Orion's Arm: Modosophont

Version 1.1.1 - Created by Nuthenry2

Welcome to the universe of Orion's arm, a place which follows hard science and the power of compounding growth, where godly and indecipherable intellects with brains the size of solar systems called Archailects govern over 300 million stars. This is where you are not going to, instead you'll be going to one of about a trillion polities that lack any transophont oversight.

Have 1000 Choice Points to spend on this jumpchain, you'll be staying in this jump for 10 years from your point of view.

Origins:

There are over 300 quadrillion embodied sophonts and 3 to 4 orders of magnitude more of Virtuals, all with unique histories and cultures. As such there's no backgrounds to pick, instead you can just drop-in or choose something plausible and based on the perks and items you obtained from this jump, if you want an origin.

Age, Sex and Clade options:

With the wide variety of clades age, sex and gender are nebulous terms, in some clades you could be 80 and still a toddler or could have just stepped out of a nanofab as fully formed adult. Even the possible sexes you could pick a much wider selection, for instance it is common for Near-baseline human clades to have 6 biological sexes while the insect clade Tensepathraa have no less than 17 and that's not taking into account that sophonts can have inbuilt mechanisms to easily change their sex over time.

Ultimately whatever you pick is dependent on the first free purchase of the 'backup body' item as this will be your starting clade.

Location and Timeline:

The galaxy is a large place, pick or roll the general location and era you will be starting in for free with the specifics up to you or if you rolled both you get an extra 100 cp. The location will controlled by modosophonts, even in the inner sphere that is dominated by Archailects have buffer systems in between their empires controlled by non-aligned modosophonts and transophonts. The time you enter the jump can be from when humanity first took steps to settle off their birth planet to the current era which is just a couple of hundred years after the Oracle War. If you have trouble explaining your choices with an origin, you could've chosen to volunteer as a participant in the 'Reality Intertextualization Project' and ended up in another part of the universe or alternative timeline or you are actually in a bottled VR-world that is accurate to the quantum level.

Locations:

1. Inner Sphere
2. Middle Sphere
3. Outer Sphere
4. Periphery
5. Muuh Volume
6. Soft Ones Volume

7. Xeno Volume
8. Anywhere you like, even other galaxies

Eras:
1. The Interplanetary Age (2093-2368 A.D. / 130-400 A.T.)
2. The Solsys Golden Era (400-530 A.T.)
3. The Sundering (530-900 A.T.)
4. The Early Federation Era (900-1200 A.T.)
5. The Middle Federation Era (1200-1500 A.T.)
6. The Late Federation Era (1500-2100 A.T.)
7. The Inner Sphere Era (3200-5200 A.T.)
8. The Post Commonwealth of Empires (Post-ComEmp) Era (5200-7800 A.T.)
9. The Outer Volumes Era (7800-10,400 A.T.)
10. The Current Era (10,600 A.T.)

Perks:

You get 8 Neb Tokens which can be redeemed to get anything you want here for free, except for the 3rd tier of Megastructure which requires 2 Neb Tokens.

Child of the Transapients - Free

As long as you don't actively interact with 'higher beings', they will be content with just ignoring you and if you stumble across something you shouldn't have they will just shoo you away unless they are malicious. This stops if you're shown to be able to stand on your own against them, seek them out, refuse to heed their warnings or become a threat to them. After all, many transophonts have met their end after their victims ascended to a higher toposophic level.

Engenerator Guarantee - Free / -200

The topic of the soul has been debated since the dawn of humanity and even now it is still being debated, but as a jumper your chain and a large amount of your abilities may depend on having a soul. Now your soul can inhabit your mind, data, coding or equivalent and you can choose to follow along for the ride when transferring your mind to a new body, uploading yourself into a virtual world, downloading yourself into a new body, converting your mind / coding to a different format and architecture or the like.

This even works with mind backups and data packet in transit, allowing your soul to automatically jump to a recently updated copy of your mind or travel the lightway network, although there are two limitations; first is that your soul can only jump small gaps from spontaneous termination, so a backup cache needs to be within arm's reach and the second is that without a substrate to run your mind on, you will be in a thoughtless suspended animation with the timer on the jumpdoc pauses until you return to a proper substrate. This comes with an Instinct for when you switch bodies to know if the method will properly kill you, thus being forced to use an 1-UP or risk chain failure.

By paying 200 cp you gain the ability to create and design methods that can safely move the soul along with mind, mimicking the effect of this perk.

Near-Baseline Mods - Free / -100 / -200

Apart from a select few every sophont has a set of core biomods, which you now have as well. First and most important is microgravity adaptation mods, this lets you live without gravity indefinitely with no

drawbacks. The second is an improved immune and repair system, meaning you have complete healing which will slowly regrow lost limbs and remove scars with time, a powerful immune system which fight pathogens fast, implant compatibility, stops cancer, increased tolerance and repair for radiation, allowing someone to live in space without significant radiation shielding and extend an average human's lifespan to 400 years. And last but not least is modular genetics and the removal of deleterious genes, meaning that radical DNA changes can be easily made even in adulthood and you'll never suffer from genetic disorders. Your offspring will inherit a non-fiat backed version that will be watered down with each generation removed from you, unless their partners possess a form of the biomods which can be inherited. This applies to all of your forms with biological parts as well.

By paying 100 cp you gain the genetic engineering knowledge and experience to mass give out copies of the mods safely to any species even the adults with a multitude of methods and even easily modify other known gene mods for different clades or even aliens.

For a another 100 cp for a final total of 200 cp, you gain the fiat backed ability to give out a wide array of gene mod including the refined superior mods and this extends to more then just biological modifications with the ability to give out cybernetics or inheritable augmentations and with some work create the equivalent of fully understood gene mods or augmentations for those of an exotic nature.

Rejected Godhood - Free / -200

you have looked upon the gift of ascension and have walked away. Changing toposophic levels is more than just becoming smarter, it completely changes your view of the world. A loving father could instantly divorce his wife of many hundreds of years in an instant because from his point of view she has the complexity of a paper cut out or a sister moving 400 light years aways to study some obscure thing while leaving her family with the equivalent of a pair of jangly keys that will distract them.

Additionally note that ascension is a very dangerous process and is never a guaranteed thing, requiring them to shed some core part of their identity, seek out a hopefully benign mentor of a higher toposophic level or form a hivemind of multiple beings and ascend together, but even then the most carefully planned ascensions can go wrong and result in hyper-autism, hedonistic solipsism or personality death while the worst forms of failure can lead to blights or perversities. Whenever you have a chance to 'ascend', become 'more' or 'better' or 'metamorphosize', you can choose to say no and easily shut down any attempts with no backlash or side effects, even in the middle of the process.

By paying 200 cp you gain the passive abilities of continuously making tiny inconsequential seeming adjustments during an ascension process that could be the difference between success and failure and should the ascension process destabilise or risk your death, it will automatically abort the process and return to a previously stable condition.

