get more shards online, and so a queue is worthwhile to maintain. The complete server should have 3 servers + the sharding in my opinion.

The first server would act as a first join server, which would house a tutorial discussed shortly and any possible solutions from Intent which are approved for use on the public server.

The second server should house as a queue for when the main sharded server is full, this would run a limbo software.

The third server should be a form of purgatory where dead players can wait out their sentence doing parkour and socialising with other dead, this would help keep server player numbers up too as bungee/waterfall/velocity will show them in the player total too.

Tutorial

As quite a few people will not be familiar with how state runs, we will need a tutorial which will introduce people to state and how the public server operates. We discussed that we think it should have a calm narration available and shows cool graphics, further disguising any fingerprinting if that is chosen. Full coverage of this idea should be read at <https://discordapp.com/channels/881279559998267452/908561741712072765>