This game is a turn based strategy game. It is set in a galaxy crowded with intelligent species who have just discovered space travel. You control one of these races and your task is to conquer the galaxy. Your race is still located on your home planet, but you have an explorer craft, and a coloniser craft. You play by exploring the galaxy, colonising new planets, discovering new technologies and meeting/trading/fighting other players. Win by building a galactic empire protected by a kick ass fleet crushing all resistance beneath your superior fire power.

One major motivation in the game is to eliminate micro-management. Many similar games involve the gamers endlessly setting build orders on cities or planets. We decided to simplify the model to reduce as much micro management as possible. This allows you to spend more time on interesting strategy and battles. It also means you should be able to complete a game in one day (a small game in a few hours).

We have spent our time developing many different strategical approaches to winning which we hope will keep you playing again and again.

You can play single player or multi player. All games may have up to 6 players, any of which may be a human or a computer.

Starting a New Game
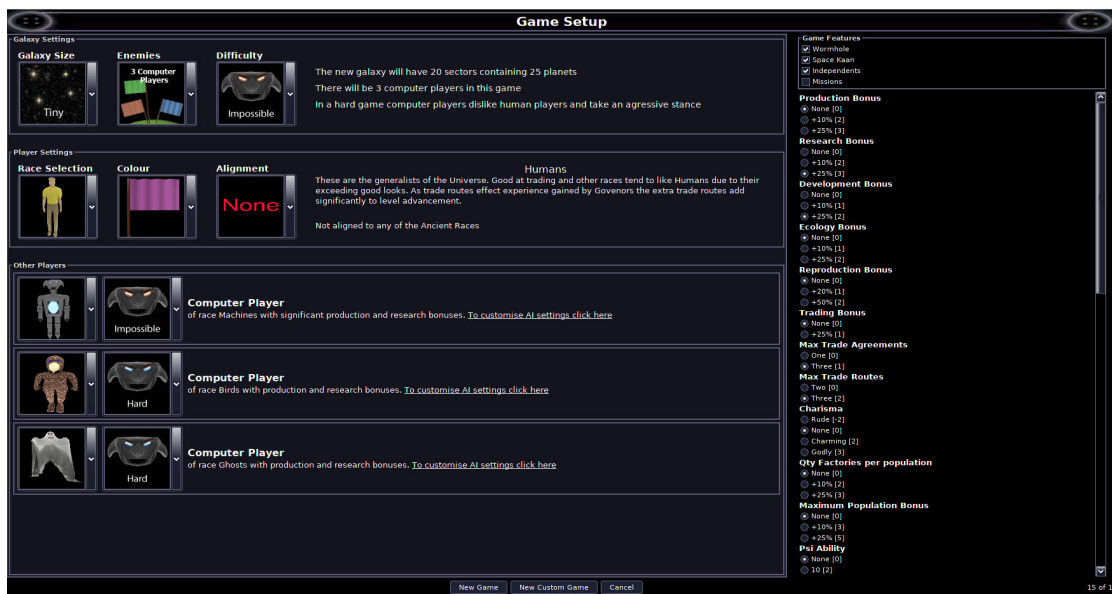
When starting a game you must choose a race. There are several predefined races from which you may choose. Alternatively you may design your own 'custom' race. On the Game Setup window, select the race you want. Each race has a description. On the right there is a list of all the options that make that races character. You may accept the predefined race characteristics or modify them to make your own 'custom' race.

There are other options you may choose such as;

- Select a race alignment.
- Specify the galaxy size.
- Specify difficulty level for user players.
- Specify bonus level for each computer player.
- Once you are finished press 'New Game'.

This will then generate a new random universe for you. You can now start playing your game.

Game Difficulty

Game difficulty and player difficulty should not be confused. On the new game screen you can set the player difficulty from easy to impossible. This will effect the bonuses this player gets and thus determine how quickly this player develops (and how hard the player is to beat).

Game difficulty effects the game's mechanics;

- Computer Players tend to dislike Human Players on hard games

- Maintenance Costs are higher on hard games

- Computer Players surrender to each other (unite) when attacked on hard games

- Computer Players may disguise attack target on hard games (by attacking a colony via another close by stellar object)

- Space Kaan, Worm Holes, Independent Players and Missions are disabled on Easy games (you can override this option)

- Human Player are given more money at the start of an easy game

Custom AI Settings

You can customise the computers AI for each computer player.

Foreign Policy

- Isolationist – Less likely to attack early and attempt to win the long game by out developing their opponents.

- Normal

- Expansionist – Attack early and use military to attack early.

Trade Policy

- Eager – More likely to engage in diplomatic trade.

- Normal

- Reluctant – Less likely to engage in diplomatic trade.

Player Personality

- On – Computer players will design craft to exploit special abilities in their possession.
- Off – Computer players will only design vanilla military crafts using direct physical attack weapons such as beam weapons.

Ancient Alignment

Each player may be aligned to one of two ancient players. See ancient races for details.

Enable Space Kaan

Should a Nebula release Space Kaan? A Space Kaan is a dragon that emerges from hibernation in a Nebula periodically or if a battle is fought in the nebula. Once a Space Kaan emerges from a nebula it wanders the galaxy attacking all players crafts in orbit around a planet until a player destroys it. They act as agents of chaos in early stages of a game.

Enable Worm Hole

Should the galaxy contain a worm hole? For details of what a worm hole is, see chapter worm holes and black holes.

Enable Independent Players

Should the galaxy contain Independent Players? An independent player is a player that will not take part in diplomacy or attack another player. They inhabit a single planet and will never expand however they will progress technologically, build planet defences and crafts to defend themselves.

Enable Missions

Should the galaxy contains missions? See chapter on spatial anomalies for details.

Dispersed Galaxy

If selected the solar systems will be more spread out. This changes the game dynamics by delaying contact with other races and making the colonisation of new planets harder. The construction of outposts are likely required to establish your empire. Later in the game, trade routes will be less common because they operate over shorter distances.

Planets and Solar Systems

The galaxy map is where a game starts. This window shows all the solar systems in the galaxy (game). Each solar system contains zero or more orbiting planets.

The galaxy map contains a control that allows you to zoom in or out. By zooming out the entire galaxy may become visible (depending on the size of the galaxy). However when zoomed out individual planets will not be visible. By zooming in only a small part of the galaxy may be visible, however individual planets can be seen orbiting their sun.

Crafts move between solar systems. You may give a craft a command to move by clicking on the craft then clicking on the solar system you wish it to move to. A craft will not actually start moving to the destination until the end of the turn. You may end your turn by clicking on the 'End Turn' button. When a craft is located at a solar system that contains one or more plants it may orbit the sun or any individual planet. You may move the craft between the sun and any planet by selecting the craft then clicking the target orbit (sun or planet). This will take effect immediately because they are all considered to be the 'same' location (the distance between planets within the same solar system is very small compared with the distance between solar systems).

You may view a planet's details by double clicking on the star / sun icon or the planet's icon. This will open the 'Solar System Window'. To view details of a planet click on the planet in the 'Solar System Window'. Note, only colonies (planets that are colonised) display information.
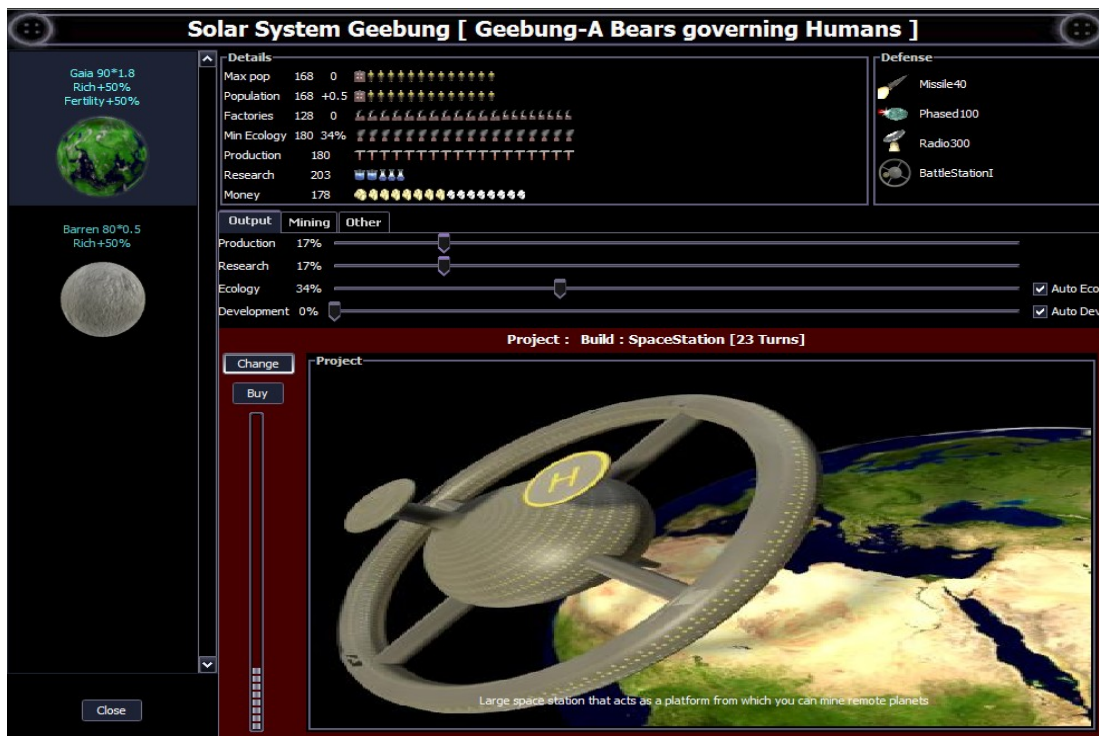
Planets are very important because they support your population and it is your population that constitute your workforce (build crafts and perform research). The quality of a planet is determined by a number of characteristics:

