



# Planets Con LIVE 2019

State of the Nuniverse

Joshua & Big Beefer - Year 0107 (2019-11)

# Topics

- Year in Review
- New features
- Roadmap
  - Continue to work with rulesets, win conditions and map designs to create faster paced games
  - Continue to improve and develop the UI
- The Virgo War

# Year in Review 2018/2019

- New mobile-friendly version and apps released - approx. 75% of players using new version
- Many small UI improvements
- Campaign resource system simplified
- Quantum Torpedos!
- Mentor Rewards - So far Dines leads with 4 months free subscription
- Auto-taxing options added - Planetary management
- Cancer and Libra Wars both end - Congratulations to Wmerkel and Hiko!

# Some Stats

Overall Desktop use has been steady - community is healthy

Mobile usage since new version:

- Over 30,000 downloads of Planets Nu App since the new version. 4000+ active installs.
- Average rating in October of 4.22 / 5 stars. (help us out by giving a 5 star rating!)



# New Functionality

Fall 2019

# New Win Condition: Top X Advance

- New win condition ends the game when only a certain number of players (specified by TopAdvanceCount game setting) are still alive.

Example: “This game will end when 5 players are eliminated.”

- Offers some new diplomatic considerations, ie:
  - Do you go all in to try and eliminate an opponent and end the game?
  - Do you try to save another player to give yourself time to gather more planets and raise your position?
- May lead to shorter games
- Already in use for some time in New Recruit games (ends when half are dead)
- Beginner games switching to using this as well
- Available for custom games

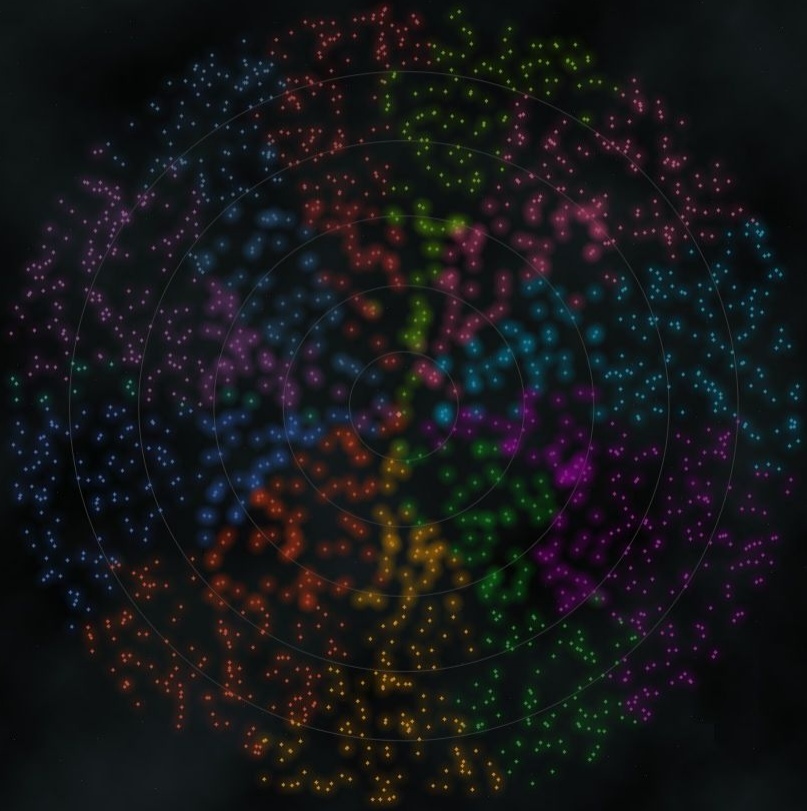
# Team Game Fight or Fail Change

- For fixed team games only
- Will be standard for system-created team games, optional for custom games
- Fight or Fail is evaluated across the team as a whole, essentially the team lives or dies as a unit
- Example:
  - A team of 3 players with the current FoF limit at 5 must have at least 15 planets (added up from all 3 players)
  - If they fall below 15 planets, all members of the team are killed, even if an individual player on the team has more than 5 planets
  - When the FoF limit increments to 6, they will then need to have at least 18 planets, etc.