Artificial Muscles -100

While Biological muscles worked for millions of years, eventually something better was invented. All of your muscular system, actuator system, servo motors, locomotive systems and similar is converted to a system of optimised bionano muscles, compared to baseline muscles maximum exertion of 0.4 megapascals your new muscles can produce a maximum force of 40 MPa. This effectively multiplies your muscle strength by 100 times to the point where if a baseline human could lift 100 kg over your head, with this perk they could lift 10,000 kg and a top athlete with a speed of 10 m/s could run at 100 m/s (223 mph / 360 km/h, this is neglecting aerodynamic drag), this assuming their bones and body can take the

strain and heat. Additionally artificial muscles come with the added bonus of being able to be powered with calories or electricity, Incredible durability, having a sub-millisecond contraction speed and being immune to decay and disease.

Although not as strong as ultimate muscles which can exert a force of 10 gigapascal, it lacks the downside of a massive energy requirement of 20 Mj per kg of muscle (about 4.7 kg of TNT) and the possibility of quenching which releases all that energy at once as an intense blue-white arc flash, followed by a fireball and blast wave. Unfortunately it does have its own downsides like how easily it can break unreinforced bones and that they create significant waste heat generated and have a high energy usage while using your full strength. You have full control over how much strength you are using along with overridable safety limitations to stop you from starving to death or dying from heat stroke, it will defaulting to a baseline human's level of strength which uses half of the power and produces half waste heat a baseline human would for an equivalent level of strength and the power needs and waste heat created will scale linearly the the level of strength used. This perks works and integrates well with cybernetics like your DNI and other muscle related perks, especially abilities that amplify your strength, And finally this perk applies to all of your forms as well.

Aphagist -100

The ultimate achievement of the fasting lifestyle would be to live on nothing more than water and the output of an internal fusion plant, unfortunately even the most advanced transapient tech can not achieve this. With a sufficient source of electricity (minimum of 7.5 kW hours per day for average human and abundant atmospheric resources), oxygen, water vapour, carbon dioxide and nitrogen are removed from the atmosphere and synthesised into organic compounds to feed your body, meaning all you need is some trace minerals and water daily. This applies to all of your forms as well.

Compubones - 100

Sometimes you just need more computing power on hand so why not convert your 'dead' or inert parts of your body into something more useful. Now your bones, exoskeleton, shell or the like excluding the 'active' components like your bone marrow, have been converted into bio-processors and reinforced with biologically-grown carbon nanotube and diamondoid materials.

These 'Compubones' do require energy to work in the form of calories or electricity and have the same efficiency and 1,000 times the data storage as a human brain along with a battery capacity for a day of constant moderate use, but due to their bio-nano nature they can run at much higher temperatures without issues to the point of being able to cook your flesh and immune to decay and disease. As such along with robust safety limitations which you can override, you have full control over how fast your compubones are running and what is running on them, as to stop you from starving to death, dying from heat stroke or any hider communities from free loading in your bones. This perks works and integrates well with cybernetics like your DNI, storing backups for 'Engenerator Guarantee', with other bone related perks and this perk applies to all of your forms as well.

Knowledge Modules -100

In the current era learning is mostly done with a DNI and skill mods, this can be a temporary affair with an installation or have it fully intertwined with an integration. You are indeed quite skilled at making skill modules of any type, converting them for different mental architectures, taking snapshots of many minds and sticking them together to form a module, turning large amounts of data and Information into a module and creating exotic methods to create or impart a module. Any that you make are easier and quicker to

integrate, lack any side effects and can even give someone skills and experience with using exotic abilities.

Polysophonce -100 (Multiple Purchases Allowed)

It can get lonely being alone, so why not get your very own friend that lives in your head. You now have a subordinate secondary mind living in your head, you may choose the form and function the mind takes and could be anything from a simple sub-sophonce autopilot or personal assistant expert system to a fully sophonce being. This mind is fully a part of you and shares the same soul thus can benefit from any familiar, soulbound and mental perks you have and can even control or automate any ability that you possess.

The mind can be later modified as needed although you should expect some resistance from a sophonce mind if its existence is threatened, so to settle any issues you can ‘export’ the mind into its own body or as a companion and leave a blank shell of a mind behind. You can also freely import it into an eidolon, fighting spirit, appetite demon, stand, fetch soul, soul bound Intelligent item, abilities powered by secondary ego or something similar. Note that exported minds do not get to keep any of the abilities that were imported into it and will be under the control of the new mind.

Savant -100 (Multiple Purchases Allowed)

You possess a small area of intellect that is elevated to the absolute limit of what a modosophont could achieve, this ‘spike’ of mental abilities gives you an instinctive and intuitive understanding of your area of expertise and significantly reduces the work hours needed to complete the same task that a baseline would need. This scales with your intelligence and will always be a significant advantage in your chosen area and can be toggled on and off at will.

There are a wide array of areas you can pick for your spike, like cold reading or pattern recognition, but there's a limit to how ‘wide’ the spike can be, for instance you can’t have a generic spike in physics but you could have one in the branch of particle physics and with tighter focus the greater your abilities are in the area. Your spikes are fiat backed to be safe, stable, cause no mental stress or psychological problems and do not affect your personality with your increased intelligence.

Transavant -200 (Requires Savant, Multiple Purchases Allowed)

Instead of merely having an ability at the level of the very best of modosophonts, you take a step into the realm of the transapients. This upgrades one savant ability of your choice to the lowest levels of a toposophic higher than your own level which gives you a level of ability that is quite literally unexplainable or Inconceivable to a lower toposophic level, even the smartest of people will not be able to comprehend or suffer mental degradation and breakdowns if they manage to glimpse the translogic behind your transavant spike. Even your self does not know the why and how, only that if you do a particular thing in a unintuitive and convoluted way that feels just right, somehow it works much better even if you have no idea about the hows and whys. This can be taken a second time on the same ability and boost it to a high transavant spike, along with being able to toggle between off, savant, transavant and high transavant levels. Note that the highest recorded spike of a modosophont is reaching into the high transapient realm which then suffered a complete psychological collapse 35 minutes later and had to be restored from a fresh backup and there are even rumours of archaisavants, but little is known of them.

Technology Module -100 (3 Purchases Allowed)

For each purchase pick three of the following categories of core technologies below, This will give you an Ultratech level in understanding the theory, use and construction of such related and overlapping technologies along with an instinctive understanding of the subject. Should you purchase all available modules you will become a Super Bright and thus have an Intelligence equivalent to 550 IQ (around S0.44) and the ability to eventually understand any modosophont level sciences, although this does not guarantee speed or ease nor does this increase to your Intelligence affect your personality.

Nanotechnology - Atomic-scale manipulation of atoms and nano scale devices
Biotechnology - Genetic engineering and manipulating biology to perform work
Computronium - The creation of computers and the supporting structures
Artificial Intelligence - The creation of AI with varying amounts of intelligence
Robotics - The application of using AI to control of machines and creating Vec bodies
Virtual Reality - The creation and modification of fully interactive digital worlds
Metric Engineering - The manipulation of space-time and creation of black holes
Sophontology - Study of intelligent beings, toposophy, culture, physiology and psychology
Spacecraft - Creation of spaceships, habitats and the needed support systems

Vacuum Adapted -100

You now possess adaptations that allow you to survive in a vacuum or underwater with up to pressure of 10 megapascals (about 1 km deep on earth) unaided for at least 4 hours and can safely enter and exit a hibernation state that lasts up to 3 years, this consists of five parts; First is a subdermal enamel armour which gives you protection from greater levels of radiation, micrometeorites, low-powered weaponry and as a pressure suit. Second is that all of your orifices and eyes are automatically sealed with membranes to protect them from decompression and boiling in the vacuum of space. Third is the ability to enter hibernation state that lowers your bodies metabolism down to a quarter of your normal rates, the fourth is the ability to enter an even deeper hibernation called cryptobiosis where the water in your cell are replaced with a special glass like biopolymer that protects your cells and lowers your bodies resource requirements down to less then a fraction of a percent, both states of hibernation will automatically wake you up if it can be done safely and cryptobiosis lasts definitely but after 3 years it becomes increasingly dangerous to wake up and may require medical assistance. And finally a considerable quantity of oxygen is stored in your modified blood and tissues. All these adaptations are purely biological based, can be integrated and improved easily with cybernetics and apply an equivalent to all of your forms as well.

