

THE NEWBOD'S GUIDE TO FEDERATION 2(TM)

Covering the ranks GroundHog to Plutocrat

Last updated March 18, 2018

1. INTRODUCTION

ALL ABOUT FED2

Federation 2, the space trading game, is a massively multi-player game set within an exciting world of interstellar commerce and intrigue, in which you interact and collaborate with lots of other players in real-time, and compete against them to climb the ranks. The aim of the game is to amass a larger fortune (in Imperial Groats) than any other player, and to climb the ranks by forging alliances and making friends with the right people. Cooperation is the name of the game in Federation.

The game is a text-based game, in which you see messages on your screen telling you what is happening, and you type in commands to tell the game what you want to do. You are represented in the game by a character, which is linked to your ibgames account - each account controls one Fed character.

You can talk to other players in a variety of ways, and get involved in detailed role-playing using the game's interactive commands.

As you advance through the ranks of the game, you will learn new skills as your character develops: from hauling cargo to trading on the Galactic trading exchanges, running a planet's economy or heading up a group of planets and defending them from alien attack. Every time you promote to a new rank, you will do something different to earn your groats.

The game runs constantly, all day and every day, except for the occasional close-down for maintenance. If you are in the game when it closes for maintenance you will be told the game is closing and ejected back from whence you came. Details of what you were doing in Fed will be saved, so that when you log back into the game you will usually find yourself in the location from which you left. If you were lost in a maze and logged off in frustration, you won't have been magically teleported back to a 'start' position.

Violence is not the aim of the game, and if you clutter up your first ship with weapons you won't have enough cargo space left to earn a living.

FED2 IS A FREE GAME

Federation 2 is completely free to play. However, you can buy extra goodies to use in the game. Some of them make it easier to play the game, such as an upgrade to your navigation computer allowing you to automatically move between planets, a promise that customs will not stop your ship for a certain length of time, remote price checking, or permission to build warehouses. Some are social things, like being able to marry another player. And some are decorative, stylish or just plain fun items such as medallions and keyring accessories.

These extras are bought in the game using a certificate of ownership of a rare and valuable alien creature called a slithy tove, which is used as a high-value bribe to obtain various the goodies. You buy slithy toves using real-world dollars - you will find details on the website at <http://www.ibgames.net/fed2/extras/index.html>.

Your score shows you how many slithies you possess, and you can see whether other players have any by looking at the information provided by the SpyNet organization with the command **'SPYNET REPORT playername'**. You can give one of your slithies to another player with **'GIVE playername SLITHY'**.

You can donate some of your slithies back to Fed2, in order to directly support the running of the game. This makes you a sponsor for the year. Use the command **'SPONSOR FED amount'** where **'amount'** is the number of slithies you want to donate. Sponsors have access to a special location, the hunting lodge in the wilderness on Earth, and if they choose can be listed on the sponsors web page at <http://www.ibgames.net/fed2/info/sponsors.html>.

None of the things you can get using slithies are necessary to play the game. It is possible to play from GroundHog to the highest rank without ever using a slithy tove.

More detail about the things that can be obtained with slithies can be found in the relevant sections of this manual. An up to date list of what's currently available is also found on the website at <http://www.ibgames.net/fed2/extras/gifts.html>.

WHY FED2?

The original version of the game, called Federation, ran for over 15 years on a variety of networks, including the British network, Compunet, and GENie and AOL in the US. We then moved it to the web and ran it as a stand-alone site. In all that time, the code was fixed, patched, ported to new systems, expanded, rewritten, bodged and changed so many times that it became unmanageable - real spaghetti code. We needed to do a complete rewrite of the code, from scratch.

But rather than just replicate the old version of Fed (known as classic Fed), we have made changes to the design to make it a lot better - added new features, expanded existing functions, and made the game easier to maintain and to update. The new version is called Federation 2.

ABOUT FED2 COMMANDS

Throughout this document, commands are enclosed in quotation marks like this: **'EXAMINE playername'**. When you use the commands, you do not type the quotes, they are simply there for clarity in this document! Anything in upper-case should be typed literally; anything in lower-case indicates the kind of information the game is expecting. For example, if you want to examine Hazed, the manual says the command is **'EXAMINE playername'** so you type: **examine hazed**.

It doesn't matter if you use upper or lower case, or a combination of the two; however, broadcasting messages in capital letters is the equivalent of SHOUTING, and is not terribly polite.

Some long commands have a shorter version, to save your poor fingers from too much wear and tear. As a general rule, the first time we refer to a command we will use the full form; subsequently, the abbreviated form will be used, for example **'EXAMINE playername'** and **'EX playername'**.

You cannot enter multiple commands by separating them with commas, periods or spaces - you must have a carriage return between commands. When we list directions in the Guide we separate them with commas for convenience, but the game won't accept them in this form.

RULES AND REGULATIONS

Federation has staff whose purpose is to help new players get started and keep an eye on the game. Don't be afraid to ask for help if you're stuck or confused - but don't expect them to give you answers to game puzzles!