- **Size** - This is the size of a planet. Larger planets can support more people.
- **Terraform** - This is the quality of the environment on the planet. A good quality ecosphere can support more people.
- **Mineral Richness** - Large quantity of minerals on a planet can boost production.
- **Fertility** - Particularly romantic scenery can increase reproduction so populations grow faster.
- **Artefacts** - Abandoned technology can improve scientific research on a planet.
- **Valuables (Gold or Gems)** - Valuable resources can increase the income a planet generates.
- **Resources** - These are rare elements that provide empire wide benefits to any player lucky enough to have control of them.

The maximum population of a planet is determined by a planets size and terraform level. So a planet of size 100 and terraform level of 0.8 may support 80 population units. Note, player and leader bonus's can also effect the maximum populations of a planet.

The amount of production a planet produces each turn is based upon the quantity of people and its infrastructure. Machines can produce more than people, but the machinery on a planet needs building - this is called infrastructure. Planets produce infrastructure by allocating resources to their development. It is important to develop a planets infrastructure to make it productive. This game uses factories to represent a planet's infrastructure, so building factories on a planet increases its output.

A colony has four percentage ratios that represent the total quantity of the planets resources being spent on each area.

- **Percent Production** - This is the percentage of the planets output to be allocated to producing the planets project. A planet may have a single project at a time and all its development effort goes to producing that item.
- **Percent Research** - This is the percentage of the planets output to be allocated for research
- **Percent Development** - This is the percentage of the planets output to be allocated to

developing its infrastructure. A planet's Infrastructure are the factories and laboratories built on a planet.

- **Percent Ecology** - This is the percentage of the planets output to be allocated to ecological preservation and improvement.


If the sum of all four percentages is 100% then all the planets resources are being used. If the total percentage is less then 100% then resources remain and this is converted to money and added to your treasury each turn. If the total percentage is more than 100% then there are not enough resources on your planet so your treasury will be debited with the difference each turn.

HINT – At critical point turn off automatic ecology and development and allocate 100%. You do not need to reduce any other percentages, your planet will just be a net drain on your finances.

The production percentage specifies how much of the planets resources are used to build its project. The higher the percentage allocated to production the quicker a planet will build its project.

If a planet has a project, its production is added to the project until the project is completed. The project below is about 10% complete and will take a further 21 turns.
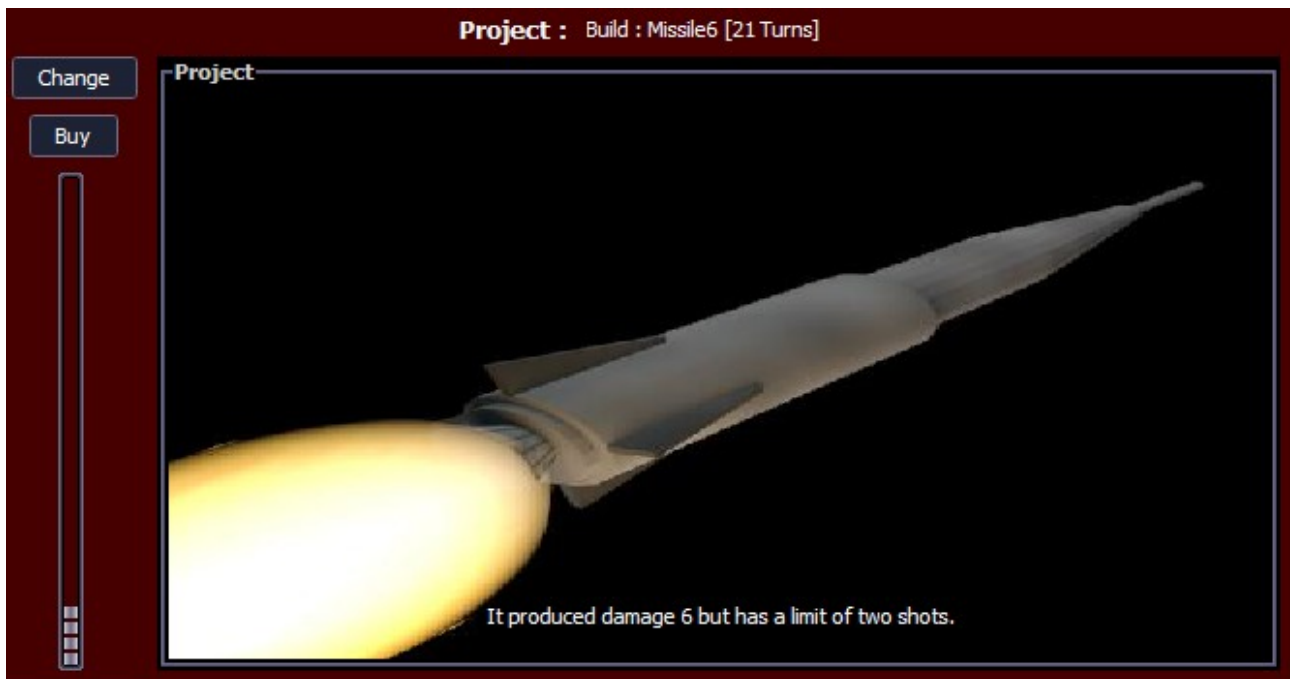
During the game you will be be able to research better factories that
- Produce more per factory
- Produce less pollution per factory
- Use less people to operate each factory so your population may operate more factories
- Improve the build quality of your crafts
- Influence the opinions of the galaxies population (propaganda / advertising)

All of a colony's factories are updated automatically once you discover a new technology. This prevents a player getting bogged down managing his or her resources (reduce micro management).

A Laboratory is a factory that produces research. The amount of research produced by a colony is determined by the quantity of infrastructure and people. Thus researching better laboratories can

increase your research output.

Unused production on a planet is converted to money and added to your treasury. However, if unused production is more than 5% some of the money generated will be wasted. Wasted money is shown in the picture below (shown in red):

The higher the percentage of unused production the higher the wastage. Wastage uses the following schedule:

- Unused Production 0% to 5% Incurs Wastage of 0%

- Unused Production 5% to 15%   Incurs Wastage of 30%

- Unused Production 15% to 25%   Incurs Wastage of 60%

- Unused Production 25% +   Incurs Wastage of 90%

Planets with varying terraform levels from poor to very good

A Planet's terraform determines if you can colonise it. When the game starts you have the technology to colonise planets similar to earth – you cannot colonise hostile planets. As the game progresses you will research new technology that will allow you to colonise hostile planets. However, you can never colonise extremely hostile planets (Lava Planets) – They must be mined instead!

Terraform 0.8

Can be colonised at the beginning of the game.

Terraform 1.0

Maximum terraform level at the start of the game.

When starting a game all players have the ability to terraform a planet to Terran norms (1.0). However as the game progresses you will learn how to terraform planets beyond Terran norms and thus increase their maximum populations (remember the more people a planet can sustain the more factories it can support and the more output it produces). Due to pollution you will always need to allocate a percentage of a planet's output to ecology, otherwise you will reduce its terraform level (pollute its environment). However, when you discover better terraform technology you will have

the option to increase your ecology output and thus improve the planets terraform level.

A planet may establish one mining colony on another planet. This represents extra terrestrial bonuses to research, production and finances. To create a mining colony you must complete a Space Station project on your planet then deploy it – see 'Transports Chapter' for details. Space stations are automatically upgraded with modules as they become available (researched). Note - it is the modules that provide bonuses, the space station its self is just a container. The modules available are listed below;

- **Habitat** - This increases the population. Mining colonies are hostile places to live so people are only willing to work there for a high salary. Therefore this module only has an effect if the mined planet's environment is mineral rich.
- **Ore Extractor** - Extracts ore from the planet boosting production.
- **Research Module** - Scientific outpost boosting research.

