

Faction Warfare: Gaming the system

Introduction

This document is being published anonymously. If you can figure out who I am because I've already mentioned things described herein to you before, please keep it quiet. I'm definitely not out to wreck your game any more than I'm out to wreck mine, and it will all work out in the end. Much of this text will be seen as obvious by some. Please ignore that as well, as it is meant to enlighten as large an audience as possible about all the things that are evidently not obvious, and to make it self-contained I need to give a lecture on the whole thing pretty much from scratch. Anyway...

By now, everyone who has eyes and reads anything about Eve is aware of the infamous Goon exploit of the Amarr/Minmatar Faction Warfare payouts. To be specific, I will reiterate the points important for this document:

1. Through repeatedly selling and purchasing the same items over and over between themselves, the Goon Cabal have ensured that the average cross-Eve pricing of specific items nobody ever wanted (*I think Small Sentry Drone Damage Augmentor I was one of them*) is measured far above the price that would be expected from their actual negligible market value. This is the only part of the Cabal's scheme that actually constitutes an exploit as per CCP ruling, as instead of manipulating the real prices of items actually in supply and demand, social in their nature, they have manipulated an automated script, which didn't know any better than to count purchases and sales among a group of alts, which did little, if anything, to affect real supply and demand.
2. The average cross-Eve price obtained by the aforementioned script is used in the LP-for-kills formula, which allowed the Goons to repeatedly destroy ships fitted with and carrying said items, not otherwise in demand or active usage, as part of a Faction Warfare battle in a private setting, receiving disproportionate LP payouts for those kills.
3. Those LP payouts have been used in the Amarr/Minmatar faction warfare to continuously keep the Minmatar faction at high warzone control tier and acquire faction items at greatly reduced cost, making them an unknown (*but thought to be large*) number of trillions of isk.

What the Goon Cabal failed to mention or draw attention to, however, is that the same can still be achieved on a smaller, but nevertheless quite substantial scale, without involving a mechanics exploit, i.e. in a perfectly EULA-legal fashion, by suitable application of sufficient manpower, well within the capabilities of most sufficiently big nullsec alliances that currently exist.

The seemingly numerous extant faction warfare players are actually powerless to prevent it, because they are neither really numerous, nor sufficiently organised to mount a determined resistance on the required scale against a raid mounted in a specific fashion. It is in fact impossible to do so, as defensive manpower requirements far outstrip the manpower requirements of attacking. This makes stupid ISK faucet kind of profit possible, *(Well, LP faucet rather than ISK, which is an important distinction that is outside the scope of this document.)* on the scale well above Incursion profits, but with no significant upfront investment other than manpower and certain logistics. This document will describe the statistical proof of these statements and outline a plan to do this in the Caldari/Gallente warzone, which I'm most familiar with. Naturally, this can also be done in the Amarr/Minmatar warzone, but Caldari/Gallente warzone offers some small advantages that may nevertheless prove worthwhile.

It stands to reason that this scheme cannot be applied indefinitely, as eventually faction warfare mechanics will be changed to accommodate it, however, until this happens, the time window to execute this remains. Such a mechanics change will inevitably be hastened by an application of this plan, *(it is obvious it's needed already, CCP's simply dithering still, they're not sure why it's not producing the results they wanted while working as designed)* so it can only be expected to be done a couple of times before it all goes to hell. It is, therefore, in your interest to execute such an operation first.

We *(me and my corp, that is)* initially planned to use this document to present a plan for a suitable nullsec entity to enter Faction Warfare on our side. However, the clear success *(but more on that later)* of Nulli Secunda entry into Amarr FW makes it impractical to keep the obvious secret any further, and it is in our best interest that as many people know about this as possible. Maybe this way it'll get fixed sooner.

Faction Warfare mechanics

Let me summarise the basic mechanics of Faction Warfare first, in case you are not aware of them for some reason. Some of these may actually be news to you even if you're an active Faction Warfare participant:

1. Two sets of opposing militias (Caldari/Gallente and Amarr/Minmatar) are in a perpetual state of war, and can contain both corporations and alliances, as well as individuals. There are no restrictions on joining except the requirement of having a positive non-zero faction standing with the faction to be joined. There are no restrictions whatsoever on leaving at any moment. The war is identical to other official wars in nature, except that no payments are required to continue it, and members of each faction's militia are impeded from operating in enemy high sec by NPC navy, which gets progressively more annoying as the system's security status increases. That does not stop the raids into enemy high sec by enterprising pilots, though. It is always possible, and sometimes makes sense, to go around through enemy high sec to reach a destination within the warzone, just like it is always possible to go around through nullsec to get the same result.
2. Absolutely the only activity in faction warfare that deducts one's standings with the opposing faction is shooting enemy NPCs. Which is not at all required. Every other activity that results in a standing gain with one's own faction generates no derived losses. Podding enemy pilots results in a standing loss with the opposing Faction Warfare NPC corporation, but nothing beyond that.
3. Both factional conflicts, Caldari/Gallente and Amarr/Minmatar, have a defined warzone each, spanning across several regions. The Caldari/Gallente warzone contains 606 possible warzone control points in 101 designated lowsec systems, while the Amarr/Minmatar warzone is much smaller and contains 404 possible warzone control points.
4. Systems within warzone have a current owner, and upgrade levels. Owning a system grants one point towards warzone control level, upgrading an owned system grants a point for each upgrade level. Upgrades are performed by donating LP earned through other activities directly into a system's infrastructure hub. 100000 LP is required to bring a system up to fully upgrade state, and 50000 extra LP can be donated to produce a 'buffer', as upgrade levels are lost when enemy plexes the system. Systems owned by a faction deny docking rights to members of any enemy faction militia, but do not deny docking rights to neutrals. This has proven to be less of an impediment than it sounds.
5. Each system spawns military complexes, colloquially called "plexes", discoverable with the onboard ship scanner, which, when entered, show up on everyone's overview. When completed, they respawn about 30 minutes later, and multiple complexes typically exist in a system at any given time. Complexes come in three sizes: minor, medium and major, restricting the biggest ship size that can enter. Some of the majors are "unrestricted", allowing capital ships. Size restrictions are largely immaterial, as almost all offensive plexing can be performed in a sufficiently fast and sufficiently tanky frigate. It is worth noting that it is impossible to light a cyno either inside the plex itself or on grid with the gate.

6. Completing complexes in systems owned by the enemy gives loyalty points to the pilot(s) involved -- assuming no bonuses for higher warzone control tier, 10000 LP for a minor plex, 17500 LP for a medium plex, and 25000 LP for a major plex. Plexes require 10, 15 and 20 minutes to complete respectively, which involves staying within 10, 20 and 30km away from the structure in the center (*the "button"*) for the said time period, while in an un-cloaked ship that is not a pod. Enemy plexes are populated by hostile navy NPCs, but killing them is not required to complete the plex. (*Which is why a fast tanky frigate that doesn't even fit guns is the optimal method.*) It is possible to capture plexes in the system owned by a faction opposing the faction you're allied with (*i.e. you can complete plexes in Amarr owned FW systems while you're in Gallente Militia yourself*) which rewards you with LP for your own faction instead of the one that you captured a plex for.
7. Other minor source of LP is kills of enemy Faction Warfare players, which are compensated at a rate of 1 LP per 10k of the value of the kill as rated by Eve itself, minus the rated costs of the dropped loot.
8. Actually preventing plexing activity is notoriously hard, and requires dedicated tactics, extended cloaky camping, and lots of effort, since an interrupted plexer can just go plex somewhere else, and a wary and cautious plexer is nigh impossible to catch in a cost-effective manner -- the button is 60-70km away from the warpin point, allowing most frigs to warp out before they are pointed, if they missed the invader on scan in the first place. No organised anti-plexing fleets typically occur. Organised plexing with a detachment to guard the plexers is pretty much impossible to seriously disrupt, should anyone bother. None of the militias ever does this on any kind of significant scale.
9. Each plex completed will push the system control bar 0.6(6)% towards vulnerability status, regardless of size, giving 20 "victory points" towards the goal of 3000. Completing 150 plexes will therefore bring the system into a vulnerable state, wherein the infrastructure hub in it can be targeted and destroyed by members of it's opposing faction (*and nobody else, not even it's allies*) and the system will change hands after DT. A FW infrastructure hub has about 700 HP/s shield regeneration and about the same amount of HP as a POCO. A 10-man squad in 400+ DPS vessels can take a hub out in ~30 minutes, three dreadnoughts with a little support can do that in one siege cycle. Participating in a hub bash generates a bulk amount of LP shared equally between those involved. The exact amount is not known, but it appears to be on the scale of 30k-40k LP.
10. It is still possible to change the system's state from vulnerable back to contested all the time until the hub is finally bashed in, but typically, once a system is vulnerable, nobody bothers with it until the upgrade day (*see below*) when multiple systems are taken over at once. This is because the system, once vulnerable, can be plexed continuously and indefinitely, which will still produce LP for the attacking faction plexers and further impede any attempts to recover it -- the meter will not show numbers beyond 100%, but they will be the actual numbers taken into account when attempting to de-plex the system. It is not known how far will the actual number go beyond 100%, word on the street is it doesn't go above 200%.
11. The enemy can impede the capturing progress by running plexes in the system while they still own it - defensive plexing, or de-plexing for short. This will reduce the capture status of the system, but since the activity does not reward the player directly in any way

except with a standings gain, it is not popular, and is typically only done for kills, or by a system's long term residents. In fact, doing it does not impede the capability of the enemy to earn LP while plexing that system.

