

# **GUIDE TO PROFITABLE PLANETARY INTERACTION**

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## **Introduction**

Planetary Interaction or "PI" has to date been covered by a number of good tutorials on how to set up individual colonies. Few if any of these tutorials however cover the interesting issue of how to set up a larger number of "right" (i.e. highly profitable) colonies. The purpose of this guide is to show you how a well run PI operation can be set up to make billions of ISK per month.

## **Skill requirements**

You will need to train each character that you want to include in your PI setup to have the following skills to level 4 at a minimum:

- Command Center Upgrades
- Interplanetary Consolidation
- Remote Sensing
- Planetology

We would highly recommend that you train Command Center Upgrades to level 5, particularly if you want to both harvest and run p2 processors on single planets.

In addition, do consider that each character doing PI should have some minimal hauling skills. We would recommend a hauling skill at level 4 with basic skills to fit expanded cargoholds and cargo rigs (you should be able to haul 10m<sup>3</sup> at a minimum and 20m<sup>3</sup> ideally). Also, the character hauling out of lowsec should naturally be able to fit WC2s!

## **Assumptions**

We assume you are running all your colonies on a 22hrs cycle for the purpose of this guide.

## **Possible PI Setups**

There are five potential colony setups worth contemplating depending on your aims, and they each have one single optimal setup that produces a maximum output:

1. The high yielding p1 colony
2. The high yielding p2 colony
3. The specialised processing colony
4. The "do it all" processing colonies
5. The "hybrid" p2 colony

Any colony used for harvesting **MUST** be placed in lowsec below 0.3 as 0.4 or highsec colonies over time experience resource depletion that will greatly erode the output of your colonies! It is just not worth the effort harvesting planets with low yields. Lowsec systems with 0.1 sec status tend to have excellent yields!

## The High Yielding P1 Colony

First of all, take a look at the market for p1 materials to confirm that prices between different materials vary a lot. You should only harvest the most expensive materials you can find in decent quantities, and ignore the rest as you can buy those in the market should you wish to produce p3 or p4 materials with other colonies. At this point in time, electrolytes, chiral structure and proteins are examples of such valuable materials.

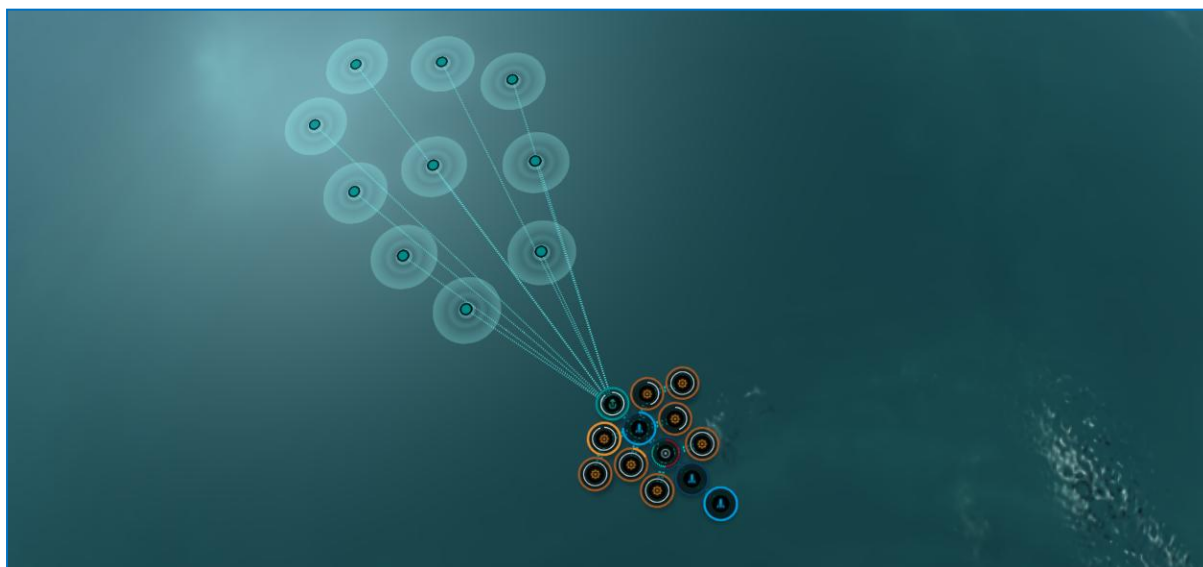
Having decided what you want to mine, head out to lowsec space (Hrondedir or Arnstur) and find planets with an abundance of the materials you want. In these systems, you will be able to haul and gather your harvested materials centrally at a station or POS, which makes it more manageable to freight them out in bulk when you have accumulated a reasonable quantity.