Angel Netting -200

Angel Nets for most bionts within the civilised parts of the galaxy are synonymous with comfort, peace of mind and civilised space as they are created to protect sapient populations or important local subsystems and other valued things by trying to eliminate both accidents and deliberate attacks. Now you can design and make a robust self-expanding mycelium-like network backbone consisting of power and data lines, distributed computronium, sensors, communicators and power collectors to create a grid of powerful but limited omniscience. Of course this is the bare basics of an angelnet, so you can also integrate automatic protective capabilities using technologies like smartmatter or utility fog and can add secondary functions to the network like weather control, terraforming, paraterraforming, artificial soil, automatic recycling, creating infrastructure, virch interface, nano immune system or pest control (whether or not this includes undesirables or enemies is up to you). Naturally you are quite skill at creating, maintaining and modifying angel nets to the point where you can integrate things of a more exotic nature to apply to the protected

area of the network or even construct it fully out of exotic methods, although note that you'll never be able to protect against every possible scenario or danger as that is in the realm of the Archailects.

Mental Encryption -200

As technology advances, So does the ways to invade and manipulate your most important and final sanctuary, known as your mind. Your brain, mind and code that make up your being are now heavily encrypted, this straight up no sells any brute force mindjacking, memetic engineering, subliminal, nano infiltration, torture and any other manipulation to your mind, even by proxies or more esoteric means. The only way to start to manipulate your mind is to carefully study your neural architecture, break the multitude of encryptions that protects your mind and then alter their Method to take into account your protections. Of course what sort of security doesn't change their encryption keys and methods every so often, so all of their work could be for nothing if they take too long. Additionally as long as they did not fully defeat your protections, they will have a nasty surprise when you regain part of your agency when the encryption rolls over.

S-Learning -200

The Super-Learner modification is a very widely used one, and is found in sophonts of all toposophic levels all across Terragens space. By combining the learning speed of the very young with the complexity of adult into a 'two-layered' learning approach where any insight that is gained from a layer is then examined or taught to the other for more insight, the result is a much greater learning speed and comprehension than possible with the Individual parts, allowing the acquisition of all kinds of skill, major and minor, physical and mental thats goes beyond merely human levels of learning ability into fully optimised, highly efficient and literally superhuman forms of learning.

Tech-Taboo -200

A popular game where the object is to achieve the highest level of technology possible, while avoiding one or more specific taboo techs. As it turns out you are quite the master of the game, you're able to replace parts of a piece of tech with different parts to achieve the same effect. With enough effort you could do things like replace every part of dry tech with biological counterparts, this of course would not guarantee It would be effective or worthwhile. And with the right skill set you could use more esoteric means as replacement parts.

Tribe Mind -200

There are very few ways a modosophont can match up with a transapient, Fortunately you are not alone. You can now easily form a stable Tribe mind with any media, This is not a hive mind nor a collective consciousness but rather a tightly networked group who retain their individuality and work together for the betterment of a mental "tribe". With enough members the tribe will begin to show Transavant abilities, requiting about 500 baseline humans for low Transavant, 100,000 for high Transavant abilities and ridiculously large amount of over a billion for archaisavant abilities, for course you can always supplement the tribe with raw computations located on a server or something. Any Tribe minds you form have complex encryption to protect its members, fail-safe shutdowns and guarantee the members will keep their individuality and will be safe from any strain or backlash the tribe causes on its members.

Virtual Zombie -300

It took almost 2,000 years to invent AI with modosophont intelligence and without modosophont sophonce, but with them true post-scarcity became possible as modosophont labour was finally rendered unnecessary. You now have the skill, knowledge and ability to make Vots (also known as virtual robots or

expert systems) along with creating and designing ‘Philosophical Zombie’ versions of any of your creations, that will make it so they possess no will, agency or conscious identity of their own. Your creations are guaranteed to be stable and never develop sophonce, decay or breakdown even after millions of years of torturous use, if desired. Naturally this includes being an expert in creating and editing sophonce AI and brains as it's an important foundational skill in creating expert systems and is actually easier to make and edit. Additionally you have the ability to determine whether or not something is sophont, accurately determining their toposophic level to 3 decimal places and create toposophic mind maps of any being, hivemind, tribemind or Intelligence that you examine.

Tech Safeguard -300

The Techno-apocalypse and many other disasters were the result of nanotech spiralling out of control. Now any technology you make or design can have built-in safeguards to severely limit corruption, uncontrolled mutations, crossbreeding and unauthorised access along with self-destruct protocols, even working against more esoteric abilities. While this perk does not give absolute protection against attacks from transophonts or other powerful beings, it does however significantly limit the damage they could do and will offer complete protection from technology running amok from naturally occurring causes. Additionally should the worst come to be, you can fight fire with fire by designing methods to fight out of control, Invasive or hostile systems.

Deus Ex Machina -300

Somehow you did something that an Archailect feels indebted to you (or maybe it just wants a chance to examine other dimensions), once a jump or 100 years you can cash in a favour for its assistance in a task. There are some limits as its help will be to its discreet and subtle in nature, for instance it won't help you take over the world but will cause a sinister cabal to collapse, neogen a species if it calculate that they will be taking care of and treated fairly, claim protectorship of a group, provide a data packet with critical info, subtly manipulate scientists to discover breakthroughs in technology and attract investments to fund critically needed technologies or just hand you blueprints if it believe you're in a position to leverage them. Just remember that its help is sometimes so subtle that you will question if it even helped at all, only a being with intelligence approaching its own or powerful prescience powers could suspect its manipulations.

Items:

All items here respawn or restock after a month retaining all upgrades and modifications if lost, stolen, damaged, destroyed, used up or sold. You may freely Import similar items. When large items are stored away they are stored in a pocket dimension attached to your warehouse so not to use up all the space and when importing them into a jump you can choose the location and to have it be just dropped into the setting, given a history and backstory or have it be constructed ‘organically’ during the jump, additionally you always have complete legal ownership and master admin access to your items that cannot be revoked or stolen. You may purchase an item as many times as you like as long as it makes sense.

Backup Body - 1 Free and Mandatory / -50 each

Having a body is a bit nebulous in the future, some don't even have bodies, some keep the body of birth until death or have a new form matching the flavour of the week. From sophont trees and kelp to a hive mind of millions of ant and ten cubic kilometre entirely mechanical Vec. There are some limitations on what you can pick as you body will be civilian grade meaning no antimatter, ultimate muscles or military grade weaponry and the technology available limits you to the smallest ‘brain’ size that can be to support

basic sophonthood is about 150 cm3 or a cube 5.3 cm on each side, although you do not need to have your brain in one piece, in the normal locations or even in your own body.