12. The exact mechanics of plex spawning are not currently known. However, through observation it is clear that it is impossible to capture an individual system faster than in about two days, due to restrictions on the plex spawning rates. This is largely immaterial as long as plexing is continued, since capturing systems once they're vulnerable is best done in bulk anyway.
13. Warzone control points count towards warzone control tier levels. Each increase of warzone control tier by one halves the ISK and LP prices from the previous one (*number of other required items remains unaffected*) of all items in Faction Warfare LP stores, from the worst prices at T1 to the best prices at T5. T3 prices are the same as prices in all the other of the faction's LP stores, but with the LP amounts typically gained from plexing, they become a much more plentiful source of faction items than other LP stores of that faction. While at T5, faction items become four times cheaper than in all other of the faction's LP stores and the worth of LP accumulated to this date multiplies.
14. Plexing in enemy systems that are currently upgraded drains LP invested into their upgrades at a rate of 1 LP lost for every 2 LP earned while plexing it. To slow this process down, each system can be upgraded slightly beyond maximum to provide a buffer of LP. This necessitates upgrading and cashing out operations to be organised so as to minimise enemy interference.
15. A consensus strategy has evolved, when every faction puts off actually capturing the systems by hub bashing and upgrading systems until one day of the month, selected to be the 'upgrade day' by general consensus of active militia members. There is no true agreement on how often or when the upgrade days have to happen, but a significant LP investment into upgrades by socially influential militia members triggers an avalanche effect anyway, as the entire faction sees a chance to cash out at high tier. Shortly before this day, as many hubs are bashed as possible, and on this day itself, every system upgrade level is maxed out, which produces a high tier that can be used to cash out the rest of the LP.

You'd think this is a sensible, if boring, system, which can't really be gamed, as attempting a large-scale intervention into Faction Warfare will be met with opposition of existing participants, who will nullify the results in a real, shooting war.

Well, not really, they actually can't do much. Surprisingly, the reason for this is numbers, even though all factions supposedly have numbers enough to rival even the biggest nullsec alliances.

Mathematics of warzone control

The following are the required minimal numbers of controlled systems and LP to reach every single warzone control tier level in the Caldari/Gallente warzone:

- T1:** 0 points (*less than 21 systems, no upgrades required.*)
- T2:** 122 points (*21+ systems, 2`100`000 LP to max/3`150`000 LP to buffer*)
- T3:** 244 points (*41+ systems, 4`100`000 LP to max/6`150`000 LP to buffer*)
- T4:** 364 points (*61+ systems, 6`100`000 LP to max/9`150`000 LP to buffer*)
- T5:** 486 points (*81+ systems, 8`100`000 LP to max/12`150`000 LP to buffer*)

The sum required to upgrade and buffer all the systems in the warzone, assuming you control them all, is 15`150`000 LP.

While CCP publishes, through the Eve API, certain statistics of factional warfare activities, including some public statistics regarding individual plexing, these are given without regard to where the plexing occurred or even which faction the plexer belongs to, being expressed in Victory Points. VP have no direct relation to LP earned, or warzone control status actually achieved, since plexing can occur in systems owned by enemy's allies and in systems already vulnerable, and other sources of LP exist beyond those listed. Defensive plexing also produces Victory Points, while it does not produce any kind of LP gains, which further complicates analysis. This is probably why, until now, no such analysis as this has been published by anyone to my knowledge.

Despite this, given enough kicking, manual lookups and calculations, certain things can be computed based on the data available. The following summarises a typical week of plexing for the Caldari/Amarr factions, (*before Nulli entry into FW*) from here on called collectively 'squids' (from Cal-amarr-ri):

- Total amount of Victory Points gained in a week: 177669.
- Total number of plexers in either Caldari or Amarr factions who made it into the top 100 plexers list for the entire conflict for this week: 61. (*The other 39 are obviously Gallente and Minmatar.*)
- Top ten squid plexers are responsible for **11.11%** of the total squid plexing.
- All squid members of top 100 plexers list are responsible for **37.28%** of the total squid plexing.

