
Planetary Interaction Guide

Tres's comprehensive Handbook for the Absolute

Version 0.2

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Abstract

Work in progress...Some parts of this guide are inspired by posts on eve-forums by Steven Thomas, Cadde and various others.

Introduction

Since the Tyrannis expansion podpilots are able to interact with planets to a small extent. This means for now practically just the production of various trade goods (former NPC produced) from resources harvested and processed on planets.

The basic workflow to achieve this is as following:

1. scan the planet for available resource distributions
2. place the appropriate command center on the planet close to the hotspots you want to exploit
3. build the needed infrastructure around it, for example extractors, processors or links
4. set up extraction materials, processing schematics and material routes
5. wait for the output and export your products

This process will give you mostly (not only) intermediate materials not directly consumable by players. For higher level products you will need a more complex processing chain with im- and exports on several planets. As the number of planets a single podpilot can handle is limited you will need to create and coordinate a logistics network that spans over several podpilots and planets - metagaming at it's finest.

So the whole show is about the creation of:

- Starbase Fuel (non-ice products)
- Nanite Repair Paste
- Player Owned Starbase Structures
- Outpost Construction Components
- T2 Components (non-moon sourced)

- Sovereignty Structures

Skills

As for everything in EVE there are also special skills for Planetary Interaction to improve your capabilities. Although it's absolute possible to place a basic command center on a single planet and have a go at it without any skill, if you want to run full-blown colonies on several planets, scattered over some systems, you'll want the following skills:

Remote Sensing. Rank #, Prereq.:

The ability to gather and analyze remote sensing data from satellites in orbit around a planet and to produce proper calibrated surveys. Level 1: allows scans within 1 ly, Level 2: allows scans within 3 ly, Level 3: allows scans within 5 ly, Level 4: allows scans within 7 ly, Level 5: allows scans within 9 ly

Planetology. Rank #, Prereq.:

The understanding of planet evolution and the fundamentals of resource extraction.

Advanced Planetology. Rank #, Prereq.:

Advanced understanding of planet evolution and the fundamentals of resource extraction.

Command Center Upgrades. Rank #, Prereq.:

Each level in this skill improves the quality of command facility available to you, in turn allowing for a greater number of connected facilities on that planet. Cannot be trained on Trial Accounts.

Interplanetary Consolidation. Rank #, Prereq.:

For each rank in this skill, you may install a command center on one additional planet, to a maximum of 6 planets. You can have only one command center per planet. Cannot be trained on Trial Accounts.

Planets

For the whole thing to work you need planet(s) to get the raw materials from or respectively to run some processors on. If we look around we see plenty of them, about 9 per starsystem. A more closer look and some databank queries later we'll get the following figures:

Table 1. Planets of New Eden

	Temp	Ice	Gas	Ocean	Lava	Barren	Storm	Plasma
Empire	2139	2710	5648	304	1467	1864	1921	231
Outlaw	2908	4689	9868	511	2804	3343	3395	386
Jove	183	350	693	35	200	232	257	27
W-space	2054	3502	7545	406	2002	2674	2597	299
Sum	7284	11251	23754	1256	6473	8113	8170	943

In sum that are 67253 planets (the 6 shattered planets included). Now, not each planet type has all the raw materials there are. Just 5 out of the 15 raw materials can be found per type. And another thing to note is the abundancy of the materials on the planets, which depends on the security level of the star system.

A null sec planet yields roughly 6-8 times more than a high sec planet.

Sec status vs CC, number of players on planet, ?structures on planet?