Sector Control

The Feds:	8.0%
The Lizards:	10.7%
The Bird Men:	8.1%
The Fascists:	7.4%
The Privateers:	12.2%
The Cyborg:	9.8%
The Crystal People:	9.7%
The Evil Empire:	6.8%
The Robots:	8.2%
The Rebels:	7.6%
The Colonies:	10.6%
The Horwasp:	0.9%
<b>Total Planets:</b>	<b>1996240</b>
<b>Total Games:</b>	<b>4640</b>

x: 39880 y: 29550  
Zoom: 20%





# Echo Cluster Map Upgrade

## Changed to reflect race strength

The website map has been reworked to better reflect the strength of the races at various difficulty levels.

- Based on the total number of planets owned by each race at the end of completed games
- Games are split into six different categories based on difficulty (note that the higher difficulty levels do not have that many games)
- Explore the map by difficulty level or by race

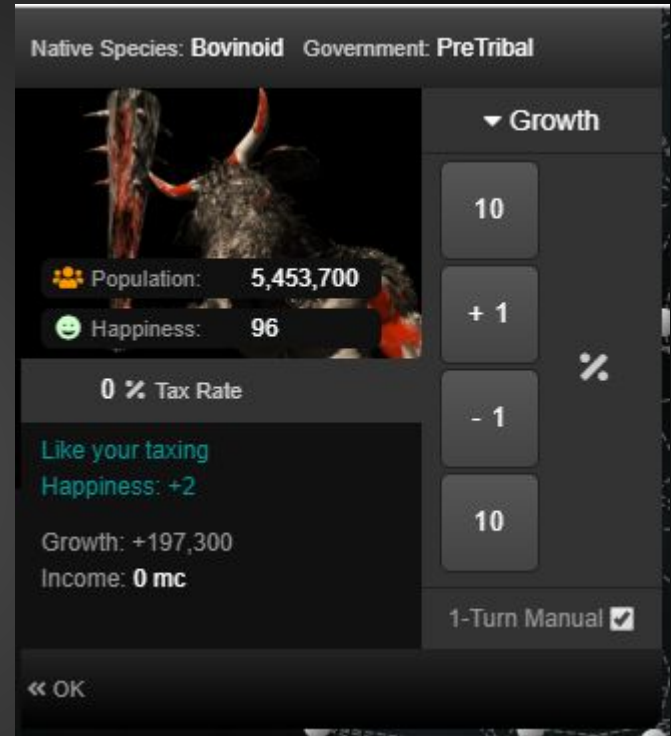
### Some Analysis:

- We can see that the Privateers are globally very strong (12.2%) - but are much weaker in higher level games (7.1% in the Inner Circle).
- Crystals are globally average, but are disproportionately strong in higher level games.

# Client Features

1-Turn Manual tax option added to auto tax. This allows you to override the auto tax for one turn with a specific tax rate for one turn (you need that money now!)

