To start with... yes... this posting is driven by an ongoing closed beta that I consider myself fortunate to be involved with. However, since the game is still very much under NDA, I am afraid that I will have to refer to other games in the course of writing this blog post.

The question put forward is this: What part of Beta is not understood?

In traditional software development a Beta is the first build, or compilation, of a program that works as it is supposed to without external modification. For example, compiling a program to model a 3D cube on the monitor. The beta would be when the program can be launched in the Operating System and produce a viewable cube. Beta software is expected to be both feature incomplete or just incomplete in general, and slow.

Over the past several years the term Beta has been abused in the software world. Rather than applying to software that only recently just compiled without errors, Beta software has come to mean fully functional software. There are, I feel, two strong examples of software that is feature complete, but is still listed as Beta.

The first of course, is Google. Google is well known for slapping the Beta tag on just about all of their software. However, millions of people use the Beta software from Google and have come to expect that the software is well written, feature complete, and fast. A good example is Google's Gmail. When Gmail launched into Google's idea of Beta, it was already a feature complete web mail client. Technically, when Google first opened up Gmail in the viral method of inviting new users, the software was no longer Beta. It was finished.

Google's reason for leaving a lot of their software in the Beta state is legal. If anything goes wrong in a beta, such as the mail servers crashing and a user loosing all of their email, Google has an extended amount of protection from lawsuits, civil penalties, or criminal penalties, as the software listed as Beta, and therefor not complete. Additionally, there was the extended legal position that Google did not own the Gmail trademark in all markets. By listing the Gmail software as Beta, Google left themselves an escape route if any of the existing Gmail trademark holders stepped forth. All Google had to do was claim Gmail was a Beta product, it was not complete, and no Gmail would not be the final name. End of problem, and the trademark holders are effectively neutralized.

Google is not the only developer or vendor to use the Beta status as a legal shield. <u>Gaim/Pidgin</u> left their multi-protocol chat program in the beta for collective years as the developers worked out trademark problems with AOL. Millions of Linux and Windows users downloaded, installed, and ran the Gaim betas without issue. The software was hardly beta at all. The situation in regards to Gaim's beta status was so ludicrous that developer <u>Luke Schierer commented on the abuse of beta on April 30th 2007.</u> Luke stated this: *We released beta7 last night. I think Sean scared people off by saying that this is the first of the betas to actually be of "beta" quality.*

The examples can go on and on of software that is fully functional, yet is listed as Beta... even though the software is not Beta at all.

So... what happens... when you take a legendary old school developer... like say... Richard Garriott... who has a new game coming up... What exactly would happen when that game is put under Beta?

Yeah... that's where this is going.

For the sake of argument, lets accept that there is a general expectation from current computer users that Beta software is fully functional, is fast, and is well written. Aside from the specific legal shelter examples seen from Google and the Pidgin developers, why would a publisher or developer bother having a Beta release of their product to begin with? The fact that there is a Beta indicates that the program is not yet complete. This line of logic is not capable of stopping some brain dead assumptions from users of the software. In the specific examples of MMO gaming, the most common excuse is this one: *Publishers and Developers have quality control teams, right? Publishers and Developers have people whose job it is to make sure that the game functions properly, right? So, Publisher and Developer wouldn't ever release the code unless the QA team said it was ready.*

The error with this argument is that is true for almost all game software development aside from MMO type games. So, lets pose another question here. Has anybody ever met or talked with a legitimate professional game tester? Most of the professional game testers are not actually gamers, and some have stated in the past they have the worst job possible in the industry. A normal game tester generally has to have a background in computer coding, either C/C++, or assembly. When under testing, the player often monitors a debug output while playing, or sets the development kit to verbose mode. Then, when actually playing, the player must come up with the most idiotic things ever to do in a game... and then do them over... and over.. and over... and over. For example, Donkey Kong Country for the SNES. A professional game tester would have to leap down every single hole in the entire game spinning, falling flat, attacking, carrying a barrel, and all other actions that Donkey or Diddy Kong could pull off. In addition, the player would probably not set a cheat code for infinite lives either in order to make sure that they version that they are playing through is the same version with the same code that would go to retail. What the player is looking for is any crashes, lockups, hangups, exploits, or errors that may occur... such as in the first *Mega Man* for the NES where pressing down against certain walls would cause the player to warp through screens, or the ability to leap through the top of the screen and wind up on the bottom of the screen.