These numbers fluctuate slightly according to weekday, phase of the moon and general player activity cycles, including upgrade day cycles (*Right before the squid upgrade day on the 20th of July, the total activity went up a few percent. Immediately after the Gallente upgrade day, squid plexing also goes up as there are now more systems to plex and an impetus to do so*) but the overall scales remained constant throughout the entire observation period. For capturing one offensive plex, regardless of its size, 20 victory points are earned. Some of the warzone control gains obtained thereby are negated by deplexing, but that is actually immaterial for the purposes of this discussion.

The distribution of plexes is about equal -- at any given time, most continually plexed systems will contain a major, a medium and a minor plex, meaning that on average, about 15 minutes are required to earn 20 victory points. That's actually the minimum, because we don't know how

much of the VP earned per faction are awarded for defensive plexing, which actually produces more victory points per plex depending on other factors, or offensive plexing for allied militias, which actually produces no victory points. (*In the particular case under review, it is obvious Amarr have little to no need to plex Gallente systems when there's more than enough Minmatar systems, so their number is negligible.*) Accounting also for the time spent evading attackers and searching for a new plex to capture, we can estimate that one VP is equivalent, roughly, to about 1 minute worth of plexing activity. A spherical plexer in a vacuum who is plexing 23/7 from bootup to shutdown will accumulate on average about 1400 victory points in a day, depending on luck, persistence and interruptions, and cannot possibly accumulate more than 2850 victory points per day in absolutely perfect and unattainable conditions.

Knowing that, we can conclude that the entire Caldari and Amarr factions combined are actually equivalent to *no more than 19 such constantly operating virtual plexer-days*. I.e., at any given moment, no more than 19 people will be plexing, on average, among the entire 14945 member pilots of the squid factions at the time under review, dispersed around both warzones.

I remind you that the above estimates are the minimum numbers of VP one might earn while plexing, so the actual number of spherical plexers in a vacuum present at any given time will be even smaller than that. Much less than you would expect, considering how lucrative plexing can be even for an average player with limited gaming time -- not only there's very little plexing done *at all*, compared to the number of pilots signed up for it, or even actually online at any given time, (*Militia channels peak at around 400 characters online on peak time on the weekends, with the daily average fluctuating around 100-150 characters.*) very few people bother to do it in any kind of significant amounts or consistently. Should we assume every single member of the squid factions actually plexes, each of them dedicates at most two minutes to the activity daily. Since it is impossible to plex in quanta of less than 10 minutes while still producing any kind of recordable results, it is quite clear that most don't do this at all, *ever*.

That is, it stands to reason that most people try plexing at one point or another, and probably, everyone completes at least one plex in their entire Faction Warfare career, but comparatively few people ever do it a second time. Only scant hundreds complete more than two or three plexes per month, and of them, even fewer are in any way serious or regular about plexing. The top 100 list doesn't stay constant either, as people rapidly appear in it after short plexing binges and drop off it in a week. From the victory points totals and the way people drop off the list and new names come up on it, it can be estimated that most people who engage in dedicated plexing activities stop after having accumulated at most 2-3 million LP.

This conclusion is further supported by observing the top ten -- the top squid plexer in the top 100 list under review, one "you ido", (*not a character with a high amount of skill points by any margin, by the way*) accumulated a grand total of 3316 victory points in the entire week under review, i.e. was plexing for no more than 8 hours every day for a week. The runners-up plexed for no more than 7 and 5 hours per day respectively during the same week, and everyone else in the list similarly obeys the power law, progressively earning less and less victory points as they go down from the top ten. People dedicating substantial amounts of time towards plexing activities are extremely rare in nature, and introducing even small amounts of such people can very substantially affect the global warzone control picture, providing on the scale of 1% of the total plexing amount for both allied factions each - or 2% of the entire plexing output for their own faction, we just can't tell.

There is little doubt, therefore, that the actual number of active Faction Warfare participants is miniscule when compared to the official membership statistics. **Any well-organised entity that can field a number of plexers equivalent to ~50 abstract plexer-days for sufficiently long can completely *win* the faction war in very short order for their chosen faction, and profit immensely from it.**

No effective methods exist to prevent plexing on a large scale. Plexing can only really be countered by more plexing, or by camping the system shut and defending it earnestly throughout the day -- which people consistently avoid everywhere except their homes. The manpower required to defend a system exceeds the manpower required to conquer it by an order of magnitude. The only reason this has not yet lead to flash-fire conquests is because nobody has been willing or capable of fielding sufficient organised plexing manpower.