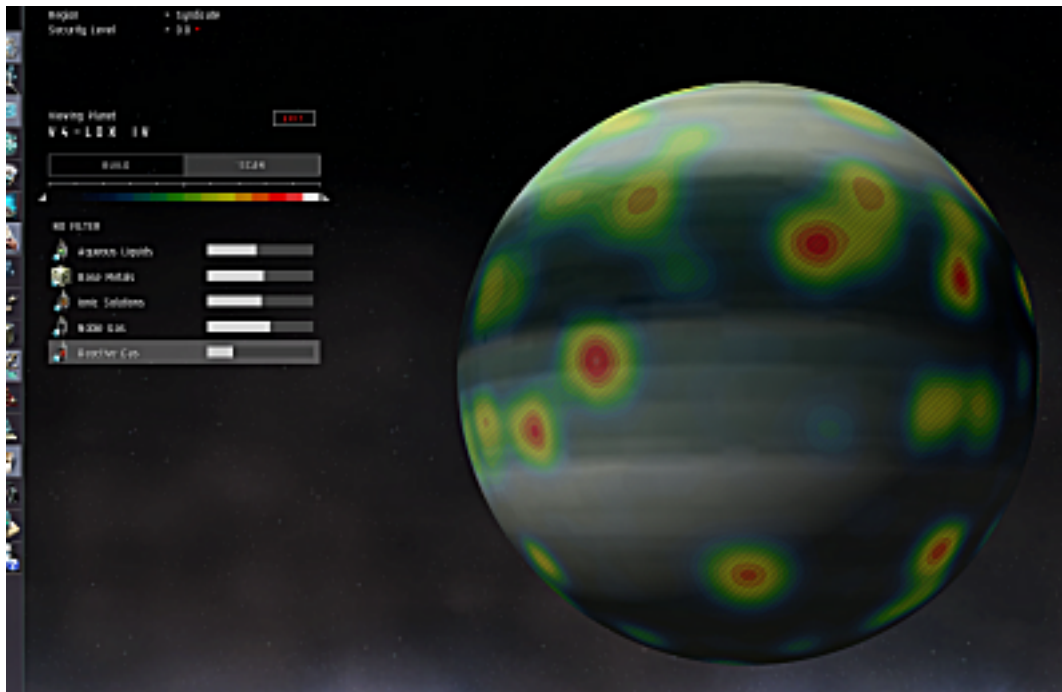
Table 2. Planettype vs Raw material

	Barren	Gas	Ice	Lava	Ocean	Plasma	Storm	Temp
Autotrophs								x
Aqueous Liquids	x	x	x		x		x	x
Base Metals	x	x		x		x	x	
Carbon Compounds	x				x			x
Complex Organism					x			x
Felsic Magma				x				
Heavy Metals			x	x		x		
Ionic Solutions		x					x	
Micro Organism	x		x		x			x
Noble Gas		x	x				x	
Noble Metals	x					x		
Non-Cs Crystals				x		x		
Planktic Colonie			x		x			
Reactive Gas		x						
Suspended Plasma				x		x	x	

Out of the 15 raw materials 3 are bound to a single planet type.

Scanning for Resources

If you go into planet view mode for a planet you'll see the following user interface by clicking on the 'SCAN' tab (the colormap on the planet comes up when you click on one of the abundance bars):

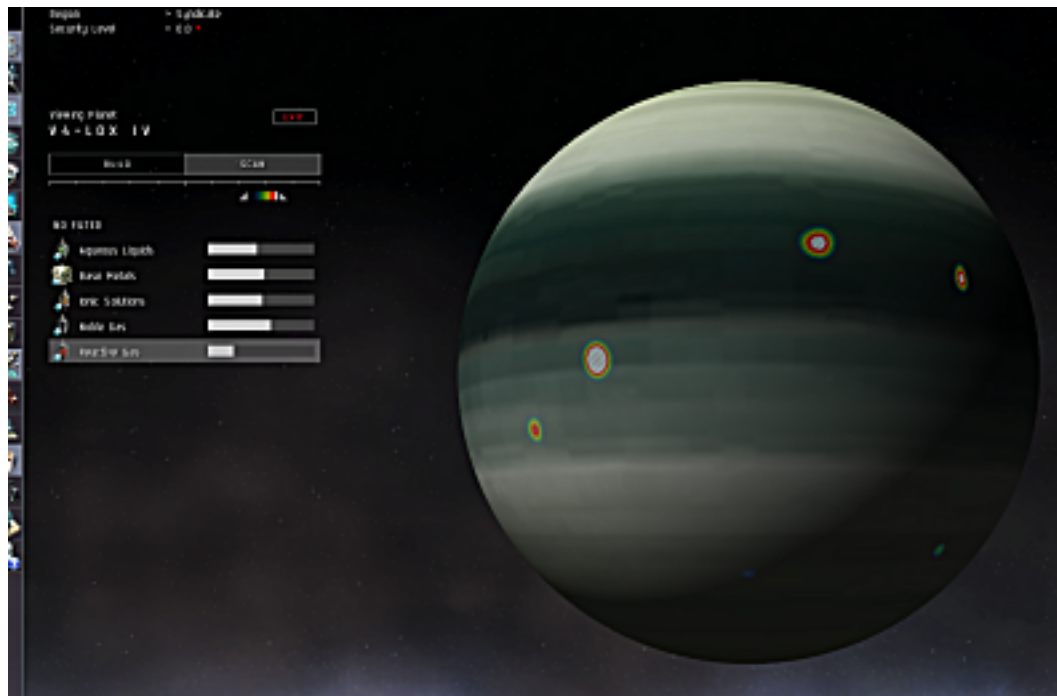


The abundance bars for the raw materials give you an overview of how much of the raw material is there at all on the planet. However, this doesn't really tell you how big of a source rate you can find at hotspots. To get this information you need to understand the colormap on the planet and have a play with the colorslider.