In most single player, LAN, or limited Network configurations, it is possible for the QA team to lock down most potential problems that the player could possibly get into. Even then, bugs slip through and into the final retail code. With an MMO though, the rules of the game suddenly

change. There are certain situations that a QA team can simply not take into account. Testing *UT3* with 64 players at once in fairly trivial for Epic to pull off. Testing *Planetside* with 500 different people on one single map, all shooting at different items, spawning AMS's, loading galaxies, and crashing reavers? Testing the different latency calculations when one player has throughput of a 56k modem and another has the throughput of a 10meg cable connection? Testing the different client data configurations for those who are running Geforce2 cards versus those who are running Geforce 8800's? These are issues that simply can't be simulated in any lab.

That is why most MMO games have a free closed, or free open Beta. The publishers and developers depend on the users to come up with all the weird situations and configurations that are only possibly when a few hundred or couple thousand are testing, versus when maybe only 50 or so employees are available to test in the labs. It is to be expected that the Beta code will be that... Beta. It won't be finished, and developers will be looking to fix legitimate problems. What... exactly then... are developers looking for?

Part of the problem with MMO Beta's is that the developers may have a hard time communicating what they want from the players. To reference my own history with Cox Communications after Katrina and Rita smacked into Louisiana and Texas... What we, collectively, were looking for in hurricane affected zones (reads: All serviced territories) was the location of downed lines, cut lines, and property damage. We, collectively, were not interested in hearing from one or two people that couldn't get the WWE to broadcast to their roofless house. We also were not interested in having somebody in a Hurricane affected zone calling up and asking for a service truck for a problem that predated the Hurricane strikes.

In the same way, I highly doubt that any developers working on an MMO in closed beta are interested in hearing about how uber somebody's stalker was and how the class needs to be nerfed. Concerns about class and character balance are a distant second to engine and technical problems. A question that needs to be asked then is this: What is the average Beta tester looking for in a game?

Lets accept, for the sake of argument again, that the average player expects the Beta to be the fully featured final product that is in the last stages of tweaking before launch. To this type of player class and character issues are the primary concern. To these players problems like missing textures, inoperable weapons, broken missions, glitchy graphics, and memory leaks are icons that the game is going to be horrible, and that everybody else should promptly go play their title of choice.

From my point of view, the developers are more interested in hearing about broken quests, map data that does not load properly, missions assigned incorrectly, out of level range missions, invincible enemies or enemies that take far more damage than their challenge rating, memory

leaks in the code, and graphics glitches. Other issues can cover mission requirements that can lead to bugs. For example, lets say a player has to destroy 4 helicopters then call in an orbital strike. The player joins a team that has this mission, and the team has already destroyed the 4 helicopters. The new player joins as the orbital strike is called in, and the orbital strike condition is fulfilled on the players mission list. But, because the player did not destroy the 4 helicopters first, the mission cannot be completed. These are the kinds of things that developers are expecting to be filed in /bug or /petition reports. That is the reason for having a Beta, so that more systems, and more players, are available to give the game a work over.

This is not to say that class balance and character balance issues are not concerns. If a level 25 character is able to consistently defeat level 35 mobs while soloing, then yes, that class is in need of an overhaul. This leads into another expectation from average testers, many of whom are looking for buffs or nerfs to specific classes of players. Any changes at all made to the most powerful character class is inherently bad, and there is only one reason or way to play the game.

From the developers point of view, a Beta release gives real data on how damage is dealt out, how well cover works, the aggro ratios for damage, the Point Blank modifiers on ranged weaponry, and so on. While it can be argued that all the various combat and support factors can be calculated before hand, no plan survives first contact with players. A good example is found in Planetside's Jackhammer weapon for the New Conglomerate. The developers had balanced the Jackhammer so that it's entire average DPS (damage per second) would be about the same as other heavy weapons from the Terran Republic and Vanu. While the Jackhammer could triple shot, effectively one shot killing lightly armored opponents, the reload time would enable any living target to get away or possibly return fire. However, New Conglomerate Players began combining the Jackhammer triple shot with Surge, a sprint function. These players would run in under Surge, fire, and run right back out a door. With the lag computations, and client side hit system, this meant that many NC Jackhammer users could effectively triple shot a target, and be gone before they (the NC player) actually appeared on the screen. Experts would bunny hop while surging and using the Jackhammer, creating an effectively impossible to hit target under the lag computations. Others would combine the surge exploit with another exploit. On heavier armor, NC players could have two Jackhammers, one in each holster. Planetside's method of handling weapon switching meant that NC Players could triple shot one jackhammer, hit the button for the second Jackhammer, and immediately triple shot the second Jackhammer, creating a 6 shot frenzy.