The profits of Faction Warfare

One person dedicating one day in a week solely to plexing activity and spending 8 hours at it during this day, leaving ample amount of time for sleep, food and other daily pursuits, will inevitably end up in Eve-wide top 100 plexers for the entire week. At most 100 people doing that once each (!) together in one day would collectively match the entire squid plexing output for the whole week. They would, admittedly, be bored stiff soon, but they wouldn't have to do this for very long before they can reap the profits. For one such binge, they would collectively earn on the scale of 32 million LP, assuming really generous delays to find new plexes to run, i.e. 15 minutes to earn 10k LP. Actual per-minute LP earnings will be higher.

This amount of LP would be sufficient to upgrade the entire warzone to Tier 5, should sufficient systems be controlled at the time, and still produce 247 billion ISK worth of faction battleships from the remaining LP. *(or 440+ blueprints, to be built at your leisure and easily transportable)* That's on the scale of **300 million ISK/hr**. That's actually a minimum -- notice that the 15 million LP required to upgrade the entirety of the warzone to T5 would only be deducted from the amassed sum of LP once upon cashing out. Certain items at T5 actually offer a potential profit of up to 30000 ISK/LP, bringing the maximum possible hourly rates as far up as **1.8 billion ISK/hr** - naturally, in practice such extremes will be unattainable, but even the minimum is one of the highest hourly ISK rates in the game.

Since to capture the entirety of Caldari/Gallente warzone systems from zero would require about 15150 plex captures, *(a situation that would normally never occur, since so far no total control has been observed with any faction since Inferno)* at most 6 repetitions of that day would be required to completely subjugate the warzone start to finish, should this goal be set. Cashing out the LP earned by 6 days of such activity, which can be performed regardless of whether there's still warzone systems to capture or not, since vulnerable system can be plexed indefinitely, would net something on the scale of **3.2 trillion ISK** if it is done all at once -- most of it not in ISK as such, but in hard to obtain valuable items, which may be otherwise useful. *(Trying to purchase equivalent numbers of faction items from the market using another source of income would produce an immediate jump in prices, making it far more costly to do.)* For comparison, Goonswarm's technetium moon income is listed in their public reports at about **~750 billion a month**.

This is quite a chunk of wealth and resources for relatively little easy *(if boring)* work, and certainly within the manpower capabilities of any sufficiently strong nullsec alliance. By delaying the capture of vulnerable systems, as much LP can be accumulated as desired, strangling the enemy faction of income at the same time, since it cannot plex, if all the systems ostensibly belong to it, but are vulnerable. It all ends in one day long spree of infrastructure hub bashing that results in a windfall, as all the captured systems are upgraded and the remaining accumulated LP are cashed out.

Notice, also, that LP payout for kills formula has not actually changed when the Goon Cabal scheme has been revealed. The only thing that did change was that the average price computation script is now directly observed by the CCP for signs of price manipulation. It is still EULA-legal to destroy a freighter full of minerals or other items, like the Goon Cabal initially did for their experiments, transmuting large amounts of expensive but low-demand items into LP if so desired. Doing that can accumulate huge amounts of LP, which will suddenly increase in worth as T5 warzone control is reached, and can be profitable on it's own, though probably less

radically than large scale plexing itself.

There's obviously some kills and goodfights in this too, not to mention the epic tears potential -
- there are hardly any opportunities to grief thousands of people at once or crash markets at will
anymore, unless you're Goons.

Further mathematics

Since this document has been started, Nulli Secunda attempted entry into Faction Warfare on the side of Amarr. During the time they have been at it, Amarr have consistently outplexed all other factions combined by a small margin, and the total number of victory points earned by squid plexers has tripled, up to a typical level of 550000 VP per week, or ~80k VP daily. Amarr plexers, most of them Nulli, have largely displaced everyone else from the top 100 plexers list, bringing the lowest required amount of plexing to get in to 1200 (~20 hours a week). The top plexers in the list, nevertheless, don't plex for more than 8 hours a day.

While the plexing output curve has substantially evened out, top ten squid plexers are still responsible for ~5% of all total plexing output, while all the squid plexers that are members of top 100 currently account for ~25%. This is quite massive, but still not the amount of effort I have expected a nullsec alliance to put in *consistently*. It was nevertheless mostly sufficient, as it was enough to conquer 40+ systems in two weeks, largely confirming the above findings.