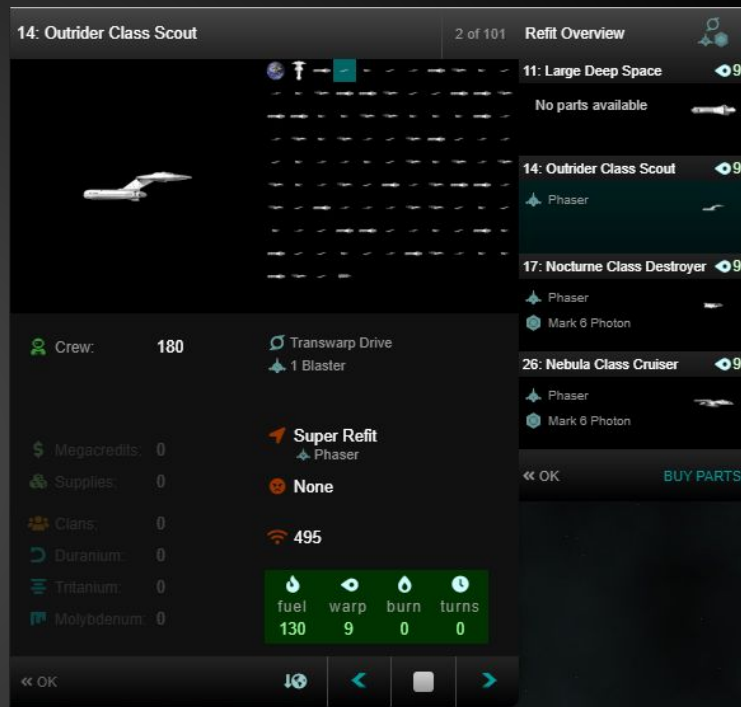
After the turn is run, the 1-Turn Manual setting is cleared and the auto tax will behave as normal.



# Client Features

Improved Super Refit interface shows expected part upgrades for all refitting ships at a starbase.

Also includes a quick link to the starbase and a new component building screen where you can build parts even if you have a ship set to build at the starbase.



# New Campaign Features!

- Shock Troops - Increases ground attack strength to 5. Costs 10 Advantage points.
  - Feds
  - Birds
  - Privateer
  - Rebels
- Fortress - Increases ground defense strength to 5. Costs 10 Advantage points.
  - Feds
  - Birds
  - Robots
- Webmine cost increased slightly from 160 to 165 Advantage points.

# Wmerkel's New Ship

## Pyrite Class Frigate

- Sub-type of the Onyx, with increased mass, crew and costs - Advantage cost: 50
- Features an advanced heating Sunburst device which can focus a beam of massive radiation to terraform planets remotely:
  - Each ship can heat the planet at its waypoint up by up to 2 degrees. It will not heat the planet it is over unless its waypoint is also that planet.
  - Waypoints in warp wells will also heat planets
  - Heating occurs before movement
  - The heating power is reduced with distance with the following formulas:
    - $\text{heating\_power} = 200 - \text{distance}$
    - $\text{degrees\_increased} = \text{heating\_power} \text{ (cumulative from all ships targeting this planet)} / 100, \text{ rounded down}$

So, if the ship is at a planet/warp well, and its waypoint is the same place, it can heat the planet by 2.

Up to 100 ly, it can heat the planet by 1

A ship 150 ly away cannot heat the planet on its own, but 2 ships at that distance can heat by 1 (each has a heating\_power of 50)

# New Achievement Rewards

Goal: To provide more incentive for non-winning players to continue in a game - make fighting to move up one position worthwhile.

- Games award achievement based on finishing rank, according to chart
- Single player victory gives a 2.4x multiplier to points
- Alliance victory gives a 1.5x multiplier for each alliance member
- Fixed Turn and Top Advance games give no multipliers unless Diplomatic win condition achieved
- Players eliminated by Fight or Fail are awarded points based on how many players remain in the game when they are eliminated
- Players who drop or resign receive no points
- Games with less than 500 planets have the award reduced proportionally
- Winners with Total Planets win condition give 25% more points
- All other modifiers (difficulty, tenacity, fewer than 11 players, etc) still apply

Rank	Payout
1	500
2	400
3	300
4	200
5	150
6	100
7	75
8	50
9	25
10	10
11+	5



# Evolution of the Q

The “Global Ship Limit” was one of the most important mechanics Tim created in Planets. It increases the weight of tactics vs pure “economics”. We continue to seek an optimal implementation of this shared limit.