This is not to say that other empires in Planetside did not exploit various game functions, but it should illustrate the point of unexpected damage combinations. The surge tricks and the double weapon tricks were not outright cheats or hacks to the gameplay. However, they did exploit the existing gameplay in a method that the developers had not originally intended. One of the aspects of a Beta release of a game is to iron out such possibly unintended combinations or exploits that use the existing code structure. This is even harder in games that are Inherent Imbalance.

What exactly is Inherent Imbalance? Inherent Imbalance refers to a design of a game where the abilities and powers of the classes are intentionally different and clearly complement each other. Since I am more familiar with City of Heroes, it will stand as the example. In City of Heroes the 5 default classes are Tank, Scrapper, Blaster, Defender, and Controller. If it helps, imagine these classes as being the 5 points on a typical star.

The job of the Tank is to aggravate enemies and maintain their attention, known as holding aggro. The Tank does this with a combination of a Taunt, melee, and Point Blank Area of Affect attacks, and is backed up with the highest health amount and self buffs. On the Stone and Ice tanks the Point Blank Area of Affect attacks include status modifiers that slow or immobilize opponents.

The job of the scrapper is to damage opponents up close. They do this with a high number of close range melee attacks and some lighter defense powers compared to tanks. However Scrappers also can get a time limited defensive power at higher levels that allows them an easy out when they get over their heads. The games design is that Scrappers will never be able to take the same amount of damage as a tank... but that they can deal out more damage than a tank.

The job of the blaster is to just damage opponents. They do this with a power set made up mostly of attacks with next to no defense powers. There are some anomalies in the blasters where some classes have Point Blank Area of Effect Taunts, not something a character with a really low health bonus and no native status protection needs.

The defender shares ranged attacks with the blaster class, albeit with weaker versions. However, Defenders also buff and heal the team, forming an opposite position to the tank who only self buffs. Defenders are able to fill in the weak points in the other classes, giving Blasters the status protection desperately needed for large encounters, and filling in the chinks on the armor of a scrapper.

The controller forms an opposite to the Tank, Blaster, and Defender. While controllers may have one or two team buffs that defenders have, the buffs are not as strong as a Defenders. In a similar manner, Blasters and Defenders ranged attacks are more powerful than controllers. However, controllers can change the status of their opponents, putting opponents to sleep, holding opponents in place, dropping the defense, slowing the opponent and so on. The status changing effects are much more powerful than other classes. Whereas the Stone tank can only reliably immobilize minions with mud pots, immobilizing a mob of lieutenants is nothing to a controller.

So, each class is inherently different. Balancing the classes so that they are equal is impossible.

Balancing the classes so that they complement each other is possible. One of the most controversial changes made to the game involved the Fire Aura power called Burn, which does an extremely high amount of damage over time. Burn was modified with a -mob run so that NPC opponents would take off running away when Burn was dropped. This nullified one of the most powerful attacks available to Fire Tanks. However, by teaming with a controller who can hold mobs in place with ease, a fire tank can grab aggro, let the enemies group up, let the controller hold everything down, then drop Burn. A lot of Fire Tank players never grasped that the fundamental use of Burn was changed in order to focus on the team play and inter balance of the group, rather than emphasize one single player's abilities.

The point of many a beta is to iron out the inherent imbalance of the classes. Another example from City of Heroes came from the lack of people playing certain classes like Defender and Corrupter. In order to make the classes more desirable to play some of the ancillary attack powers had their damages adjusted upwards. When the development team felt enough people were playing the classes again, the power ratios were lowered to their original design levels. Even so, many of the players affected expressed madness that their characters had been unfairly nerfed, with few taking the time to examine why the changes had been made to begin with.