The body will come with blueprints, DNA templates and software needed to maintain, lighty modify and reproduce the body along with the curious effect of being able to automatically transfer your mind and soul into it as long as you're in close Proximity to it or have a network connection. Each backup body will respawn after 10 years or at the start of a jump, which every comes first and post jump they can be absorbed to turn them into an alt form or remove them so you have an empty spare body to use. Your first purchase and Mandatory as this will be part of your origin is free with each additional purchase costing 50cp each.

Encyclopaedia Galactica - Free

This encyclopaedia provides an organised reference to summaries of Terragen knowledge, while it won't tell you about how to make certain technologies it will give you an basic Modosophont's understanding of the underlying principles. This mass of mostly reinforced data crystal comes in the shape of a book and will automatically update itself and in future jumps will download any open source encyclopaedia through the internet or their equivalences. It will respawn with data it has and never lost any, including out of date or deleted articles and previous editions, just remember that its quality and accuracy will depend on the source material.

Cybernetics Package - Free

As a citizen of the future you naturally possess ubiquitous augmentations.

DNI: This Direct Neural Interface links with your mind providing you incredible utility. You can wirelessly interact with computer systems, augmented reality, modify your mind and increase your intelligence, possess a built-in computer and many other features such as a mental backup cache and assistant AI. Comes with a knowledge patch for its operation already installed and can also be made to work with any data and communication format, truly this is the future's smartphone.

Air Dust: As 50% of the population lives near a vacuum, naturally they'll have a way to mitigate the danger. A blood based swarm of nanotech air tanks that can hold 1000 atm of gases that are capable of supporting a neb oxygen needs and remove waste gases as needed. Depending on exertion levels they can provide you with life support in a vacuum for 12 minutes to 3.8 hours and to recharge the air supply, simply breathe in an atmosphere for a couple of hours or hyperventilate for a few minutes.

Medisystems: A complex system consisting of a vast array of nanites each with their own specialisation and network of macroscale implants. While there are many features, the main ones are monitoring your body's health, an artificial immune system that's capable of defending against natural and synthetic sources, rapid tissue regeneration and blood clotting, neutralise and purge toxins, repairing and modifying DNA, minor body modification, fertility control and Biostasis (a safer and easier alternative to cryonic suspension). Come with a large updating DNA and immune database installed.

These augmentations are fiat backed to be unable to be hacked, usurped or be used to spy on you and against you. You can choses to remove them individually by willing it to happen and reinstall them or install on someone else by touching the package and willing it to happen. This package works with all types of partly biological bodies and will adapt to their needs, for example your Air Dush will store ammonia or methane if you need to breathe non-oxygen gases

Thinsuit - Free

A vacuum rated clothing made from nanomaterials that provides short-term protection from the vacuum, temperature, and radiation extremes of space. Consisting of a 1mm thick rubbery looking material that contains tactile sensors, nanobots for cleaning, low level magnetic shielding, nano solar cells and nano flywheels for power generation and storage. Being made from nanomaterials lets it flow in a semi-liquid manner to fit any form, it spends most of the time idle as an underlay for clothing but when needed it will flow to cover the wearers unprotected head and extremities, providing them with airtight protection in a matter of seconds long with a HUD display and coms systems.

Everyday Technology Package -50 each

The average citizen has access to fantastic technology, now you can purchase it too. Pick one of the following items to receive along with blueprints to make more. You may bundle together up to 6 purchases to apply discounts to them.

Computer Node: A solid cube of universal computronium 30 cm on each side (about 27,000 cm3), this raw cube of computer power has many uses. It can host about 128 baseline modosophonts, run a Virchworld or just use it for its raw number crunching power. While it can run passively powered by ambient light and cooled by air at a reduced power rating, To squeeze the full performance out of this node you will need to keep it cool and provide power and data.

Defender Multi-8 'Millennial Anniversary Edition': The DM8 is a gauss sidearm revolver that has eight self-rotating 10mm chambers which can house rotating cartridges, allowing the user to Instantly switch between ammunition types. Your's comes with a Auto-Holster that holds 80 cartridges and can quickly reload or change ammo for the DM8 in a matter of seconds, Gyro-Wrangler which can autocorrect your aim and avoid friendly fire, Duster Power-Coat which can absorb the high-recoil from cartridge and anchor you in place for extremely high-recoil rounds, 9 each of the cartridges stated below and can easily integrate and fire custom cartridges.

Needles: 2x40mm kinetic rounds with 16 to a cartridge, a muzzle velocity between 1 and 2 km/s and the ability to modify the rounds on the fly to choose between levels of penetration or fragmentation to ensure maximum efficiency.
Shock Darts: less-lethal taser rounds with 12 to a cartridge and can automatically tailor their voltage.
Sticknet: 4 round to a cartridge that expands to a sticky 50m web mid flight to disabled prey by attaching them to the surroundings.
IR-Laser: a laser that can out-put 22.5kw beam for 3.2 seconds, have a 1 km effective range which trails off at 7 km and have a variety of single, pulsed and continuous modes.
Duster: 10x5mm disks doped aluminium microparticles with 8 to a cartridge, when fired it will release a spread of microparticles with a range of 75m and 5kj of energy.
Hunter-Stingers: 4 mini-drone to a cartridge that has an explosive cap and gas propulsion system with five seconds of flight time and a range of 800m.
Boomshot: a microfission mini-missile initiated with a nanogram of antimatter, it has a range of 4km and a speed of mach 1.5.
Plasma Shockwave: two dense fusion fuel pellets that when bombarded by an antimatter beam will convert a pellet into directed super-hot plasma, this transfers hundreds of thousands of joules in kinetic and thermal energy to anything within a 20m range. This round has extreme recoil and is not advised to fire without exosuit support.

Desktop Nano and Bio Forge: This domestic universal combination autofabricator is similar to the ones found in the homes of modosophonts across the Terragen sphere, this particular model masses 100 kg and is 100 cm3 when packed down which expands to 1m3 when fully expanded. Under ideal conditions with all the needed feed stock it can construct at a rate of about 10 kg per hour of and about 1 kg per hour for biological living tissue and organism. It is also fully unlocked with all restrictions removed, has a built-in genestick and comes with an archive of commonly used everyday items, tech, food and organism templates. Feedstock not included and must be supplied or it can turn raw resources into feedstock.

Docbox: This 200cm x 125cm x 100cm cuboid container actually unfolds into an incredibly sophisticated autonomous doctor machine, of the same sort that replaced all hospitals and doctors surgeries in the middle interstellar age and is capable of giving the best medical treatment that an ultratech civilization can offer. This medical device is run by a powerful medical expert system and can treat almost any condition for any clade from simple infection diagnosis or treatment and cosmetic alterations to near-total body reconstruction from mass trauma, gather data for the inbuilt medical database or whole body rejuvenation for indefinite extending their lifespan, natural this means that it can also create bodies to be engenerated into from on board storage and be used as an exo-womb to give birth to new life. Additionally, as a significant portion of the Terragen sphere population possesses some sort of augmentation or cybernetics, it can fabricate, install and maintain them as well and can fabricate Smart Bandage (known as surgiconics), medical nanites and other medical supplies for external healing and the installation of implants. For it to be fully effective it requires power and feedstock hock-ups, but can keep a being alive in nano-stasis from ambient light and slowly heal them by recycling matter In a emergency.