While Minmatar bloggers celebrate as a victory the fact that Nulli Secunda failed to reach T5, and due to the pendulum effects (*they can't defend the systems they have flipped for the same reason Minmatar cannot, so now Minmatar gets to decide when they flip them back, and can block Nulli's second attempt at a cashout by doing so*) won't be able to for a while yet, they should also remember that the patch day has put a large wrench in the works, costing Nulli at least 20% of their expected plexing output for that day, and possibly quite a bit more -- maybe even enough to capture the remaining systems required for T5. It also should be mentioned that Nulli Secunda appears to have suffered from numerous setbacks which are determined by the geography of Amarr/Matar warzone (*which contains easily campable chokepoints, while Caldari/Gallente warzone is topologically more like three intersecting rings*) and could also have been caused by the apparent lack of a clearly spelled out manual for it's troops, which someone planning such an operation should not leave to the players themselves.

They could do much better if they treated it less like a war they have experience with, and more like a raid, and planned it in greater detail. So can you, and I will hereby provide you with some useful pointers. Take this with as many grains of salt as you care.

Strategy

General concepts

Provided sufficient numbers of pilots can be deployed and will devote sufficient amounts of time to plexing and guard duty, the entire operation can be completed in a week, at most, two, producing a rapid invasion-upgrade-cashout cycle, wherein sufficient number of systems are first brought to vulnerable state over the course of a week or two, then rapidly captured and upgraded. If this is done sufficiently quietly, you can get really far ahead in the plan before anyone even notices what's going on and attempts to stop you. This cycle can even be repeated with the allied faction later if so desired. Announcing you're joining FW across the whole New Eden is certainly a bad move.

The most important strategic notions in such an operation are twofold:

1. Kills actually do nothing whatsoever for warzone control, do not really get the enemy out of your hair due to much higher permeability of lowsec gates as compared to nullsec, (*no bubbles*) and only bring comparatively small amounts of LP. Open confrontation in large fleet battles serves no purpose whatsoever here, and is therefore best avoided simply to cut costs and reduce the attention of other uninvolved parties.
2. Very little force will actually be required to protect the plexers individually, since it only makes strategic sense to protect them from solo attackers and small gangs. A sufficiently big guard force will instead invite a roaming blob looking for kills. Should the militia be capable of mustering a really big fleet, let alone a capfleet -- which they very rarely actually do -- it can only stop you from plexing where it currently is, and will inevitably need to disperse if it is to prevent your activity in a wider area. Then it isn't so large anymore.

Therefore, the success of this operation will not be decided by a big fleet battle, nor by a number of big fleet battles, but by coordinated operations of numerous small squads. Total control over the warzone is actually not required to attain the goals of this plan. Home systems of significant enemy militia groups, which they will fight seriously for, can simply be left alone, while still capturing sufficient systems to attain T5 all around them. (*This is actually easier in Caldari/Gallente warzone than it is in Amarr/Minmatar warzone, simply due to there being more systems to play around in.*)

Faction Warfare combat is dominated by sub-battleship sized vessels and small to mid-sized corporations, which are constantly in skirmishes with local pirates of various skill levels. While there are quite a few high-SP experienced solo and small gang pilots, they're typically in it for the solo or small gang pew per se, and do not concern themselves with warzone control strategy beyond their home systems. (*Many of them are actually nullsec alliance retirees or straight alts.*) Assorted militia corps, while notionally allied, and commonly involved in joint operations, are at times feuding amongst themselves, riddled with spies, and they do not trust each other a whole lot. The most numerous NPC corp militia members are the least trusted for obvious reasons. Some of the above entities reportedly do come with batphones, which are not commonly engaged. A fleet of 40 people with a few battleships in it is called a big blob, and solo battlecruisers die to 10-strong gangs (*or smaller*) of cheap frigates and destroyers. Usage of

capitals is quite uncommon, though obviously not unheard of, and is most often seen during hub bashing operations -- otherwise capitals are kept off the field in almost all cases.

In short, the entire area is populated by entities busy fishing around for a small gang or solo fight. While they are capable of pulling in greater forces should a chance for one materialise, it typically takes hours. However, there is absolutely no reason to give them such a fight, as none of these entities is up for a massive campaign of stopping a determined farming operation, nor is capable of mounting a decisive farming counter-operation themselves. The whole business is like a group of hunters trying to catch rabbits in a field of wheat, where they can't see them for further away than a few steps -- even though some losses among the rabbits are inevitable, hunters won't be able to stop them from eventually eating the entire field no matter what they do.