It is particularly good to mine planets with special resources because they tend to found on planets that are too poor to colonise. However ownership of the planet can be gained though the mining station and thus control of the resource.

Planets may be invaded during the game and thus change owner. However, the race populating that planet does not change. All bonuses on a planet are based upon the actual species populating the planet not its owner - thus a player may gain some of the advantages of another species. Objects built on a planet (such as crafts) are also operated by the population of the planet. Crafts like planets have the bonuses of the race operating them, not the race owning them.

The craft design window usually shows the performance of the craft design when the crew and owner are the same species. However, when opened from a planet whose species is different from the owner then the craft design's performance is for the crew of the planet's species.

As a leader your ability to influence the masses is very important. Generally speaking people believe what their leaders say. However with the aid of the media (propaganda) you can increase your influence in the galaxy. The galaxy map is split into sectors. Each sector is a region of space. Each sector is owned by the player with the most influence. Any planet in a sector owned by another player loses a percentage of its production due to 'cultural domination'.

Resources

Some hostile planets contain rare elements called resources. As these planets cannot be colonised, you must mine the planet to gain access to the resource. These provide significant player wide bonuses so the race to claim the galaxy's resources should not be ignored.

Bonuses are not always accumulative – that is, if you have multiple sources of the resource, it will provide the same bonus as having a single source of the resource. Boralium is accumulative – if you have two planets with the resource Boralium – you will get two boralium per turn.
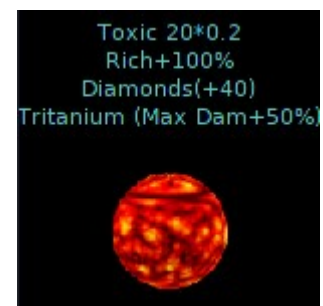
Resource Types:
- **Anti-Matter**   Reactant matter that evaporates normal matter on contact : Player Weapon Damage +25%. Bonus is accumulative.

- **Boralium**   Provides 1 boralium crystal per turn.   Bonus is accumulative.

- **Cloak Palm**   A fossilised plant extract that has natural cloaking abilities : Player Cloak Ability +150.   Bonus is accumulative.

- **Psi Fungus**   Rare fungus that enhances the psi abilities of a race once eaten : Player Psi Ability +15.   Bonus is accumulative.

- **Tritanium Ore** A strong and light element : All hulls can sustain +50% damage.   Bonus is accumulative.

- **Warp Crystal** An enriched and unusually pure form of warp crystal : All player crafts +50% movement. Bonus is accumulative.

- **Energy Spores** Microscopic life forms that can absorb energy. All player crafts +50% shield power. Bonus is accumulative.

How do I build a Mining Colony?
Create a Space Station project on the planet you wish to own the mining colony. This planet will get the population, money and production bonuses. When this project is complete your Space Station will be loaded onto a Transport craft and will be visible on the galaxy map. You can move a transport craft just like any other craft – move it to the planet you want to mine, then press the deploy button (on the craft menu).

You can also mine planets that do not have resources, but planets that are mineral rich make better mining colonies.

Black Holes & Worm Holes

Worm Hole

Black Hole

These are rare stellar objects found on the galaxy map – not all randomly generated universes will contains a black holes, but most will contain one. You can move your craft to them just like any other stellar object on the galaxy map.

Black holes are a great place to perform research. Any player who can deploy a space station around a black hole will receive a 10% research bonus.

A worm hole allows its owner to travel quickly to any planet within range. This makes it an ideal place to station your fleet to attack and defend. Control over the worm hole offers significant tactical advantages for its owner and represents a strategic resource to contest.

Spatial Anomalies

These are objects that appear on the galaxy map once you have discovered technology capable of finding them. When they appear on the galaxy you may navigate to them like any other stellar object. At the moment there is only one type of Spatial Anomaly – the space bubble and it requires the scanner 'Anomaly Sensor' to be visible on the galaxy map.

Technology

The technologies you have discovered determines your capability, for example, you cannot see enemy craft in space (unless they are in a solar system owned by you) until you have researched a scanner. As you research better scanners you can see further into space. There are several distinct fields of technology:

- Weapons – Technologies used to attack your enemies
- Hulls – These are craft designs used to hold weapons and other equipment
- Shields - Technologies used to protect crafts and planets
- Scanners - Technologies use to see into space
- Engines - Technologies used to move craft through space
- Computers - Technologies used to calculate movements in battle (plus other things)
- Specials - Technologies placed into a craft that do not fit any simple definition
- Factories - Technologies that determine the effectiveness of your colonies (usually by increasing production)
- Laboratories - Technologies that increase the research output of your colonies
- Bio technologies - Technologies that effect you planets and populations (usually by increasing the terraform of a planet so your populations can grow).
- Theories - Technologies that open up new fields of research but in them selves have no practical application.
- Humanities – Technologies that determine commerce and living standards of your population.
- Miscellaneous - Technologies that do not fit categorisation.

You can research one technology at a time. You can see what you are currently researching in the Technology Window, shown below:

Research Project Window

Technologies Available for Research | Technologies Already Discovered | Missed Technologies | All Technologies

Overview | Details

Technologies
hull , Galatian160
hull , FighterII
engine , Quantum100
computer , GalacticExchangeII
scanner , Radio300
shield , Phased100
weapon , NeutronBlaster
weapon , PrioVirus
weapon , Cowardice
weapon , Replica Beam
weapon , Droid Mine
special , ColonyModule6
special , High Energy Immunity
special , EnergyAmplifierI
factory , Assembly Line Matrix
biotechnology , TerraformingII
module , HabitatI
misc , Flox Planetary News Ser
misc , Advanced Planet Constr

Droid Mine
This launches a mine that is not cloaked targets a moves slowly towards the
target craft. When the target is reached the it detonates like a normal mine.
It has a limit of 2 shots. [4 Turns]

Researching a biotechnology called TerraformingIII [1071 of 3100]

Select   Cancel

On the left is the list of technologies available for research now. The player has selected Droid Mine as the current research project and is almost half way through researching this technology (shown in the progress bar at the bottom of the window). At any time the player may select a different technology to research, BUT, changing research projects has a cost in lost research effort.

This window is used to display more than the current research project. The tabs at the top of the windows allow you to select:

- **Technologies Available For Research Tab** – Displays the current technology the user is researching (if any) and the progress made so far. On this tab you can select a new technology for research.

- **Technologies Already Discovered Tab** – Displays all technologies the player has discovered so far in this game.

- **Missed Technologies Tab** – Races that are not creative (almost all of them) cannot research all technologies. When a new game is created a random selection of technologies are added to the player's missed technology list. The only way to discover these technologies is through trading, espionage or salvage. This tab shows all the technologies that you could research now if they were not on your missed list (An empty list does not mean you have not missed technologies, it just means you could not research the technologies you have missed at the moment).

- **All Technologies Tab** – This tab shows all technologies in the game, its a techopedia!

Crafts and Fleets
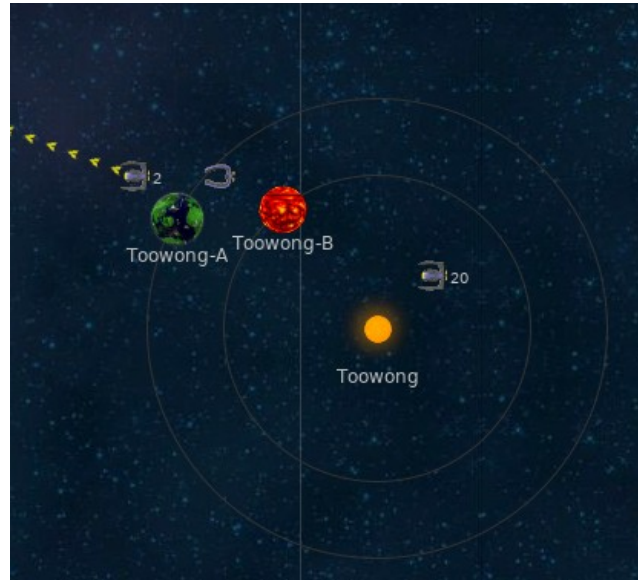
Crafts are visible on the Galaxy Map. In the picture above you can see a stack of 20 crafts in orbit around the sun, and three in orbit around a planet called Toowong-A. Of the three crafts in orbit around Toowong-A, two of them have been commanded to move to another solar system. Crafts with a command to travel to another solar system are drawn on the top left of the planet while the craft with no orders to move is drawn on the top right of the planet.

You may view the details of a craft by double clicking on a craft in the Galaxy Map.