Fastman Shoes: A pair of shoes that's made from smart matter which allows it to change its appearance and fit any size, But what makes it special is the ability to store power, charge any other devices and implants you have with smart matter cables, passively absorb light for power and automatically walk themselves to a power station to recharge. Additionally, you also get a belt, backpack and umbrella version with the same features.

Geckotech Gloves: Not quite gloves but rather 50 square metres of a nanomaterial that can form all sorts of shapes and split and recombine. But won't make this interesting is the layer of Class 2 Geckotech, this allows it to stick to nearly any solid surface of a force of 25 kg per centimetre squared. You can form it into all sorts of shapes, like gloves or knee pads and even layer it onto other items like your Fastman shoes, Thinsuit or use it as an adhesive.

Fan Cloth Paracopter: A backpack which contains deployable fan cloth wings, these are a mesh with miniature fans that's capable of providing a lift in a modest gravity. This backpack can be used for everyday transport or for sport, while smaller less capable versions are used for emergency escape from aerocraft or tall buildings. While it does use power for flight, it can actually generate power on its own by having the wind turn the miniature fans, meaning if you can find enough thermal updrafts you can stay in flight indefinitely or anchor it to form a temporary power station.

Light Lander: This single stage small lander craft is capable of safely launching into geostationary orbit and returning from pretty much every planet with a gravity of under 5g while carrying 3,000 kg of payload weight, possibly reaching the local moon if you cut the payload in half. It has an expert system AI pilot and uses a solid core engine that works by heating up a tungsten honeycomb mesh with either antimatter or monopoles then a reaction mass of hydrogen is heated by the core and expelled out of a rocket nozzle. Unfortunately due to the fact that fuel makes up a significant chunk of the cost of the craft, it does

not come with any and you'll need to supply your own monopoles or anti-matter if you wish to make use of it.

Nanoflex Smart Paper: Made from a large number of tiny, triangular tiles linked together by nano motors and connectors which allows it to disconnect and reconnect parts and morph itself into many shapes. Each triangle has its own processing power, power storage, display, sensors, wireless networking and speaker/microphone which gives it the ability to display text, pictures, video, and games making this the Kindle of the future if an DNI is the smartphone of the future. You'll receive 150 square metres of the stuff.

Network Mesh Nodes: you have 10,000 small cubes that are about a 1 cm on each side, when Scattered they will act as nodes to form an ad hoc mesh network. Each node has an array of communication methods, including radio, laser, camera, microphone and chemical messengers along with a folding antenna, solar and sensors array and extendable legs with geckotech feet. When spread out the mesh network can cover quite a large area as they have a minimum omnidirectional range of a kilometre in a crowded habitat and can cover part of a solar system if they have direct line of sight for laser communication.

Omnitool: This device is made from smart matter with a huge amount of reconfiguration, which gives it hundreds of different functions. Basic functions consist of simple mechanical actions like hammering, cutting, sawing, screwing, drilling, milli scale manipulation, etching, carving, scrubbing, wiping, planning, bracing, lifting, forming containers and more advanced tools like lasers, plasma cutters, voltmeters, magnetometer, spectrographs, RADAR/LIDAR measurement, chemicanalysers, chemical synthesisers, ultrasound emitters, genesticks, mechanosynthesis annealers/disassemblers and many more.

Pocket Fabricator Watch: This smartwatch is actually a portable fabricator, when idle it will act like a smartwatch and provide additional computing power for devices like an DNI but when needed it will split the casing in half and inflate a 10 cm3 fabrication chamber. Due to the limits of modosophont technology it's fairly limited in speed of creation with a construction rate 10 grams per hour under ideal conditions with plenty pure feedstock and not accounting for the time it needs to reconfigure itself, and its limited storage space is about 95% full of the schematics and software need to build and run common everyday items and gear for survival situations. While it seems limited in use, with enough time and patience you can rough it out in some pretty bad situations or kick start the local tech level.

Synano Soil: You may think that to grow plants you just need to put them in the ground, but you'll find that a habitat or newly terraformed planet will lack the required complex chain of well established specialised organisms to support any plant life. Fortunately with the invention of artificial soil this is no longer an issue, this quasi-colonial organism will act just like normal soil but with the added bonus of storing water and nutrients as needed, removing toxins and even injecting water and nutrients straight to the roots of a plant. Your strain of artificial soil consists of both the more natural biological parts and Mechano parts which increases efficiency, lowers the needed mass, can use hydroponics or aeroponics like systems, does not require any existing biosphere and can fabricate biological, mechano or synano plant seeds from a library to be grown in situ. You get enough soil to cover 1000m2 of growing space.

Thicksuit: Unlike a thinsuit, this piece of gear is made from thicker material along with having a solar sail, photovoltaic array, strength amplification and a bionano system to recycle your body waste. In all this is designed to provide the wearer with protection from the hazards of space for several weeks at a time and up to 3 years if the user enters stasis.

Utility Smart Matter: A swarm of micro robots that work together to exert force on the local environment, display images and transmit information between each other. There are 3 main types of utility matter, Fog which is used to act as gravity, provide locomotion in microgravity and as a temporary avatar for virtual beings. Fluid which can form shapes from the liquid it's suspended in and as a shock absorbent gel. Sand which can form buildings and can be used as an abrasive to scrub you clean. You get 1,000L of each of the 3 types in a compressed storage form and will automatically replace any worn out or damaged bots.

Pet -50 Each

Owning pets is an activity that is quite common among intelligent beings in the Terragen Sphere, in fact there are a huge variety of possible pets especially when you take into account all of the natural, genemoded and build species. You may pick any sub-sophont that is intended or is modified to be a pet that is made with a maximum level of ultratech technology and yes you can have a sub-sophont human. The pet will always be sub-sophont unless they are imported as a companion that's sophont itself, possesses various safety instincts for living in a modern world and will come with care supplies and a month's worth of food. Additionally your pet can be freely imported into any other pet items or sub-sophont companions.

Energy and Mass Allowance -100

The economics of over 300 million star systems is complex… very complex. But fortunately one thing is universal, until someone figures out how to create matter or energy Ex Nihilo they will alway have at least some value. You will receive a monthly stipend of 1,000 kg of any baryonic matter on the periodic table and a million megajoules (277.8 MW hours) of energy, both of which will be spontaneously created when needed and will appear when and where it is needed, like in an auto fabricator, bank, stock market, powering machinery or nearby in a box. Each purchase doubles the matter and energy you receive each month.

Heavy Lift Vehicle -100

Sometimes you just need to lift a blue whale into orbit and drop it off on a local moon, now you can with this behemoth of a SSTO craft. Using its 8 huge solid core engines powered with either antimatter or monopoles it is capable of launching from any planetary body with a gravity of under 45g into high orbit while carrying a payload weighing 250,000 kg (as in what the mass would weigh when affected by the local gravity). By reducing the payload or refuelling on route the vessel can transfer and land on the local moon, return and land in a different stop on the planet or can fire up its auxiliary beam core engine to transfer to another planet in the system if you don't mind a nearly year long trip at the longest. It comes with an expert system to pilot it and enough monopoles and reaction mass for a single launch with a payload at the maximum capacity, all you need to do is find a suitable launching place and figure out how to package a blue whale and the needed life support systems.