Phase 1: Plexing

The goal of the operation during this phase is to get as much LP as possible while rendering as many enemy systems vulnerable as possible, ending this phase when the total number of vulnerable systems minus all the systems your side currently has vulnerable reaches 81, with a few systems worth of buffer. The process itself should provide enough LP to make the cashout worthwhile, but can and should be supplemented by plexing systems beyond vulnerable state.

Deploying a large capfleet to the warzone is therefore not at all required and would probably be detrimental, though a few support carriers can come in useful, and during the hub bashing phase, several dreadnaughts can be of use -- but neither are actually essential. It can even be argued that cloaked Orcas will come in more useful as mobile resupply/repair and reshipping platforms than carriers, since this will cut down on fuel costs and potential losses while achieving mostly the same effect. (*Off grid fleet boosts do little to make plexing activities easier either.*) Supplying sufficient amounts of cheap T1 frigates and fittings will be enough to sustain the plexing activities themselves, supplying heavier or better ships for guard duty will be enough to protect the plexers from all but the most determined attackers and ensure an uninterrupted flow of LP.

Multiple station systems will need to be selected as bases of operations and adequately stocked with supplies required for the operation of small gangs. At the start of the operation they need to be owned by the chosen faction, and during it they will be the only systems that will actually require defensive plexing in them, so as to avoid the loss of docking rights. Alternatively, a POS or several can be set up, and the whole issue of defending will be avoided entirely, but POSes are obviously more vulnerable to random harassment, and typically will involve knocking out someone else's POS first.

It is optimal to plex as many different systems at once as possible - at any given time, more than a hundred plexes will normally be available to capture across the warzone. Each plexing squad should consist of at least 3 dedicated plexers in specially fit speedtanking frigates, and whichever amount of guards is deemed necessary - typically, a gang of 2 combat fit vessels camping the plex gates in the system while the plexers work will deter most solo or duo attackers, and prevent the plexers from being interrupted. Should a bigger fight come their way, they don't really need to hold the ground for longer than the plexers need to complete the plexes they are currently occupied with, (*if at all -- whatever enemy comes is normally not interested in ground*) and can (*and should*) simply evacuate the system. Whenever possible, plexers should be provided an opportunity to swap with their guards to prevent player burnout. Intel networks quickly and efficiently reporting the passage of roaming enemy fleets will be important.

It is optimal to complete all plexes available in the same system before moving on to the next one, but once a plexer is interrupted and leaves the plex, the timer simply stops, and can be returned to when the enemy gets bored and leaves. Typically, whoever chased a plexer out will not stick around to run the timer to its completion and close the plex.

Phase 2: Hub bashing

The optimal way to do it is to get the whole hub bashing and cashout as fast as possible to prevent interference. The systems only actually change ownership during downtime, so hubs are best bashed a few hours before downtime, and system upgrade operations need to be started immediately after the downtime, which may or may not be possible. Once the hub is bashed in, it is typically impossible to make the system vulnerable for at least a day, which gives you some time to play with.

A militia typically has problems assembling enough people for a boring activity like this, so has at most one hub bashing fleet out during the pre-upgrade-day rush, that runs well into USTZ night. When that phase comes, you should have several fleets ready instead, assign every fleet a specific zone of operations, and ensure reserves are available to call upon in case any of the fleets meets significant opposition. Each fleet will need several dreadnoughts and enough support vessels to ensure their safety.

Phase 3: Upgrade and cashout

The actual amount of LP required to upgrade the entire warzone is small, compared to the number of LP your alliance has earned by that point. The challenge is getting it there in an organised fashion, doing it quickly, and coming back to a station where the LP can be cashed out quickly. It is best to determine well beforehand who will be in charge of donating LP where, and how they will motivate their people to do that. It may, in fact, be wise to simply invest ISK to procure appropriate sums of LP in trusted alliance characters by ganking alts in haulers full of minerals, as described in the beginning of this document. All the component items required to take advantage of the LP store offers chosen must be stocked in the planned cashout stations well before this phase. This is also a responsibility that mechanically falls to the individuals who have been plexing, so it is best if corporation directors can take care of directing which LP offers are to be taken advantage of and stocking up appropriate components in corporation hangars.

While upgrading a system requires little beyond actually flying up to the infrastructure hub and opening an upgrade window, the process does not typically go without a hitch, as enterprising enemy FW members and local pirates will be out next to hubs and in gates along the way in smartbombing battleships, fastlocking arty Thrashers and Tornados, and other vessels designed to quickly take out light craft, typically solo. It is therefore best if upgrading is done in groups capable of taking such opposition on and centrally coordinated.