Crafts may are used to colonise, invade (take an enemy's planet), explore and fight (destroy enemy populations and crafts).

Fleet

A fleet is a collection of crafts that share the same orders (move together). To create a fleet click on a craft then press the 'Join Fleet' button (you can hover over a button to see its tool tips that describe its purpose). You may add other craft to the fleet by selecting the craft then pressing the 'Join Fleet' button. Note a craft can only join a fleet if the craft and fleet are in orbit around the same solar system.

Fleet Way Point

A 'Fleet Waypoint ' is a location to send all new craft you build. If you have several planets building craft, it avoids you having to move the craft once they have been built to the same location to build a fleet.

To create a fleet waypoint, open the solar system window you would like to congregate your fleet. Select the 'other' tab. You will find buttons to set the waypoint as the sun or planet of the open solar system.

Craft Damage

If a crafts gets damaged but not destroyed in a battle – over time the craft will repair. However crafts repair much faster when in orbit around one of your planets with no enemies.

Designing a Craft
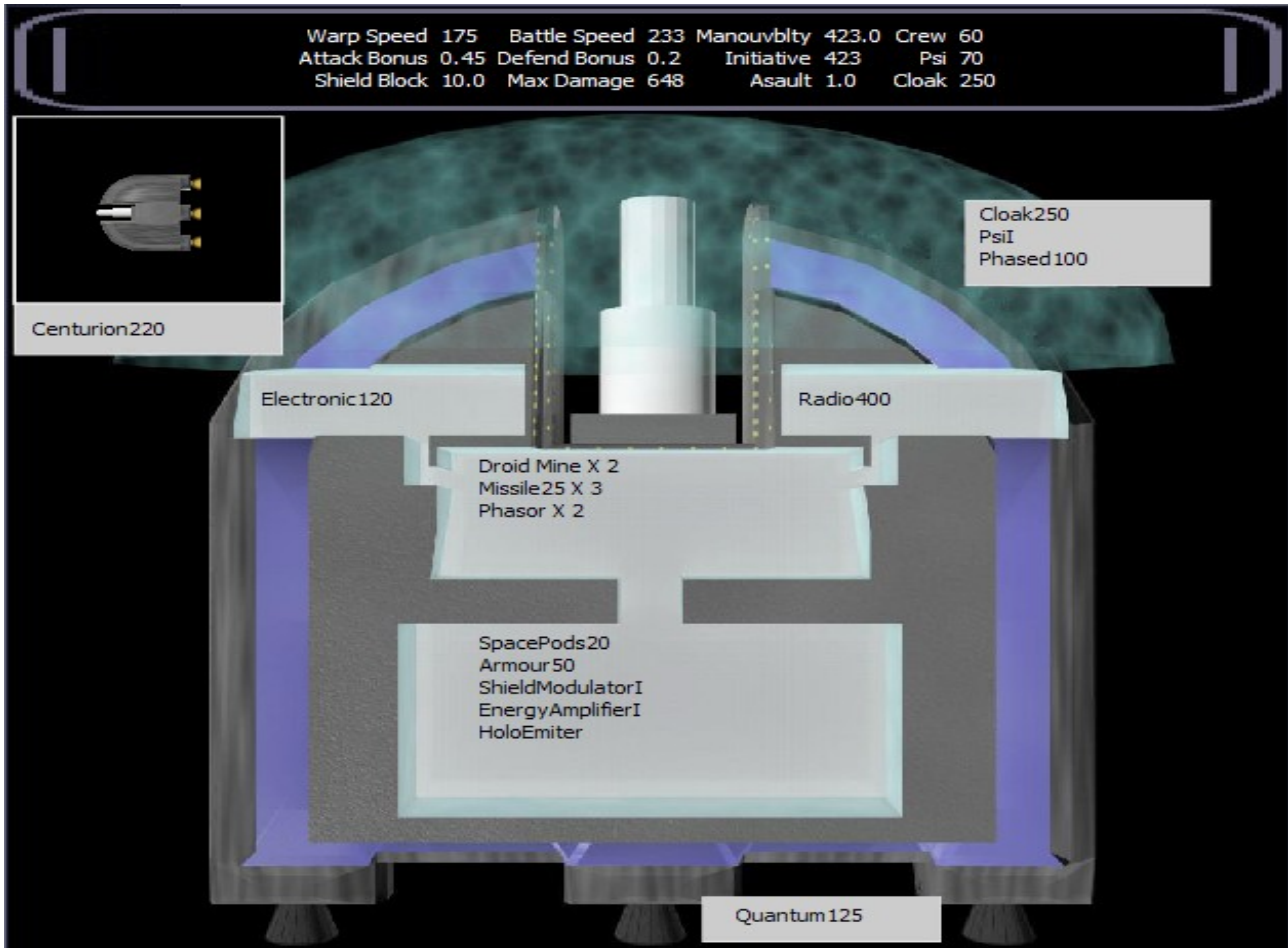
The game contains a large quantity of technologies that can be used to design crafts. Some have specific purposes such as the colony module and troop module. However many of the technologies are for designing military crafts. Producing a good craft design for a military is a skill that needs developing.

There are five factors that can determine how a craft performs in a battle:

- **Manoeuvrability** - A craft's manoeuvrability modifies the damage this craft inflicts on other crafts and how much this craft is damage by another crafts weapons. A crafts Manoeuvrability is determined by its speed and computers. Computers are equipment on a craft that control movement. Better computers produce smarter strategies in battle and improve manoeuvrability.
- **Cloak** - Some races have cloaking characteristics, as do some shields. Cloaked crafts are difficult to hit.
- **Psi** - Some races have psi characteristics, as do some weapons. This causes enemy crafts to miss turns and even surrender.
- **Crew** - When a craft enters a battle it has a full crew complement. However particular weapons can kill members of a crew. Once a craft has no crew it no longer takes any active part in the battle.
- **Build Quality** - Prototypes are often faulty by nature. In this game the first few crafts built of a particular type suffer from reliability problems. The first craft built of any given type is the least reliable and as a player builds more craft of a given type they become more reliable. Built quality may be improved using better production techniques. These technologies are called quality control can be researched during the game.

Crafts are designed to meet particular objectives on a battle field. It is these ideas that will define your strategy. A craft must have a hull and an engine. However a craft can also have many other

types of technology. Here is a list of all technology types found on a craft:

- **Hull** - The size of a craft hull effects its speed and internal space. Generally the larger a crafts hull the more space it has inside and the more stuff can be placed on it. Each hull has a maximum quantity of damage it can sustain before it is destroyed. Note when the hull is destroyed so is the craft and all its equipment.
- **Engine** - There are three types of speed. Warp speed is the speed a craft moves between solar systems (speed on the galaxy map). Impulse speed is the speed a craft moves on the battle field. Turning speed is the speed a craft can turn on the battle field. The speed is determined by the engine and the hull of a craft. Generally the larger a hull the the slower it moves.
- **Weapons** - Weapons inflict damage on target (enemy crafts). Weapons have a range of techniques to inflict damage on a craft. Each type of weapon is described below.
- **Shields** - These protect a craft from damage. Shields vary on the amount of damage they can block, and how quickly they lose their charge when attacked. Once a shield has lost its charge it has no effect. The maximum (starting) charge of shields also varies. Some shields also cloak (see cloak below). Some weapons can only work when shields are down (have no charge), other weapons target shields and nothing else. For example the 'shield drain' weapon transfers shield power from the target to a friendly craft whose shields are low. Shields are particularly important because they protect a craft from physical damage that effects their performance in the battle.
- **Computers** - Computers are equipment on a craft that controls its movement. Better computers produce smarter strategies in battle and improve manoeuvrability.
- **Scanners** - Scanners allow you to view crafts in the galaxy map which are not located directly in contact with you population or crafts. The stronger a scanner the further you can see. Some races have cloaking characteristics, as do some shields. Cloaked crafts are difficult to hit in battle. Strong scanners can penetrate a craft's cloak. The visibility of a craft is defined as scan strength - (distance + cloak) > 0.
- **Specials** - These are other items that can be installed on a craft. These vary so much that no description is presented here.