Interstellar Singleship - 100

This small interstellar craft can be operated for long periods of time by a single individual and consists of a crew cabin connected between two engine modules and thick plume shielding cones with a long teather. Propulsion is provided by the leading engine which drags the connected cabin and trailing engine with it, slowing down is as simple as firing the trailing engine and deploying the magnetic sail brake. Each engine module is powered by a beam core conversion drive with the output being split between 3 magnetic nozzles to provide stability and thrust vectoring, an engine outputs about 1.1g of continuous

thrust over a long periods of time and can run in an antimatter fuel mode albeit with a tenth of the thrust, additionally monopole or antimatter laden fuel pellets can be injected into the exhaust plume to allow a short burst of thrust up to a maximum of 50g.

This craft can travel with a cruising speed of 0.84c and sprint at 88% of the speed of light, to protect the craft from such speeds it uses a pathfinder laser to eliminate larger debris and ionise the interstellar medium, ablative carbon shielding and a cycling cloud of monopole infused nanotech devices that extends many kilometres in front of the craft to provide cooling and creates a magnetic field to gather ionised interstellar dust for propellant which can provide the craft with a vastly extended range of over 10,000 light years along with its self repair systems (assuming large stockpile of monopoles and a lower cruise speed). The cabin can accommodate and support 5 near-human biomorphs indefinitely along with being outfitted with a virch for entertainment, autopilot expert system, nano-stasis units, conversion micro-reactor for a back-up power supply and a nanofab that can construct food, small orbit-to-surface lander craft, high acceleration probes, solar collecting arrays, spore tech seeds to convert an asteroid into habitat, completely re-engineer the crew compartment and any recycle waste.

Monopole Cache -100

This small cough-drop size cache contains both north and south stable massive monopoles along with simplified and easy to build but inefficient blueprints and software for a breeder accelerator and a small conversion reactor.

What are monopoles you ask? Originally created by high transapients by improving monopole production by giving them mass and thus long term stability, after creation it was found it be Incredibly easy to duplicate more by simply colliding them together at relativistic speeds and soon became cheap to produce even by monosophonts, thus mostly ending the use of antimatter. While they can be used as magnets, propulsion, cheap passive magnetic screening but the most game changing part is when Injected into a plasma will catalysed nuclei into mesons and photons, thus turning matter more or less directly into energy.

As a bonus to prevent proliferation, you can choose to manually or set triggers to cause any monopoles, monopoles from fiat backed items and monopoles created from fiat backed sources to evaporate in a burst of Hawking radiation. You have an amount of monopoles measured in 10’s of milligrams but this is enough to run 5 of the reactors while breeding more with 20 accelerators and have a couple of milligrams spare. Just don't let north and south monopoles touch or they will mutually annihilate like antimatter.

Omnicraft -100

A enthusiast grade omnicraft is an all-terrain boat sized vehicle and Habitat and by that I mean ALL-terrains. Constructed of a combination of nanotechnic materials and smart matter that permits them to reconfigure themselves in a variety of ways, making it capable of sailing on water, crawling over land, floating along with lifting bodies and even as an in-system spaceship. This one in particular is a high end version and can launch from a planet, survive an Jovian atmosphere, be submerged deep under water and even make a trip to the local oort cloud, additionally it possesses a small conversion reactor for all of its power needs. Note that some configurations will require time to manufacture materials and machinery, additionally there are some things that cannot be reconfigured like monopoles which are used for propellant and need to be supplied from external sources.

Singlehab -100

A singlehab (also known as Space Cottages) is a self-contained space habitat designed for long term occupation for around ten to twenty sophonts. There are many designs from the string and buckets to create artificial gravity, Inflatable Bubbles, inside out Vacuum Reefs or just a conglomerate of random modular units. But Whatever you pick it will have the following features: comfortable living quarters with furnituring, radiation protection, life support, waste recycling, food production, self-maintenance and cleaning, autofabricator, air locks and docking ports, RCS thrusters, emergency escape pods that can enter an atmosphere, a small fusion reactor and all sorts of little things a hab needs. This does not include any transport to the hab, but a bonus due to its smart matter construction which allows it to radically reconfigure its structures on the fly, with all the smart matter needed seemingly coming from nowhere, although this effect is limited to the creation or deletion of 1m3 smart matter per day and up to a maximum volume of 100,000 m3.

Virch Node -100

Over 99.9% of all sophont beings that live in the Terragen Sphere do so in a virtual environment, also known as a Virch. You now have a sphere of computronium 75m wide that is dedicated to running a virch, It comes as an object that is barely above the background temperature of space and can slowly run a nearly undetectable small backgrounder colony with passive radioactive decay, ambient starlight and battery power or you can kick on the conversion reactors and run very hot to host about 4 billion of the smartest modosophont with lots of power left over for the virtual environments, this can be upped to 10 billion baselines if you cram them in with limited environments. It is also equipped with small and efficient beam core conversion drive for station keeping and interstellar travel which have 0.1g of thrust and can safely reach a max speed of 0.1c, a full suite of Virchbuilder programs for easy making virchworld without worrying about the finer details, very wide bandwidth communication array for networking neighbouring virch nodes together and as a bonus any being that get upload or download with it engenerator technology will have their soul guaranteed to be moved along with their mind and will keep any minds living in the node between jumps or when it respawns. Of course it is not only limited to hosting virtual worlds, you could use it for anything that needs a lot of computer power.

Asteroid Belt Mining -200

Asteroid mining is the most common way to gather resources and is the first thing to set up when Colonising a new star system due to ease with which resources can be accessed. You now have the mining rights to part of an Asteroid belt, Kuiper belt or Oort cloud (wherever is the most convenient for the jump) weighing about 1% of mass of Earth (about 65 million Gigatons / 6.5 x 10^19 Kg) that regenerates after 100 years. Curiously this patch seems to possess trace resources foreign to the universe, It will contain raw resources that could possibly be found or makes its way into space from previous jumps you've been here and updates with all future jumps. The rarity of the special resources is dependent on how much effort it takes to make it or its natural rarity, very easy and self multiplying resources would have at most a gigaton while the rarest of the rare could have just a flake of the stuff. Naturally it will contain an amount of Monopoles and a couple of tons of picometer size magmatter flakes, Although they'll be quite a pain to find and you'll be better off producing your own Monopoles for a reliable supply then relying on mining them.

Megastructure -200 / -300 / -600

There are an untold amount of vast structures sprinkled throughout the Terragen Sphere, So instead of listing hundreds you may just pick which one you want instead with the exception that it must be made with a maximum level of ultra tech technology (aka modosophonts must be able to make it). The

structure you pick may have its own ecosystem and infrastructure but will lack any sophonts with all systems being run by sophisticated and mature AI expert systems.

For 200 cp you are limited to the size of under 1,000km in it longest dimension, although there are two exceptions, first are long and thin structures like Beanstalk, light Orbital Ring (Not capable of holding up a city) and Lofstrom Loop are limited to planetary size instead while something like a road tree network is spread over a small continent. The second is that if it's capable of interstellar travel or reaching a speed of around 0.01c or faster its size will be limited to a maximum of 10km.