The levels should be red or at least yellow in the spots you choose for your harvesting. This will ensure that whilst spots do deplete over time, the minimum amount harvestable at the stage of depletion will be high enough to keep your colony running at maximum capacity. All in all, you should be able to harvest at around or at least 21,000 units of materials every 30 minutes, which is enough to keep at least 7 basic processors busy around the clock.

Your colony should basically look like Figure 1 shown below. You will need to use the same hub and spoke setup around a central launch pad as well as the same honeycomb structure to save CPU on the connections between the colony modules. The connection between the extractor and the central launch pad should be upgraded 3 times to take 2,000 units.

**A colony of this type should make about ISK 2-3m worth of materials a day.**

**Figure 1: High Yielding P1 Colony**



Additional launch pads are extremely useful to have as they save you the need to haul more often than strictly necessary. If you have command center upgrades at level 5, you may elect to either run extra extractors or more launch ads. Extra extractors are only worth it if you have a hard time keeping your 7 to 8 processors.

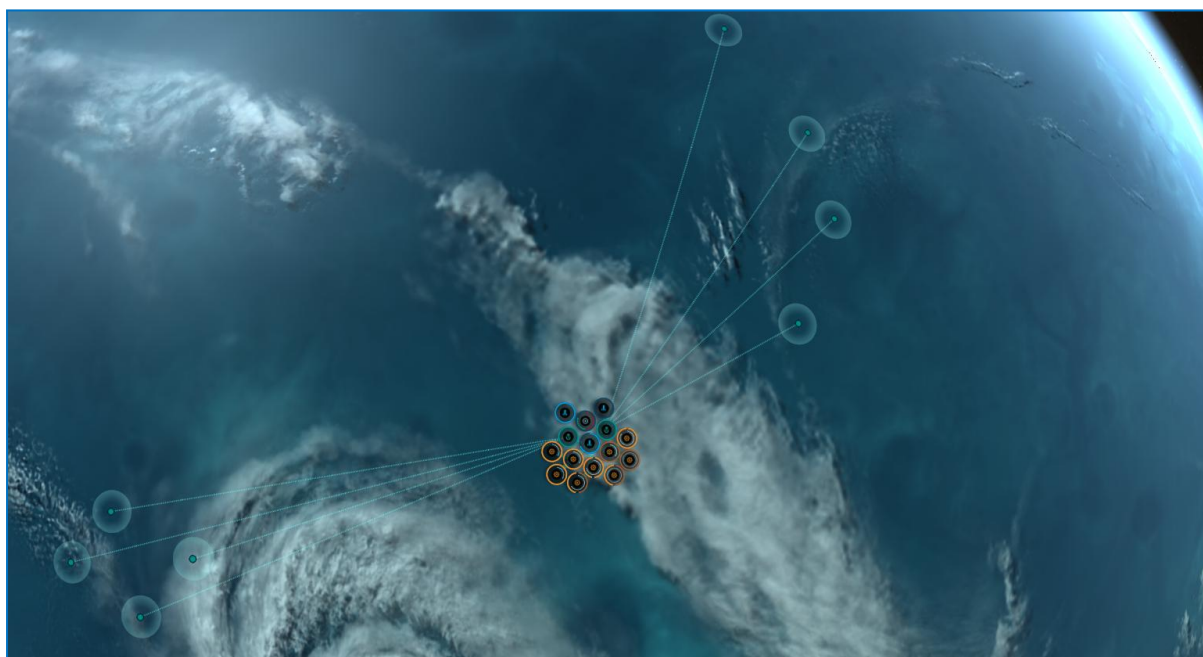
## The High Yielding P2 Colony

This type of colony should only be set up under two conditions: (1) your command center upgrades skill is at level 5, and (2) the planet you are harvesting is so rich that the p1 setup is effectively overwhelming your processors with way too much excess raw material. Another consideration of

course is that p2 materials take less space and are easier to haul out. Essentially, you need to run two extractors to harvest different materials. Given CPU limitations, you will be able to run no more than 4-5 extractor heads on each, which means that fewer heads need to have a higher yield to keep your processors busy. You will need to harvest at least 9,000 units per 30 minutes for each material (which also means that the connections between extractors and the central launch pad only need to be upgraded twice). Each extractor should be matched with 3 basic processors (6 in total) and you should have 3 advanced processors turning your processed p1 materials into p2. This is a pretty optimal setup which is not achievable with level 4 skills.

**A colony of this type should make about ISK 2-3m worth of materials a day.** This is the same approximate amount as for a p1 colony, but it saves you processing later. The lack of incremental ISK value is due to the fact that inevitably, one of the materials harvested will be worth a bit less.