Different weapons work very differently. Here is a brief description of each type of weapon and how they work:

- **Beam** - These are the most basic form of weapon. They attempt to destroy a craft by damaging its hull. Shields a use to protect crafts from this form of damage. As you research better technology you will get better beam weapons that have longer range and higher damage.
- **Missile** - These are similar to beam weapons, they attempt to destroy a craft by damaging its hull. However, they move independently to the target and may be destroyed in transit. If they hit they do much larger damage than beam weapons, but, have a limited number of shots per battle.
- **Detonator** - This overloads the engine of the craft causing a huge explosion. The craft is destroyed but may be able to damage or destroy several crafts close to it.
- **Immobiliser** - These attack the engines of a craft. The shields must be down in for these weapons to work and they can render the target immobile (making it easy to hit - reduce its manoeuvrability).
- **Shield Drain** - These weapons target the shields. They drain energy (charge) from the target's shields and attempt to add it to the shields of a friendly craft.
- **Gravity Beam** - Gyrators target hull and by passing all protection of the shields. They use intense gravity waves to shake or spin the target craft.
- **Damage Bots** - Tiny machines that attach themselves to a craft and damage the craft at the end of each turn. For these to be deployed on a craft they must fired when the shields are down. However once deployed they inflict damage directly on the craft's hull by passing the shields.
- **Psi** - These target the crew and by pass all protection of the shields. They use intense psi energy to reduce moral of the enemy crew. They make the target craft miss turns in the battle and can make the target craft surrender. A Psi beam can be used to heal an enemies Psi

attack.

- **Transport** - These target the equipment installed on an enemy craft. They use matter transporters to transport equipment from the target to the source. They have no effect when the shields are up.
- **Biological** - These target the craft's crew. Shields must be down for this weapon to be effective but fired at a target cause a number of the crew to die immediately.
- **Plague** - These target the craft's crew. Shields must be down for this weapon to infect the target. However once deployed they kill crew at the end of each turn in the battle regardless of shield state. Plague also spreads through the enemy's fleet during battle as such its effect increase over time.
- **Troop Transport** - These target the crew of a craft. They allow an attacking craft to transfer some of its crew to an enemy craft in an attempt to invade (take control) of the craft. These can be used to 'heal' damage from Bio weapons and your enemies troop transports.
- **Holo Emitters** - These project decoy crafts into the battle in an attempt to draw fire away from the players real craft.
- **Spacial Distortion** - These produce a tear in space time in the battle field. This slows crafts down and weapons cannot be fired through it. It may be used to slow down crafts while attacking and gives more time for defensive forces to attack. It can only be mounted on a planet.
- **Time Warp** - These allow a craft to make a small jump back in time. In effect, once fired they allow the craft to move again. After a craft has moved and fired all its weapons firing a time warp weapon will allow the craft to move again and fire its weapons again.
- **Time Warp Beam** - These is an advance form of time warp technology allowing the time bubble to be projected at a target location. When fired at craft wreckage it may bring the craft back 'to life'.
- **Mind Control** - This weapon targets the crew of an enemy craft. It attempts to control the minds of the enemy crew and allow the owner to control an enemies craft for the next turn. This class of weapon does not always succeed and its success rate is effected by psi shields.
- **Berserker** - This weapon targets the crew of an enemy craft. It attempts to place the enemy crew in state of insanity such that they will attack the closest craft on their next move. This class of weapon does not always succeed and its success rate is effected by psi shields.
- **Cowardice** - This weapon targets the crew of an enemy craft. It attempts to place the enemy crew in state of fear such that they flee on their next move. This class of weapon does not always succeed and its success rate is effected by psi shields.
- **Droid Mine** - This weapon launches a droid mine into the battle field when fired. A droid mine is half way between a missile and a mine - it moves towards its target like a missile but it explodes like a mine when it reaches its target (or is destroyed) damaging everything close to it. It moves very slowly and a Droid Mine weapon has limited ammunition.
- **Re-target Device** - This weapon targets automatons such as missiles and droid mines. When successful it causes them to their target. When selecting the new target there is a tendency top choose a craft that is close (regardless of owner).
- **Replica Beam** - A very powerful beam that allows a player to produce a copy of another craft for the duration of the combat. This uses boralium each time it is fired which is a limited and rare resource.

- **Teleport** – Teleports the target craft to a random location of the galaxy map. Unlike cowardice it is guaranteed to work. It can also be used on your own craft.

- **Sleep** – A biological weapon causing the crew of the target craft to fall asleep – this causes the craft to miss a turn. Shields must be down for this weapon to work.

Weapons that use gravity such as the Gyrator bypass the shields. This can be a great tactical advantage. Shields can be a significant impediment to damaging a craft. However some players in the game are immune to them. Some weapons (Psi and Troops / Bio) can be used to take control of another player's craft. This can be a significant advantage over normal weapons. However, Some players are immune to Psi or Biological attack and damage from both can be repaired during battle by your enemy. Also most of these weapons require the crafts shields to be down. Weapons that require shields to be down (Transport, Bio, Immobilisers etc.) can work very well in combination

with a shield drain. However if your enemy also has a shield drain it can be a fairly non productive approach. Holo Emitters are a cheap tactic, however, they do require your enemy to be slightly naive. The first time these weapons are used on a player it will be successful, however, the more it is used the less successful it will be. Once a player has had holo craft deployed on it, there is a chance that holo craft will be detected (hence no battle deployment takes place) in the next battle. Missiles have a long range and high damage. They allow you to take a long range, high and short impact approach to fighting a battle. If you enemy is slow, you may be able to destroy them before they reach your position. Detonators allow you to build small and cheap craft which when destroyed can cause significant damage to the surrounding crafts. However it can be difficult to get them away from your fleet and close to your enemies - Holo emitters may be used to create decoys which helps a lot. There are four types of damage that may be inflicted on a craft:

- **Physical** - The generic term damage is used to refer to physical damage. This is shown on a health bar below the craft. The physical condition of a craft effects its performance. Its speed and the weapon damage is reduced as a craft's damage increases. Therefore crafts become less effective as they become damaged in a battle.
  There are a number of ways you may inflict physical damage on a craft. These are:
    - **Mass** - Throwing mass at the target craft, (like a bullet or a cannon)
    - **Energy Beam** - Producing a steam of energy directed at the target (like a laser)
    - **Gravity** - Produce gravity waves that by pass a craft's shields and damage the target by tearing it apart.
- **Psi** - This is shown on a health bar above the craft. No bar means no damage and once the bar reaches full length the craft will surrender. There are two sources of psi.
    - Ambient psi energy - This is the difference between your races psi ability and the psi ability of the enemy.
    - Psi damage to craft - This is caused by psi weapons producing psi beams directed at a single craft. This effects the crew's ability to perform.
  The effective psi damage to a craft is the sum of these to psi sources. Each turn the crew of a craft may freeze and miss the turn if the effective psi damage is 10 or more. When a craft is attacked and the effective psi damage is very high the crew may also surrender to the enemy.
- **Engine** - This is shown on a health bar above the craft. No bar means no damage and once the bar reaches full length the craft is immobile. As the bar increases the speed and manoeuvrability of the craft is reduced.
- **Crew** - The craft is inoperable when there are no crew – targeting a craft's crew can be very effective but the shields are an effective defence.

The damage that is inflicted on a craft by any of the technologies above can depend on another factors; including;

- **Specials** - Special purpose technologies installed on a craft. These technologies vary in purpose. Examples include, improve speed (and by consequence manoeuvrability). Improve shields, Improve weapon fire power etc.
- **Player Bonuses** - Players have innate bonuses that can effect performance on the battle field.

A player with better crafts or more crafts can destroy his enemies. It is not always obvious which craft design is superior but never the less it is important as a player not to lose the research race. If other players are more advanced than you then their technology can build larger craft faster and each craft has better weapons - you lose!