For 300 cp you can pick structures that compare the planets in scale instead of just islands. The rules are that you can pick any Megastructure in size like a McKendree Cylinder, with the exceptions that if it needs a star or an equivalent mass to remain stable or as an integral part of the design like a Dyson Swarm which costs either 600 cp, 2 Neb Tokens or a Neb Token and 300 cp.

Lightway and Beamrider Network -200

The webs of Light that spans light years across the void is the backbone of galactician civilization, can now you have your own segment of it. The communication part of your network consists of a web of in-system Laser Comms and Interstellar Laser Comms pointed at nearby stars, while the transport part consists of smaller system Boost Beam arrays and large Interstellar Boost Beam arrays. What are Boost beams you ask? They are stations that accelerate self-manoeuvring smart dust micropellets to nearly light speed. When these pellets impact a craft's magnetic plasma sail, they vaporise and transfer the momentum to the craft and accelerate it to a significant percentage of lightspeed, they also have pushing lasers for use with light sails. Your networks are guaranteed to be virus and hacking proof, 100% data Integrity and will play well with the ‘Engenerator Guarantee’ perk or similar abilities along with integrating FTL technologies.

This comes with all star systems within a 20 light years radius around your starting location (around 100 stars systems) populated with a network of both types under your control and can be expanded as needed plus each of your fiat backed planets, megastructures and star systems you own are covered by dedicated stations as needed.

Civilization Archive -300

This monolithic sphere approximately 2.5 m in diameter contains an archive of an amalgamation of Ultratech civilizations and can boot strap any polity to an ultratech level.
This contains but is not limited to technological, scientific, social, legal and language information along with biome, bluprint, clade, gene, software, skill patch, common games, viruses and vot templates databases. This archive has a dedicated librarian Vot that is designed to organise the data and to help you find what you need, can interface with a DNI to download skill modules and quickly access knowledge and finally you can add an infinite amount of data to be stored on the archive and fiat backed it against loss.

Polity Megacorp -300

The meaning of a government and a corporation is blurred as one could become the other and back again with time. Now you can select any sophonts, property and business that you control or have ownership over to follow you on your chain with the choice importing which parts you would like for each jump, unfortunately if anything or one is killed, damaged or destroyed they will not follow you to the next jump, so try not to get your civilization wiped out. Being with sophonthood will count as non-respawning

followers, processed a non-fiat backed version of both ‘Engenerator Guarantee’ and ‘Near-Baseline Mods’ perks and gain temporary ‘Pseudo souls’ if the jumps meta requires one. Due to the contents of your empire or business not being fiat backed any sophonts can leave if desired and businesses can fail but fortunately this ‘item’ gives some resistance to memetic pressure so your polity won’t be dissolved by larger empires. If you have or obtain another fiat backed empire, land, Infrastructure, business or group of followers, you may freely import and combine them into this item to provide them with the boons this item gives.

Companion:

Recruit Anyone - Free
Free! Anyone you want to recruit in this world is free to join you as a companion if they agree. This is a perk you can use in future jumps.

Pack Rat Spore - Free
A long time ago an aioid decided to live by the saying "live forever or die trying" and thus copied emself many times over along with trying every method to prolong their existence indefinitely. One of these spores has heard of your existence and enthusiastically decided to follow you on your jumpchain adventure, although do note that there will be large amounts of offshoot spores infecting the jump when you move on to your next jump.

Import -100
You can import a companion of your choice and they’ll get all the freebies, 300cp and 4 template tokens to spend as they like.

Drawbacks:

Ascension Embargo - Free and Mandatory
You are barred from Ascension or Transcension and locked to a modosophont level, even if you try you’ll just find that you hit a wall that you can’t break through.

Continue Mode - Free
By taking this drawback, you may retain any changes you have made as a result of your existence here into other Orion’s Arm jumps

Hider Infestation +100
There are many reasons why a group of beings would hide from the greater galaxy, some are just loners or isolationists, some are hiding from the law or transapients and some are just parasitic. Unfortunately for you everywhere you look there's a group hiding like cockroaches under a log, you’ll find them lodged in the crevices of your stuff and continuously stealing a small but noticeable part of your resources. Apart from the annoyances, they won't cause too much trouble unless they are disturbed or threatened then they can get violent.

Longer Stay +100 (Multiple Purchases Allowed)
You’ll spend 5 more years here. By taking it again 10 years will be added to your stay and will double each time after, up to a maximum total stay time of 10,600 years.

Death Cult +200
Ever since you first felt the last dying emotions of a being's final death rattle, you have become addicted to the feeling. You now have a constant urge to link your DNI with a victim's DNI to allow you to feel their feelings and then murder them. This pratices is abhorred almost universally and comes with the harshest punishments and even if you resist the urge DNI death cults will seek you out, either to be a willful participants or as sacrificial lamb.

Companion Lockout +300
All companions are sealed away and cannot be imported, any companions gained during this jump will not respawn until after the end of the jump.

Item Lockout +300
You can't use items from outside this jump in this jump. Or access your warehouse.

Power Lockout +300
You can't use powers from outside of this jump in this jump.

Transapient Bully +600
You did some to really piss off a transapient being and I mean really pissed off. This being plans to utterly destroy you and crush your will but it does not seek to kill you or modify your mind, its end goal is to make you willingly fail your jumpchain so it has a chance to take your place. Expect that every little thing that gives you joy in life will be tainted or destroyed, that tv show you enjoy will be bought out and modified into something that you absolutely hate but everybody else will enjoy it, your house will be seized and demolished completely legally while out of town for a weekend, your relationships will sour and fall apart, 'Accidentally' will get downloaded into cybernetic livestock. Your only relief is that it can't be too blatant, otherwise it risks drawing the attention of other transapient, but still your life will be an absolute constant HELL.

Ending Options:

What will you do now? Stay here? Go home? Move on to the next jump?

Notes:

Visit the websites for more info:
https://www.orionsarm.com/
https://tvtropes.org/pmwiki/pmwiki.php/WebOriginal/OrionsArm

Change log:
V1 - initial release
V1.01 - Spelling fixes, changed 'Ascension Embargo', 'Virtual Zombie' now includes designing, Clarified 'Savant', added perk 'Rejected Godhood' .
V1.1 - Spelling and grammar fixes, restructured some perks, 'Engenerator Guarantee' upgrade works with non tech methods, re-fluffed 'Rejected Godhood', added 'Interstellar Singleship', renamed 'Feedstock Cache' to 'Energy and Mass Allowance', added 'Polysophonce', added 'Compubones', now

‘Polity Megacorp’ can choose what come with you and can hold from importing things for a jump, added bundling purchases + ‘Desktop Nano and Bio Forge’ + ‘Lander’ + ‘Synano Soil’ + ‘Defender Multi-8’ + ‘Docbox’ to ‘Everyday Technology Package and upgraded the quantities of lesser items’, ‘Virtual Zombie’ can determine sophonthood and toposophic level, defined Superbright Intelligence to a number, added ‘Heavy Lift Vehicle’, modular genetics and T3 added to ‘Near-Baseline Mods’, import ability for ‘pet’, added ‘Angel Netting’, added ‘Virch Node’, shrunk ‘Civilization Archive’ to no longer the size for a 3 story house, expanded ‘Knowledge Modules’, added ‘Hider Infestation’, added ‘Death Cult’ added ‘Transapient Bully’, upgraded ‘Tech Safeguard’, added ‘Artificial Muscles’, rewrote ‘Vacuum Adapted’, Simplified the Neb Tokens.
V1.1.1 - edited ‘Artificial Muscles’, widen margins, ‘Savant’ no longer affects personality, added ‘Rejected Godhood’ T2

Thanks to Ibachmac with some help editing.