The colorslider has two handles at both ends, so you can set the colors to indicate finer nuances of abundancies by moving them closer to each other. By holding and moving the colorbar itself you can slide through the abundance values with a higher resolution.

- In it's widest setting the colorbar goes from zero to maximum abundance (blue to white, 0% - 100%)
- In it's most narrow configuration the resolution of the colormap is increased by a factor of 10 (so the minmum and maximum now is just 10% apart, f.i. the colorbar starts with blue at 72% till white at 82% - everything above and below won't be visible anymore and the colormap on the planet will reflect that)

HowTo find a hotspot. You click on the abundance bar to get a colored distribution map overlay on the planet. Then you spin and roll the planet around until you think you got the most abundant spot. Now narrow the colorbar for 10x resolution. Check the hotspot by sliding the narrow colorbar slowly from the left to the right, so that the most abundant area just becomes white. You might want to spin and roll the planet again to make sure there are no better hotspots you might have missed.



Planetary Structures

Now that you know where to get the most stuff you need some information about the structures you will work with. Most of the time you'll just look at symbolic representations of the structures you built on the ground (or let float in the atmosphere) in the form of pins. Each structure has a specific symbol on it's pin so you can easily spot it's function in your planetary networks:

Planetary Command Center - xCC



Planetary command centers are the infrastructural core of each colony, specialized for a planet type and come in 6 tiers. There are basic, limited, standard, improved, advanced and elite command centers. With a command center you can already export products from a

Planetary Command Center - xCC

planet via a planetary launch container. Command centers can't import products on their own. You can only place one command center per planet. Command centers need to be bought on market and shipped to the planet.

Extractor - EX



An extractor pulls material out of a planets crust, collects liquids or destilates gases. There are dedicated extractors for each of the 15 raw materials. If you set up an extractor you can choose between 4 levels of exploitation rates which affects the cycle time, the lifespan of the resource and it's extractable size. Extractors don't need to be bought on market.

Storage Facility - SF



A storage facility can be used as a buffer, a redistribution point and as a simple storage as the name already says. There can be different types of materials in the same storage at the same time. Storages don't need to be bought on market.

Basic Industry Facility - BP



The basic industry facility processes raw materials into processed materials. It's cycle time is 30 min. Industry facilities don't need to be bought on market.

Advanced Industry Facility - AP



Advanced industry facilities process processed materials into refined commodities and refined commodities into specialized commodities within 1 hour cycles. Industry facilities don't need to be bought on market.

High Tech Production Plant - HP

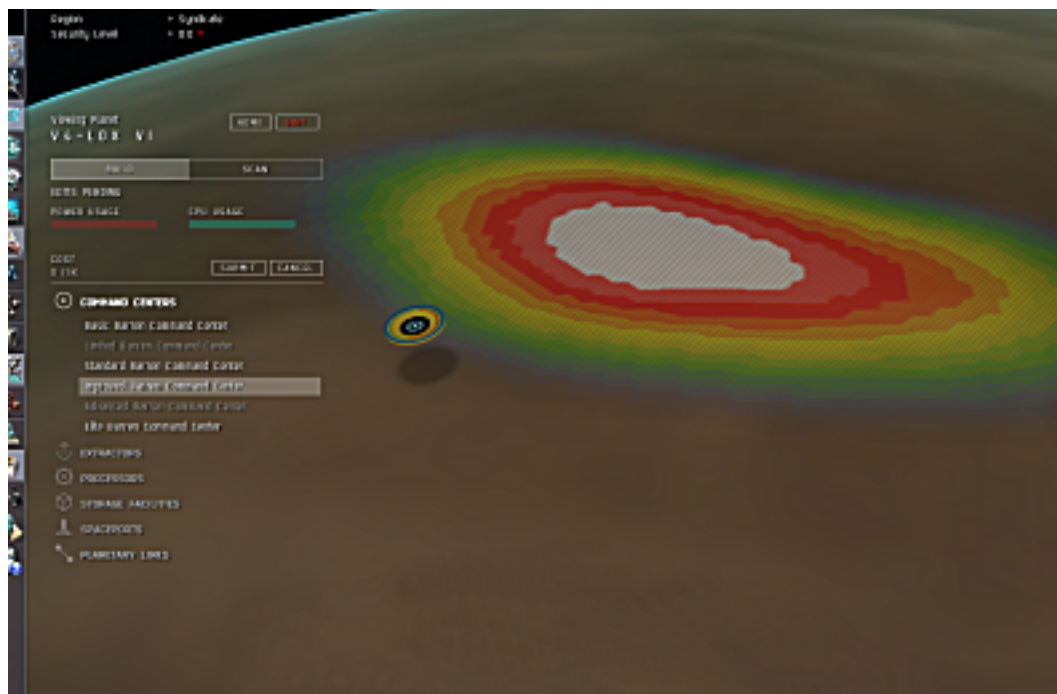


High tech production plants are only available on barren and temperate planets. With 1 cycle per hour they process specialized commodities and processed materials into advanced commodities. Production plants don't need to be bought on market.