Battles
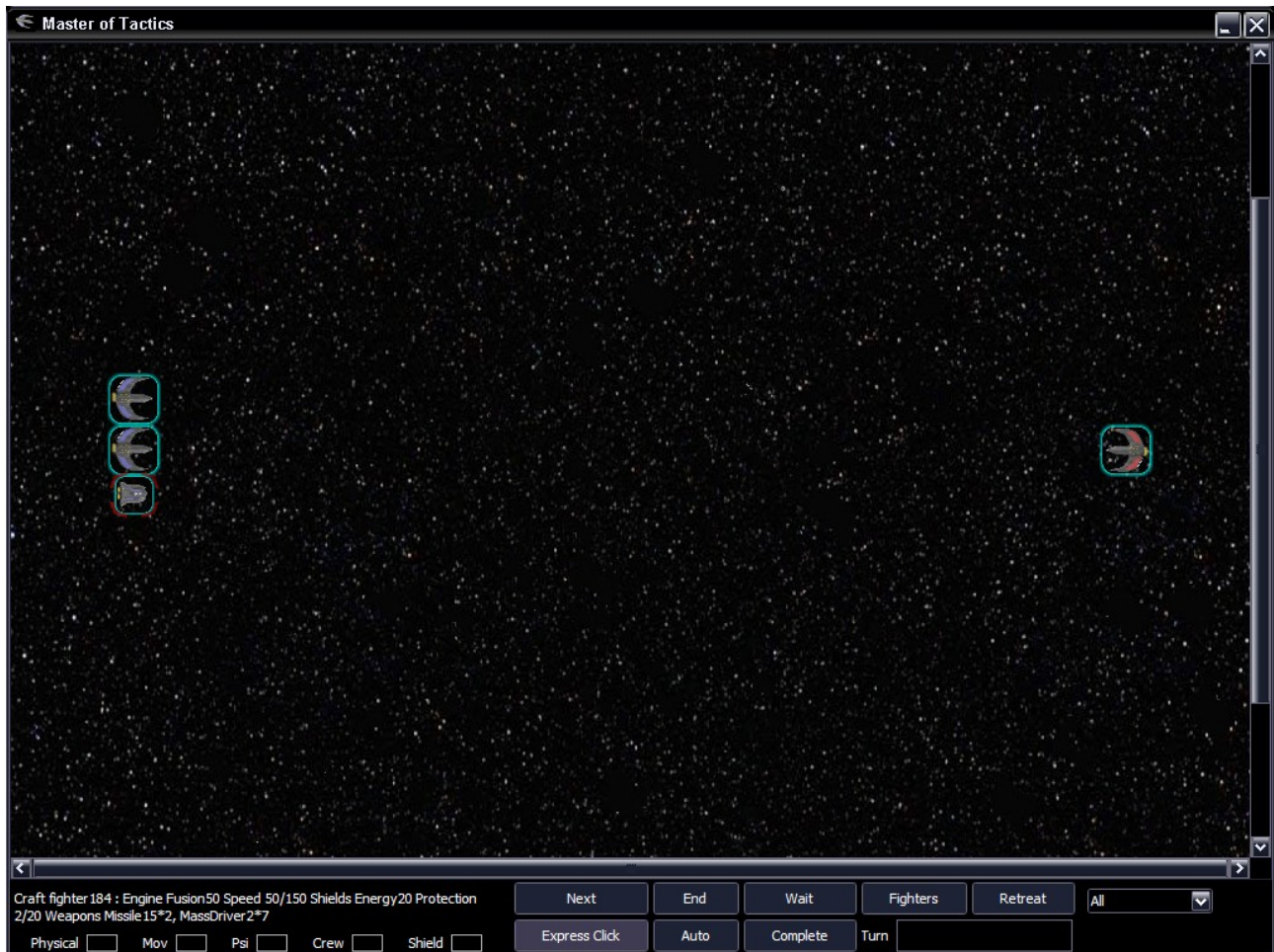
Crafts fight in battles at the end of a turn. You may start a battle by flying your crafts or fleets to a solar system then using the attack command. At the end of that turn a battle window will appear.

Usually crafts move in a fixed order. Generally speaking small faster crafts move first. What actually determines which craft moves next (or first) is the initiative of a craft. A craft's initiative is calculated using the craft's manoeuvrability plus any initiative bonuses from the player or specials the craft contains. Also, attackers in a battle have a small initiative bonus. Players can always reduce the initiative of their own crafts using the wait command. If a craft has been asked to wait it will be after all other crafts in the battle. Players do not have to move the next craft (based on initiative). Players can select another craft using the mouse and move it providing no other player's craft is of higher initiative and has not moved.

You may select one of your crafts by clicking on it with mouse. Once you have selected one of your crafts you may move it to a location by clicking on the location. You may attack an enemy craft by clicking on the enemy craft. Note - If your craft is too far away from the target location or craft your craft may not get all the way there in one move.

The right mouse button is used for craft selection. Right click on empty space to remove your selection. Right click on any craft to select it. Note, if you select an enemy craft you must select one of your own crafts before you can issue any battle orders.

- **Next** - If the next craft to move is not selected then the next button will focus on the next craft to move.
- **Wait** - Informs the currently select craft to wait until later in the turn to move.
- **End** - This ends the selected crafts turn.

- **Retreat** - Tells the selected craft to leave the battle.
- **Auto** - If auto is selected the computer will take control of your crafts and you can just sit and watch the show.
- **Mode –** There are three modes and express is the default. The move and attack modes are intended for expert players using a complex attack sequence.
    1. **Express**: Uses a single click to move the craft towards the target and attack the target. Pressing the end turn button finishes this crafts move entirely (movement and weapon attack).
    2. **Move**: Next click is used to move the craft and no weapons will be fired. If the craft has not completed its move it may move again. Pressing the end turn button finishes this craft's move only – the craft may still attack.
    3. **Attack**: The next click is used to specify a target for this craft to attack. The craft will not move. The cursor colour will indicate if the mouse location is within range and weapon firing angle. Pressing the end turn button discharges craft's weapons and does not effect movement.

    You can change the mode using the express key or by clicking the button.
- **Complete** - The complete button tells the engine to execute the battle in a instance. This should have the same outcome as the auto button but is immediate.
- **Weapon Selection** - By default all weapons are fired at the target. You may select an individual weapon using this control.
- **Fighters** - If your craft has fighters (in its fighter bays) then this will launch them. Fighter are very small craft that are launched from a mother ship (a craft with fighter bays).

If express click is not selected a craft move takes at least two clicks, the first specifies a location to move to. Once the craft has finished moving further clicks are interpreted a weapon fire instructions.

A craft cannot be moved on top of another craft and has a limited movement range. It is therefore normal for a craft be unable to move across the battle map and attack the target in a single turn. When your hover over a target craft to attack or a target location the green movement indicator shows the actual location your craft will actually move to. The red movement indicator shows where you are trying to move the craft.
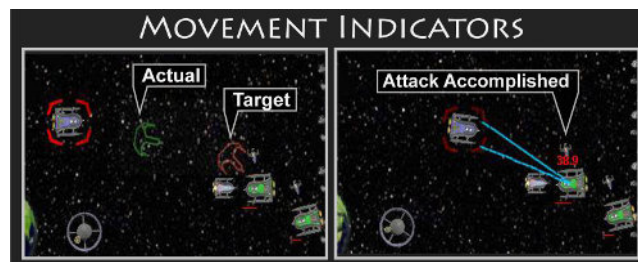
Key Bindings

n	Select next craft
c	Instruct currently selected craft requests computer to perform its turn
f	Instruct currently selected craft to attack the closest enemy (without moving)
t	Instruct currently selected craft to end it's turn
w	Instruct currently selected craft wait to move
r	Instruct currently selected craft to retreat from battle
SPC	Change to the next mode
e	Change to Express Mode
m	Change to Move Mode
a	Change to Attack Mode

ESC   Close the Battle Window (automate the battle).

?   Show these key bindings

Using SHIFT key

Select an automaton (missile, droid mine etc.) as the target instead of a craft.

Holding the shift key causes a click to prefer automatons (missiles, mines etc.) as the target. For example: if a missile is on top of a craft clicking the missile would normally mean move to or attack the craft, however, if the SHIFT key is pressed your click is interpreted as move to or attack the missile instead.

Using CONTROL key

Select a location as the target instead of a craft or missile etc.

If you have an craft selected, holding the control key down when you click and your craft will to fire weapons at that location instead of the craft. Weapons like spacial distortion and salvage beam must be fired at a location.

Using ALT key

Move Mode: Instruct your craft to TURN towards the target but not move.

Express and Attack Mode: Instruct craft to fire shield drain (only) at the target.

What crafts in a battle are destroyed they usually leave wreckage behind. This wreckage can be salvaged or if a time warp bean is targeted at it me may resurrected to fight for the remainder of the battle.

Any craft that has retreated from a lost battle may be destroyed. This is called being routing. While fleeing your crafts have been taken with little resistance.

If the opponents psi is significantly higher than yours then one of your crafts may not get a turn. Instead the fear symbol will appear on the craft. If this keeps happening try to research psi technologies.

If your enemy is cloaked one of your craft may miss its turn at firing weapons at the opponent. Instead of firing weapons the message 'No Lock' will be animated. If this keeps happening to you try improving your scanner technology. Also try to move a craft with scanners close to the cloaked craft so you can get a better weapons lock.

If a planet has an asteroid field this will appear in the battle. Asteroids fields reduce a crafts speed (while passing through them) and damage crafts as they pass through.

If a player has discovered the technology mine field then all battle located around that players planet will contain a number of mines. Mines are only visible to the owner but any craft that moves to close to one will cause it to detonate. When a mine detonates all crafts close by will receive damage. Mines use the same technology as the detonator weapon and the amount of damage they produce if dependent of the owner's engine technology.

Transport Crafts

Transport crafts can be built on a planet by selecting Transport as the project. Transports are important because they move colonists and important infrastructure around your empire.

When a Transport is in use it can be viewed and commanded on the galaxy map like any other craft.