A.T. = After Tranquility, when Apollo 11 mission achieved touchdown on the Old Earth's Moon on july 20, 1969. 2098 AD = 130 A.T.

The perks that apply to any ‘form’ means that they will still work with any alt forms, power-ups, alt-modes or even if you get magically transformed.

Longer Stay = 5x2^x+5 | 100cp = 15 years, 200cp = 25 years, 300cp = 45 years, 400cp = 85 years, 500cp = 160 years, 600cp = 325 years, 700cp = 645 years, 800cp = 1285 years, 900cp = 2565 years, 1000cp = 5125 years, 1100cp = 10,245 years, 1200cp is over the time limit.

Near-Baseline Mods T3 will beagle to make the Equivalent of known biomods for supernatural beings like ghosts if you're able to significantly interact with them (Go, Cyborg Ghosts!). The superior gene mod Includes but not limited to things like: Hibernation, Cryogenic stasis adaptations, 800 year lifespan, Secondary backup organs, Bio-optimization (adapt to changing environmental conditions), Biological DNI, Needing only 3-4 hours of sleep, Multi-tasking, Pain as information, Innate calculation, Slearning and Super Bright level Intelligence.

Intelligence:
A baseline human is S0.3, Super Bright is from S0.4 to S0.9 although buying all the knowledge modules will make you a S0.4, with salvant you will be S0.999 In your selected area. The Difference between S0.4 and S0.9 is the amount of work hours a being can do in the same amount of time. The ‘Transavant’ perk scales with your toposophic level if you become a transapient in another orion's arm jump.

Knowledge Modules:
This works with different methods of copying skill onto someone and you can make skill mods of magic, but it won’t be able to give someone the ability to use it if they lacked the ability.

Philosophical Zombie:
If your capable of modifying / creating a soul, you can make false / Imitation ‘Soul’

Tech-Taboo:
Yes, you can make Magitech or Psitech if you can Imbue magic or Psi into objects. Or really use any other supernatural powers.

Angel Netting:
You can integrate Magitech / Psitech / Magic if you can feed it the needed power source or make it out of magic if you set up a self-sustaining system if you have the required skill. Or really use any other supernatural powers.

Terragen Sphere - The region of the galaxy that has been colonised or explored by Terragen sophonts, approximately 14,000 light years across with over 300,000,000 star systems under control and houses 78 quadrillion bionts, 310 quadrillion abionts and 30 to 3,000 quintillion virtuals.

Orion Arm humans an average of 6 sexes:
Female, Male, Hermaphrodite, Ferm (female with male sexual characteristics), Merm (male with female sexual characteristics), Neuter (no sexual characteristics or organs)

Terms:
Sophont - capable of self-awareness, including self-reflection and planning their own future.
Provolve - an animal gene modded to have sophonthood
Neogen - a sophont being that was made from scratched
Biont - biological based sophont being
Abiont - non-biological based sophont being
Virtual - software sophont being
Vec - a sophont robot
Angelnet - a smartmatter network designed to keep residents safe
Synsects - robot insects
Terragen - Anything that can trace their origin or ancestry back to Earth

Interesting clades to pick:
Albertosaurus sapiens - large dinosaur provolve
Alseid - Provolved tree
Anttechians - Ant based hivemind
Avivecs - Environmental Vecs that are designed to closely resemble various species of bird.
Bright Cats - Bioborg cat provolve with a lot of subclades
Calebs - Provolved Dogs
Changeling - Cyborgs who have biological bodies but an artificial processor
Enhanced Dolphins - Provolved Dolphins
Hellspiders - Vecs optimised for function on the inner surface of Suprastellar shells
Hian Dao - Omniborg (contains animal, plant, and robotic parts)
Homo Superior - completely remade the human form with the most advanced biomods
Methanoids - Methane-respiring cold-adapted extremophile humanoid neogen
Near-Baseline Humans - humans that been genemodded, one of the most common neb
Octoperiors - Octopus based superiors
Raffin - 1.5m tall rat provolve
Shogs - Gelbot-like vec clade
Synthetic Human - Human androids, with nanotech organs it near impossible to tell
Tilonians - Sailing yacht vecs
Ton-E-mite - Sophont termite mounds with the termites acting like theirs ears and eyes

Pets:
Babel fish - Air breathing fish that is used as a external DNI

Buildbug - a 30cm woodlouse made for construction of biological materials
Cybernetic livestock - an engineered presapient with an easily removable consciousness
Homo parvus - human subspecies created as pets or toys with limited sentience
Mamster - a Mouse / Hamster splice
Micromastodon - 1.5m tall wool elephant like being, lives in ice age conditions
Nanopet - a swarm of friendly utility fog, act like a personal angelnet
Spiderpet - a spider that's as long as your arm, popular in the Zoeific Biopolity
Velvet Snake - genetically modified leg-less ferret

Megastructure 200cp:
Akilaspek Tree Forest
Arcology
Atmospheric Thermal Energy Tower Plant
Aysee Tent
Bernal Sphere
Bubblehab (a floating city with is supported by heated hydrogen gas or vacuum balloons)
Conversion Giga-Power Plant
Deep Well Industrial Zone (Uses nucleosynthesis to generate heavy elements)
Dome Habitat
Dyson Tree Variant: Wagon Wheel
Freesphere
Intra-habitat (a habitat meant to go inside another habitat)
Interstellar Singleship (interstellar ship for 1 to 5 sophonts, can reach 50gs of acceleration)
Ocean Thermal Energy Plant
O'Neill Cylinder
Road Root
Solar Moth (Small private space ship)
Stanford Torus
World Ship (Huge nomadic interstellar ship, moves at 0.01 to 0.1 c, 10km max size)
Yggdrasil Bush

Megastructure 300cp:
Angelnet
Artificial Planet
Bishop Ring
Civilization Ship (like a World Ship but in the 100 km+ size)
Deep Well Industrial Zone around a gas giant
Ederworld
McKendree Cylinder
Planet
Ribbon World (low gravity ring habitats around a planet, can be combined with a shell world)
Sunline (Gas Giant with self-replicating fusion / conversion reactors to make an artificial sun)
Supramundane World (aka Shell World or planet with multiple layers)
Worldhouse (Nano or Bio versions)

Megastructures 600cp:
Buckminster Dyson Sphere (many McKendree Cylinders linked into a Geometric shape)
Dyson Swarm

Niven Clouds (Smoke Rings)
Rung World (over 100 McKendree Cylinders linked together around a sun)
Solar System
Suprastellar (aka Shell World but over sun)

Megastructure not allowed:
Anything containing magmatter
Banks' Orbital
Hypernode (disassembled star which turned into a mass of conversion reactors to replace it)
Wormhole Pair

Rough Timeline the beginnings:
91 - First Lunar settlement
196 - Completion of a space habit that hold 10,000 Sophonts
484 - The first interstellar colony ship was launch
621 - The Great Expulsion
1010 - Utility fog becomes commercially available
1200-1500 - Monopoles were developed
1750 - The first Terragen ascended to the third toposophic level