**Figure 2: High Yielding P2 Colony**

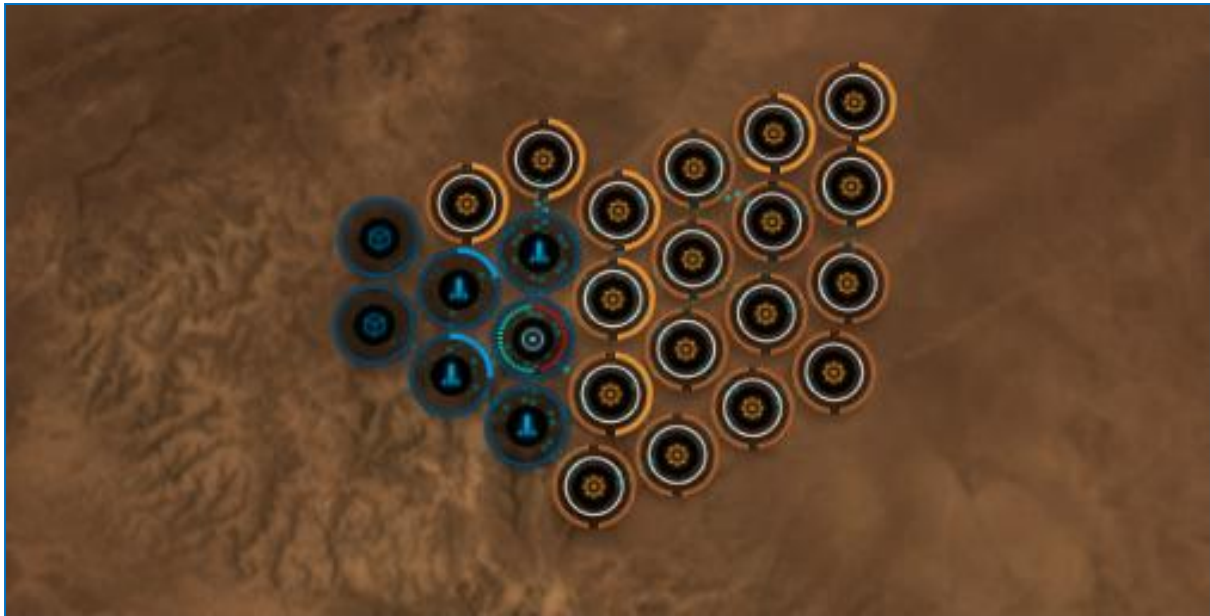


### The Specialised Processing Colony

This type of colony should be set up in highsec. Lowsec is fine too, but it makes it harder to haul in cheap low end materials you purchase off the market to be processed with your high ends.

Specialised processing colonies are ideal if you harvest a very large amount of one material, and need to process huge batches in one go. The illustration below explains the setup (no further comments needed really):

**Figure 3: The Specialized Processing Colony**



A specialised processing colony adds about 10% value to the raw materials brought in. **The daily output of for instance a coolant producing colony is worth about ISK 25m, of which the processing colony added about ISK 3m in value.**

An alternative specialised colony processes materials in multiple stages. These have been shown to potentially create value of up to ISK 10m per day, but they tend to run into a supply problem as they need a fair bit of process material to run.

**Figure 3: Multistage Specialized Processing Colony Producing P4 from P2**



### The “Do it All” Processing Colonies

Whereas specialised colonies are good for scale in one material, a different setup is required to produce all the p3 and p4 materials needed for POS and POS module production. Here, economies of scope are distinctly more advantageous than pure scale. The “Do it All” colony offer a Swiss Army knife approach to the problem of scope by having many processors, each able to process one different material. The idea is to back solve for the quantities of p1 or p2 materials needed to make p3 and p4 materials going into POS production, dump them into the central launch pad, and let the colony do the work. You will need separate colonies to make p3 and p4 materials...

**Figure 5: The “Do it All” Processing Colony**



### The “Hybrid” p2 Colony

An alternative expansion to an existing high efficiency p1 colony is simply to add one or two advanced processors to it and haul in the second material. It's that simple really, but requires a bit more hauling and the logistics are harder to manage. We recommend you have an excel sheet to track the material needs of Hybrid colonies.

### Summary

**A single account setup with 3 alts and fifteen colonies should make ISK 30-50m per day (ISK 1bn-1.5bn per month). Up to ISK 2.5bn can be made if high value materials are harvested and low value materials bought, made into p2 using hybrid colonies and processed into p4 using multistage specialised processing colonies.**