Once the upgrade is complete, you have only a few hours to finish cashing out before the enemy plexers will, through natural plexing, bring the tier one level down. Many of the more lucrative items, like racial datacores, involve a lot of clicking to acquire and make it a painful activity impossible to EULA-legally automate, so it will take a while. As many plexing members of your alliance need to be online and ready at the moment the upgrade starts as possible, as recovering the lost tier level will incur extra effort and extra LP costs, while they will inevitably have other things to do. Market intervention with items thus acquired is also best centralised, as otherwise continual undercutting costs your alliance members time and ISK and produces

internal strife.

Other considerations

One extra squad will be required - a corporation of 20-30 moderately active members (*preferably with dreads*) will need to join the *opposing* side of the Faction Warfare. Their role is, amusingly, to bash infrastructure hubs of your own faction that the enemy has put into vulnerable state. While the enemy faction at large is saving them for the upgrade day, your fifth column bashing them in will allow you to plex them again, which is actually far easier and more useful than defending them. This service will not be required more than a few times, but will be invaluable for achieving T5. In between these assignments they can be used to provide intel on enemy militia activities, awoxing and other harassment tactics.

Tactics

Plexing tactics

There's [quite enough written on the subject already](#), in multiple sources even. I will just quickly reiterate the most important points and add a few more tidbits:

1. Almost all plexes of all races can be completed in a sufficiently fast and sufficiently tanky frigate. "Sufficiently fast" means at least 1000m/s on AB, "sufficiently tanky" means ~150 DPS permanent active tank of the opposing race's damage profile. That is enough to survive all plexes except unrestricted, which may need higher speed or better tank. Plexes smaller than Major can be survived at much lower tank levels, and minors can probably be completed in a buffed rookie ship. Incursus, Merlin, Punisher, various combat interceptors have all been seen in the field, and with the current buff to attack frigates, some of them may end up viable candidates if you take the time to experiment. Caldari plexes are a bit more damaging, due to missile damage only depending on your actual speed, but it's hardly a problem.
2. Right choice of orbit matters, the best orbit is one that is just inside the button's capture range. This prevents NPCs from clumping together and ensures a more even spread of DPS while orbiting.
3. When plexing solo, a dscan range of 50000 km ensures adequate warning of anyone appearing on the gate and doing it often enough when a war target is in system is sufficient to never lose a ship to a war target. The actual gate is 100000 km from plex entrance beacon.

Plexing support tactics

Most opponents you'll face when guarding your alliance's plexers are not looking to actually prevent plexing, they're looking for a killmail or a fight. It is completely in your power to prevent them from getting either, but it is in your best interest to avoid sufficiently big fights, while winning the sufficiently small ones to keep up appearances, improve plexing rates and your killboard scores.

As such, the best vessel for plexing support is a T1 cruiser fitted for anti-frigate duty. If your plexing partner is in a minor plex, you will not be able to enter it, so you will have to take position on the plex gate, prevent any suitably small opponent from entering and run from any sufficiently big one which won't be able to go in. Otherwise, your best position is to sit on the warpin point inside the plex, not touching the NPCs, which gives you extra time to decide whether to engage or not.

How to fix the whole thing

I wouldn't be me if I didn't post this with an idea how it can be stopped from being so totally ridiculous. The whole mess can be fixed in about an hour without changing pretty much anything.

Step 1: Remove the ability to donate LP directly into infrastructure hubs. Completely.

Step 2: Make defensive plexing give LP directly towards infrastructure hub upgrades. The LP reward should be the same as for offensive plexing, but should not end up in the plexer's pockets at any stage.

Step 3: Increase the amount of LP required for full system upgrade from it's current 150k to 500k or higher. (25% of the total victory points required to capture it or more)

Step 4: Increase the amount of LP removed from system upgrades when offensive plexing to 1:1 for LP earned when offensive plexing from the current 2:1.

There's a lot more that can be done to make things better, but these four things are enough to *fix* the situation, as in, make it less than totally silly by striking at the root of the problem -- they make the upgrade day strategy impossible and ensure that defensive plexing is the only way to upgrade a system, so every encounter inside a plex is much more likely to lead to an honest fight. I could spell out why exactly do I think this would work well, in excruciating detail, but since there is pretty much zero chance anything of the sort will be done, I'd rather spend the time writing something else. :)