You can view the quantity of free transports you have available for use in the status panel (bottom right of screen). If you build a planetary project that requires a transport, when the project is complete the transport will appear on the galaxy map and the quantity of free transports will decrease.
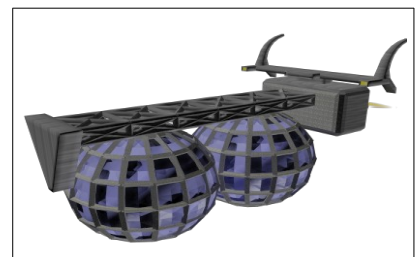
**Transports DO NOT appear in the galaxy map
unless they are in use.**

Projects that require a Transport:

- Outpost – Move the transport to a Sun and press the deploy button (on the craft menu). These act as fuelling stations to increase your craft range.

- Space Station – Move this station to a Planet or Black Hole and press the deploy button (on the craft menu). These act as mining colonies and provide bonuses.

Other uses for Transports:

- Moving Troops – In the 'other' tab of the Solar System Window you can load troops from a planet onto a transport. This transport can then move these troops to an enemy's planet and attempt to invade. To invade an enemy planet use the deploy button (on the craft menu) – this will open the Invade Window.

  You can see the quantity of defending troops on a planet using the Solar System Window. However, for enemy planets you will have to use espionage on the planet (see Espionage).

- Moving Marines – In the 'other' tab of the Solar System Window you can load colonists from a planet onto a transport. This transport can then move these colonists to another colony. To invade offload colonists use the deploy button (on the craft menu).

  NOTE – Planet populations grow fastest when they are half full.

- Building Trade Routes – Select a solar system and click Trade Route on the context menu. A transport will appear at the selected solar system. Move this transport to the other solar system and deploy the transport. A trade route will be established between the two solar systems.

The quantity of marines and colonists a transport can hold is determined by its capacity. You start the game with transports that can hold up to 25 colonists or marines.

NOTE – a Transport can only contain one Space Station, Outpost or Trade Route!

A Space Station or Outpost is by default 'owned' by the planet that build it – This is called the origin of the space station. Deploying a space station at a planet will create a mining colony for the origin planet. An expert player will understand different planets have varying strengths and use them accordingly. You will usually have planets specialising in production and others in research (maybe others in population growth etc etc).

How do I create a Mining Colony for a planet that has low production output (without waiting 100 years!)?

Deploying a space station at an existing colony is considered to mean re-base (change the origin) of the space station.

Build the space station on a planet specialising in production. Move the transport loaded with the space station to your research planet. The image adjacent shows the context panel for a Transport with a space station loaded – click the deploy command (shown in the commands section). As you cannot deploy a space station on an existing colony – this is interpreted as change the origin of the space station. Now move the transport to the planet you would like to be the mining colony of your research planet and deploy it.
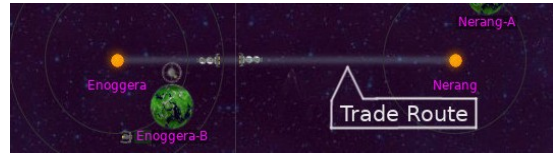
Planet Invasion

See Transports.

Trade Routes

Trade is an important part of an economy and an empires productive capacity. You can establish a trade route between solar systems that will increase the output of all planets in both solar systems. To establish a trade route the following conditions must be met:

- Distance between the solar systems must be less than your Maximum Trade Route Distance. Your maximum trade route distance is based on your technology. If you have not discovered any trade route technology, you will have a distance of 0.

- Each solar system has a maximum quantity of traders. This is determined by your player bonuses (your race abilities) and the technology you have discovered. Note – your capitol will always be able to have an extra trade route.

The race Humans are excellent traders and start the game with basic trading ability.

Trade routes require stability and can only be located in space you control (cannot pass though a sector controlled by another player). Should the control of a sector change or a planet in a solar system is invaded or bombarded and destroyed – the trade routes in the solar system are destroyed.

How to create a trade route – see Transports.

Ancients

The Ancients are races whose civilisation predate the players. As such they are very powerful. When starting a game you may choose to align yourself with one of the two ancients.

When aligned to an ancient player you get gifted special technologies (not available otherwise). However, being aligned to an ancient race does restrict your freedom during the game. If you declare war on another player with the same alignment you will incur the wrath of that ancient (They will send a marauding fleet – with significant fire power). Ancient alignment also effects your diplomatic relationships.

NOTE – Wrath fleet are not dispatched on easy levels.

Gifted technologies for Water are:

Cloaking Space Inverter

Technology 'Cloaking Space Inverter' which causes a localised space inversion raising cloak levels of all craft by 100

Station Missile Base

Missile launcher mounted on all battle and space stations once discovered

Gifted technologies for Air are:

Psi Enhancement

Psychometric Genetic Manipulation that has increased your race's natural psi ability by 10

Dimension Chamber

Provides an extra 40 space in any hull into which it is installed

Each race (gamers get to choose their alignment) has a default alignment which is used by computer players.

Ancients do have a home planet. However they have a large powerful fleet protecting it. It is best to stay away from this planet until the end of the game when you may wish to conquer it.

Leaders

Leaders are particularly gifted individuals. They offer their allegiance to players. When a player accepts the offer of a leader the leader will bring a unique set of gifts that provide bonuses. Leaders are rare, and it can take time before you get any offers of help. However they do tend to offer their services more frequently once you start marking your presence in the universe. Fame that attracts leaders tends to come from fighting battles (winning or losing). So start fighting early!

There are two types of leader;

- **Generals** – Lead fleets and provide bonuses on the battlefield.
- **Governors** – Leader solar systems and provide bonuses to planets in the solar system.

A leaders abilities improve with experience. Experience can be gained differently for each type of leader;

- Governors gain experience over time but gain significant experience by colonising planets and managing trade routes.
- Generals gain experience by fighting battles (losing causes a general to gain much more experience than winning!).

Diplomacy
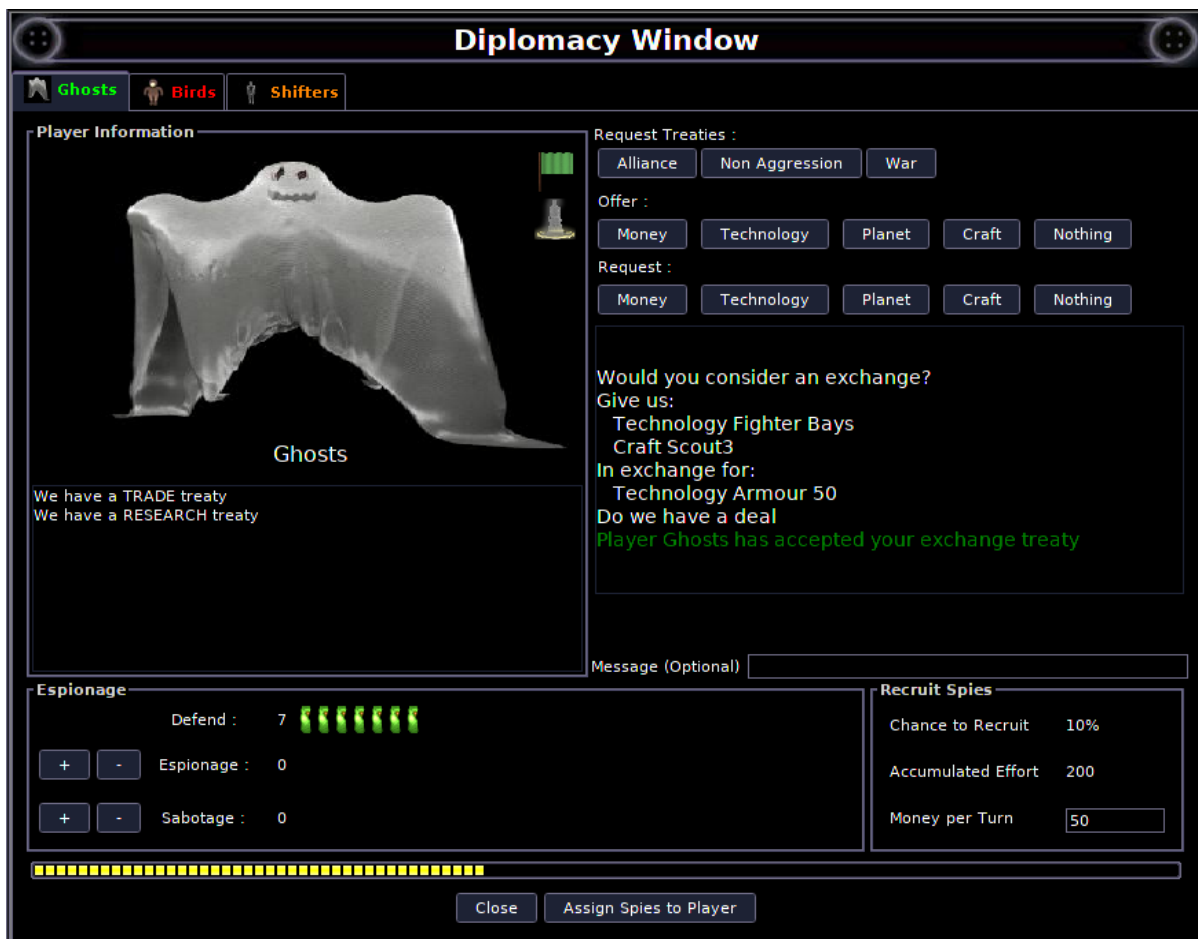
Diplomacy is a very important part of this game. Your diplomatic skills will help you in a number of ways:

- **Time to expand** - Your relationship with another race effects the likelihood of you being able to form treaties such as alliances, non aggression pacts, and peace.
- **Trade Routes** - A trade treaty provides both parties income.
- **Research Treaty** - A research treaty allows a player to research technologies with another player.
- **Swap Assets** - You will be able to swap assets to get technologies you need or even demand them.