- Classic Q Pros:
  - Some control over ships built in regular queue
  - Targeting of important build planets
- Classic Q Cons:
  - Queue Lock
  - Building bases based on ID#s vs where they make sense
- PQ Pros
  - Soft Ship Limit
  - Flexible Priority Points
- PQ Cons
  - Requirement to build (and queue) too many starbases
  - Too much randomness

# Planetary Production Queue (PPQ or PlanetQ)

The Planet Queue system is the evolution of the Production Queue global ship limit system. It features 3 significant changes:

1. Builds are now awarded based on the number of planets a player owns rather than randomly selecting starbases
2. New “rbX” friendly codes to specify which starbase will build when a regular build is awarded.
3. The randomness of build selection is greatly reduced.

Goals:

Reward aggression, funnel resources into combat, give players more control, reduce randomness.



# Planetary Production Queue

How it works:

1. When the number of ships in the game is below the ship limit builds are allocated with a minimum number of builds (default is 10) even if this pushes the ship count above the limit.
2. Builds are given to players based on the % of planets they own. In 3 phases:
  - a. Phase 1: Guaranteed Builds
  - b. Phase 2: Leftover Lottery
  - c. Phase 3: Other Builds - Weighted Random

# PPQ - Example

The ship count drops to 498 with a 500 ship limit. In this case 10 builds will be allocated.

- Player 1 has 12% of the owned planets.
- Player 2 has 22% of the owned planets
- Player 3 has 4% of the owned planets
- Player 4 has 37% of the owned planets
- Player 5 has 25% of the owned planets

## Phase 1: Guaranteed Builds

$100/10 = 1$  build allocation for each 10%.

- Player 1 gets 1 guaranteed builds (10% used).
- Player 2 gets 2 guaranteed builds (20% used).
- Player 3 gets 0 guaranteed builds (0% used).
- Player 4 gets 3 guaranteed builds (30% used).
- Player 5 gets 2 guaranteed builds (20% used).

# PPQ - Example

## Phase 2: The Leftover Lottery

The remaining unused percentages are then used to weight the allocation of the remaining 2 builds.

- Player 1 - 2% left =  $2 / 20 = 10\%$  chance
- Player 2 - 2% left =  $2 / 20 = 10\%$  chance
- Player 3 - 4% left =  $4 / 20 = 20\%$  chance
- Player 4 - 7% left =  $7 / 20 = 35\%$  chance
- Player 5 - 5% left =  $5 / 20 = 25\%$  chance

When a player gets a random build they are eliminated from the selection pool and the pool is reweighted.

This phase exists to slightly increase the odds of more players getting “at least one build”.

# PPQ - Example

## Phase 3: Other Builds - Weighted Random

Any remaining builds (or unused guaranteed builds) will be allocated to all players randomly based on the percentage of planets they own. After the ship limit this is not expected to happen often.

### Summary:

Overall this results in a fair distribution of builds with only a small amount of uncertainty which is weighted by the number of planets owned. Each player will receive a percentage of the builds roughly equal to the percent of planets they own.

While this may look complex, the basic strategic principle is simple: “The more planets you own, the more builds you will get.”

# Other

- **Chained Intercepts are coming (work in progress)**
  - **Avoiding combat by intercepting with higher ID will be eliminated**
  - **Still some complexity to work out around “loops”**
- **New game format: Bleeding Edge**
  - **Will include new rule candidates for Standard**
  - **Join the first Bleeding Edge game for your first taste of the new PPQ system.**

# New Champ Game: Virgo War!

- Sign up now to join the latest Championship Match!
- Round map - NO SPHERE
- The Virgo War will be a Standard game with some stellar cartography, explore map, and wormholes.

# 2020 Roadmap

- Continue to work with rulesets, win conditions and map designs to create faster paced games and more mobile friendly games
- Continue to improve and develop the UI - for both desktop (features) and mobile (experience).
- Following the Virgo War (the final Zodiac war) we will revisit and possibly redesign the format of the Championship and the road to becoming Emperor.
- Some “unsuccessful” campaign features/hulls will be retired.

**Questions?**