One of the major problems a MMO in testing right now faces is many players who are looking for the *best class* to play. Attempting to explain to the players that there is no best class, that each type of class does something differently than other classes, seems to fall on rather deaf ears. Many players openly spam the Global chat with statements to the effect of *Why play that class, my chosen class is much better*. These players are going to be in for a rude awakening as the game is completed and they find that all of the classes will be needed in battle. Not just one or two.

If making a game that is inherently imbalanced seems like a hard thing to do, it is. Many players will chase after equal balance between classes, expecting to be able to do something with one class that can be done in another class. So, why play an Inherently Imbalanced game?

One of the major reasons to play a game that is inherently imbalanced is that there is a spot for several different types of players. One of the standout features of Planetside so many years ago was the inclusion of Engineer and Medic classes, as well as driver certifications. While most of the game was focused on the Player Versus Player combat, players didn't necessarily have to be VT-Grumpy-Bunny or Fatal1ty in order to level and play the game. Players with slower Internet connections could still be useful in scouting missions, wandering deep behind enemy lines or taking towers far away from the lag filled main battle.

Players who took aiming lessons from Star Wars Storm Troopers could find a spot tagging along on a squad healing allies, or reviving downed allies. As there was a need for players in Max

Armor to go crashing into the next base or tower, there was a need for engineers to stay behind and repair turrets, lay down landmines, place localized mini-turrets, and put up motion sensors. Just as pilots were needed up in the air for bombing runs and galaxy drops, drivers were needed for ANT runs in order to fill the NTU silos.

In a similar manner City of Heroes / City of Villains also offers different players different ways to play the game. Fans of Real Time Strategy games will probably find more enjoyment in the micromanagement available to a villainous Mastermind. Players who love to sneak around the shadows will find the Stalker an excellent choice for covert actions. Players who love leaping into the middle of a mob and pounding the living daylights out of an enemy that cons purple will find enjoyment in the Tank class. Players who are good at keeping track of other players and managing the battles will find the Controller and Defender classes more suited to their interests.

If an inherently imbalanced game offers so many different choices and playing styles then, why do many developers strive to balance the games? Most of the time it is because a development team does not have a clear idea of what the game is, or where it is going. One of the chief complaints laid against Planetside is that development team chased after what was popular, rather than what was Planetside. The game was collectively ruined in pursuit of changing a persistent campaign based MMO into a session based game similar to Unreal or Quake.

So, why would developers not want to make an inherently imbalanced game? Simple answer, Player Versus Player content. Player Versus Player content generally doesn't work in a game that is inherently imbalanced, especially with games that only have 2 sides to choose from. City of Heroes stands as a good example of these problems at work. The entire concept of the game builds upon each player complementing another player. A stalker is not equivalent to a scrapper. A brute is not equivalent to a tank. A corrupter is not a controller or a defender. I've gone into this subject in depth before.

So, this raises the question of why does PvP work in a game like Planetside that is also inherently imbalanced? Imagine for a second the game of Jankenpon, or rock / paper / scissors. Rock is beaten by paper, paper is beaten by scissors, and scissors are beaten by paper. In the same way, having 3 classes in an inherently imbalanced MMO provides a balancing factor in and of itself. What happens if a Magrider, a Prowler, and a Vanguard all met in a field? The Magrider isn't as powerful as the Vanguard, but the Magrider has a superior movement ability. The Vanguard has the most powerful cannon, but is awfully slow to move around. The Prowler has a slightly weaker cannon, but a higher rate of fire than the others.

A beta of the game provides realistic feedback about how such encounters would work. Is the Magrider too fast for the Vanguard and Prowler to hit? Is the Vanguard's gun too powerful? Is the Prowlers rate of fire too high? What happens if the Magrider and Vanguard team up? What happens if the Prowler and Vanguard team up?

Beta's are designed to answer these types of questions. Players may not like the answers they

get during the beta, but all of the data that is generated is used to balance the game within the intentional imbalance. The result is that when playing a beta, players should expect to find things they don't like, or problems that just don't make sense, and report the issues.

Now, as stated at the beginning, much of this has been thinly veiled at an MMO that is in the works right now. Hopefully the development team will realize from the beta feedback that PvP content is not going to work in the MMO, and that the current PvP plans should just be scrapped outright. MMO's do not need to have PvP in order to be successful. City of Heroes proved this a long time ago, even before I joined.

So... one final question. Does anybody NOT understand the concept of beta now?