Launchpad - LP



A launchpad serves as a connection to the customs office in the orbit of the planet. If you build one, the customs office in the orbit becomes accessible to you or it will even create one if there isn't one already. You can export and import products with it. Launchpads don't need to be bought on market.



HowTo install a CC. Be in space in the same starsystem as the planet you want to colonize. Have the matching CC in the cargohold of your ship and planet view open. In the 'BUILD' pane only the command center item will be highlighted, expand it. Depending on the type(s) of CC(s) in your cargohold there will be highlighted entries. Decide upfront where to place your CC as you can't spin and roll the planet during placement. Click the highlighted entry (mouse pointer gets a CC symbol attached) and click again on the planet where you want the CC to be. Click the 'SUBMIT' button to finalize your building or 'CANCEL' (equals R-CLICK with mouse) to start again.

Table 3. PG and CPU for planetary structures

PIN	PG	CPU	Cycle Time	Storage	Cost
BCC	+6,000 MW	+1,675 tf	-	500 m3	???
LCC	+9,000 MW	+7,057 tf	-	500 m3	???
SCC	+12,000 MW	+12,136 tf	-	500 m3	???
ICC	+15,000 MW	+17,215 tf	-	500 m3	???
ACC	+17,000 MW	+21,315 tf	-	500 m3	???
ECC	+19,000 MW	+25,415 tf	-	500 m3	???
EX	-800 MW	-200 tf	300-1,800 sec	-	150,000 isk
SF	-700 MW	-500 tf	-	10,000 m3	600,000 isk
BP	-800 MW	-200 tf	1,800 sec	120 m3	225,000 isk
AP	-700 MW	-500 tf	3,600 sec	???	450,000 isk
HP	-400 MW	-1,100 tf	3,600 sec	???	900,000 isk
LP	-700 MW	-1,600 tf	???	10,000 m3	1,125,000 isk
Link	- 0.26 MW/km	- 0.36 tf/km	???	-	-

Let's say you placed a CC at your planet, got all excited about it, flew some fancy maneuvers and now can't see it anymore. Well, nothing easier than that. Either DoubleCLICK on the planet or click the 'HOME' button or re-enter the planet view mode. All of those actions executed on a planet (that you've already colonized) will spin, roll and zoom right on top of your CC.

HowTo install other planetary structures. Access the planet mode from the maximum distance your skills allow you to. Choose from the 'BUILD' pane the structure group you want to built from and expand it. Decide upfront where to place your structure as you can't spin and roll the planet during placement. Click at the entry of the structure you want to build (mouse pointer gets a pin symbol attached) and click again on the planet where you want the structure to be. Click the 'SUBMIT' button to finalize your building or 'CANCEL' (equals R-CLICK with mouse) to start again.

Building the structures is one thing, understanding how to handle them another, especially the pins. Each pin has some indicators that tell you something about it just by looking at it. The colored outer ring gives you information about the usage of the storage volume of that structure, like a circular gauge with darker color for free space and brighter color for used space. The smaller white inner ring signals the status of the structure. A blinking ring tells you that the structure is waiting for something. A steady, but broken white ring tells you at what part of the actual cycle this structure is at.

PICTURE of CIRCLE-TIMER

When a pin has no smaller white inner ring it just means that it doesn't cycle. A special case is the command centre with it's half blue half red inner ring, cause this one tells you how much PG/CPU the installed other structures on that planet are consuming.

Schematics, Links and Routes

work in progress.. upgraded links, 5 hops max

HowTo create Links

HowTo create Routes

Orbital Customs Office

work in progress.. Taxes

HowTo export or import products

Processing Tree

work in progress..

Production Math

work in progress..

depletion time vs source range vs extraction rate

Add something about max abundancy vs source rate.. it seems that when the colorbar is at most wide setting that white (100%) reflects 255u/min for a 5hour cycle. This means with the right setting for the colorbar at 78% you can actually see sustainability areas..

HowTo decide where to place extractors

FAQ & Changelog

FAQ

Changelog v0.2

- *error in Table 2 - raw materials for ice planet solved*

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