A race's diplomatic status with another race is determined by a number of factors:

- **Game Level** - The harder the game the more computer players tend to dislike human players
- **Charisma** - Some races are generally less likeable that others
- **Your Actions** - Spying, sabotaging, giving, and trade effects relations

Your actions in the game cause your relationship to be effected with other player in two ways. There is the short term emotional reaction which is severe but dissipates quickly. However, your actions are not forgotten and and effect your relationship for a period of time. You may view the list of actions affecting your relationship in the diplomacy window.

You do not usually get the opportunity to discover every technology in the technology tree. In any one game there is likely to be some very important technologies you do not get the opportunity to discover. You can gain these technologies by trading with another race or spying on another race.

All diplomacy and espionage is conducted using the 'Diplomacy Window'. The diplomacy window shows the state of relations and and treaties you have with each player. The diplomacy window displays the following important information;

- **Relationship Bar** - The bar at the bottom shows how much the other player likes you. It turns red if they dislike you and green if they like you. You may improve relations with another player by forming treaties with them and giving them technology or money. You can worsen a relationship by being caught spying or sabotaging their colonies.
- **Treaties** - You may have treaties with each race independently. Each type of treaty is described below. The list of treaties you hold with another player is also displayed on the Diplomacy window.

In order to perform espionage you must recruit spies. You allocate an amount of money each turn to attempt to bribe spies to your cause - Use the 'Recruit Spies' button to change this allocation.

The quantity of spies you currently have is displayed in the espionage panel. Any spy not assigned to a task is assigned to counter espionage (defend). You may use the plus and minus buttons next to espionage and sabotage to move spies between defending and attacking.

The tasks you may assign a spy to are

- **Espionage** - These spies are allocated to steal technology from another player.
- **Sabotage** - These spies are allocated to destroy factories on your enemies planets
- **Player** - These spies are allocated to sending information about a player to you. Once you have assigned spies to monitor a player you may use the 'View Report' button to see information about the player. This costs 3 spies and the spies cannot be reassigned afterward.
- **Planet** - These spies are allocated to monitor a planet. This allows you to view a planets details on the Galaxy Window. This costs 1 spy and the spy cannot be reassigned afterward.

Moral Choices

During the game advisers will recommend adopting policies, usually that boost production or increase the effectiveness of your weapons. Each player has the options of adopting the proposed policy or rejecting it. However some of the decisions you make to increase your efficiency may effect other aspects of game play. Here is an example;

- **High Impact Munitions** - Develop highly toxic and polluting munitions. These increase the

damage your crafts inflict by 25% but have a very negative impact on your relations with other players
- **Slavery** - Improve planetary productivity by forcing people to work. Help poorer people by bonding them to businessmen who will help them see the benefits of working hard. Provides a large production boost but also provides reduces influence significantly
- **Economic Exploitation** - Improve planetary productivity by encouraging the masses work harder and longer. Unfortunately some see this as economic slavery it does reduce your influence
- **Environmental Neglect** - Allow industry to maximise pollution by generating toxic waist and dumping it off world. This increases production by 20% but unfortunately does effect your relations with other players
- **Gift Aid** - Encourage your citizens to give a proportion of all their income to the poor. Reduces production by 5% but improves your relations

More on Planets

Colonies can manage their own ecology and development percentage. This is very useful because the most efficient use of these percentages would require constant managing otherwise.

- **Ecology** - Use the minimum ecology percentage to maintain the current terraform quality. If the player is capable of a higher terraform quality than the colonies current level then then the minimum plus the improve percentage from the 'Settings Window' is used.
- **Development** - Use zero percent unless there is enough population to operate more factories than exist then the percentage is the improve percentage from the 'Settings Window'.

Other Stellar Phenomena

The galaxy contains more than planets and suns, it also contains:
- **Nebula** – Large clouds of gas in space. If a planet is located inside a nebula then all battles fought at that planet will have shields and cloaking disabled. Nebula also contain Space Kaan (large space creatures) that can be woken by fighting inside the nebula. Once awoken a space Kaan will wonder the galaxy attacking the player's crafts.
  NOTE – Space Kaan are disabled on level easy.
- **Black Holes** – Singularities in space time.

Planetary Crisis

Psi or Biological weapons may be deployed on an enemy planet as an alternative to bombarding. Move a craft with Psi or Biological weapons to the target planet and then press the deploy button.
- **Psi Crisis** – Target population becomes more susceptible to espionage attacks for a number of turns.

- **Plague Crisis** – Planet loses population for a number of turns.

- **Emergency** – Planet doubles all output for a number of turns. An emergency is triggered when a colony is attacked but not destroyed. It motivates the population to pull together and fight the aggressor.

Prizes

At the start of a game many unexplored planets have old technology, money or other prizes waiting for collection. The first player to arrive at the solar system collects the prize. It is therefore very important to explore the galaxy early in the game. Many of these prizes will have a profound effect on what you can do later. As a general hint - collect as much boralium as you can!

Boralium Crystals

These are rare crystals that use in special planetary projects and weapons. The only way you can get boralium crystals is by finding them in a prize (see prizes) or mining them as a special resource (see resources).

Modding MoT

On the setting page you will find a button Export Technologies. This will write XML files into a folder called updates. These are plain text files and may be edited using any text editor. Modding may cause the game to crash so you are recommended to read the modding guide first. If the game crashes after your modification, delete the updates folder or export again to undo your modifications.
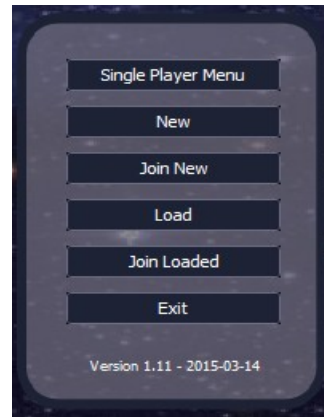
For MS Windows Installer the updates folder can be found in %APPDATA%/mot folder.
For binary installations the updates folder will be in the root folder.

Multi Player

The start-up window when you run MoT is shown below:
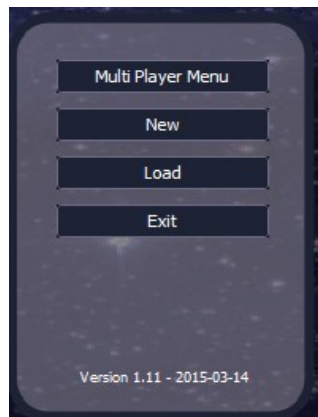
Start Up Menu   **Multi Player Menu**

To create a new multi player game or load / join an existing multi player game you must use the multi player menu. You cannot start a new game from the single player menu and then join the game because the single player 'New Game' window does not do the same thing (does not start the server socket).

Create a new multi player game:
     First player must select 'New' from the multi player menu.
     Subsequent players must select 'Join New' from the multi player menu.

Load an old multi player game:
     First player must select 'Load' from the multi player menu.
     Subsequent players must select 'Join Loaded' from the multi player menu.

Hints and Tips

- **Press Key p** - To pause game at any time. Press again to unpause.
- **Press Key x** - On the battle field this removes all animations.

Galaxy Map Key Bindings

n	Select next
v	Select previous
s	Save the game
l	Load a saved game
e	Open Empire Window
r	Open Research Window
d	Open Craft Design Window
g	Open the Statistical Graphs Window
j	Instruct currently selected craft to join a fleet
a	Instruct currently selected craft to Attack
c	Instruct currently selected craft to Colonise
b	Instruct currently selected craft to Bombard
z	Instruct currently selected craft to Sleep
	If no craft selected sleeps all craft
ESC	Close Dialogue Window
?	Show these key bindings