While you are in Federation, you are subject to the Federation Game Rules. You can read them on our web site at <http://www.ibgames.net/fed2/info/fed2rules.html>. We expect our players to behave in a mature, adult fashion, and anyone who is disruptive will be asked to leave. The staff have a responsibility to keep order in the game and if they ask you to stop doing something, then you should stop! You can see a list of the staff members who are currently in the game by typing **'STAFF'** and see a complete list of all the Fed staff on our web site at <http://www.ibgames.net/fed2/info/who.html>.

You can ask for help by typing **'CALL STAFF'** - this alerts any staff who are in the game that you have a question or a problem. It also tells the staff where you are in the game. One of the staff members will then contact you to offer help.

ABOUT THIS MANUAL

The manual covers all of the game that exists so far, and will be updated whenever new features are added to the game. This manual goes into detail about all aspects of the game. You can also read the QuickStart Guide, which gets you started in a hurry, and the Command List, which provides a quick reference.

When explaining how something works, we will use two stereotypical characters as an example. Newbod is the generic new player - keen and eager to learn, but still wet behind the ears and prone to making embarrassing mistakes. Dork is the kind of obnoxious nerd who never reads instructions, thinks he knows everything, wants to be handed everything on a plate without having to work for it, and usually ends with no friends at all.

You will also see mention of Bella, also known as Our Illustrious Leader. Bella is the creator of the Fed universe - the designer and programmer, without whom all of this would not exist.

Then there's Freya, the Fed2 Game Manager, whose word is law.

Finally there's me - the demi-goddess Hazed, author of The Idiot's Guide. Come up and buy me a drink some time!

DISCLAIMER

Whilst we have made every attempt to ensure that the information contained in this Guide is accurate, Fed2 is a constantly evolving game and modifications are frequently made. Information about any changes will be found in the weekly Fed Chronicle, or the What's New page of the ibgames web site, as well as on the electronic notice board in the game itself.

This manual has been reproduced using recycled electrons. No aliens were harmed in the creation of this manual.

2. GETTING STARTED IN FEDERATION 2

LOGGING ON TO FED2

To play Federation, you need to use a program to connect to our game server. You have a number of options: you can download the program which we provide, called FedTerm; you can use a game front-end of your choice; or as a last resort you can use the basic functions which come with Windows. All of these options are explained below.

Using FedTerm

This is the option we recommend, because the program has been specifically designed to use with Federation 2. It gives you a lot of special features, such as auto-mapping, special displays for different aspects of the game, and adds customizable pictures of characters and planets.

You can download the program from our web site at <http://www.ibgames.net/fed2/fedterm/index.html>, where you will find detailed instructions on how to install it on your computer, and how to use it to get started in Fed.

Using Other Game Front-Ends

You can use any telnet client or game front-end to log on to Fed2. To log on to Fed2, point your game front-end here:

System Name: fed2.ibgames.net
Port Number: 30003

Using Windows Telnet

If you use Windows, as a last resort if you cannot get access to Fed2 any other way, you can fire up the basic telnet client that comes with Windows. It's not very elegant, the formatting will be all over the place, and it has no input window so you won't be able to see what you are typing - but at least it will show you that it works!

Click the Start button (on the bottom left of your screen) and select Run. In the box that comes up, type the following:

```
telnet fed2.ibgames.net 30003
```

then press return.

IBGAMES ACCOUNTS

To play Fed2 you need to have an ibgames account. If you are using FedTerm then the front-end will handle this for you, otherwise when you log into Fed you will be asked for your account ID and password. If you don't already have an account, then type NEW and you will be asked if you want to set up one.

Type in the account ID you want to use, and assuming it is not already being used by someone else, you will be asked for a password - you will have to type it twice to check you know what you typed. When you type the password, nothing will appear on your screen, as a security measure.

You will also be asked for your email address. This is important - it is the only piece of information we have to identify you, and if you ever forget your password, we need to know that you really do own your account before we can help you. We promise we won't use your email address to spam you - see our privacy policy at <http://www.ibgames.net/ibinfo/privacypolicy.html> for details.

SETTING UP A FED2 CHARACTER

Once you have set up an account, you will be asked to set up the character that you want to use to play Fed2. Once again, FedTerm will handle this for you, otherwise you will go through the process when you first log into the game.

The first thing you are asked to provide is a name for your character, which can be between 3 and 15 characters long and must only contain letters of the alphabet and numbers - with no spaces. If you choose a name that is already in use by another player or by the game, you will be asked to choose something different.

Please do not use a name that contains the words Fed or Host; these are reserved for game staff. Don't use any vulgar words as your name, those are against the rules (see <http://www.ibgames.net/fed2/info/fed2rules.html>).

You are asked to specify a race - which can be anything you like! Spaces are allowed, but no punctuation, only letters and numbers. Whatever you type here will be accepted, so take care. Note that there's no benefit to being human, or a droid, or a tentacled blue blob from the crab nebula - your race is purely cosmetic, designed to help you role-play. It is possible to change your race later, but at a cost - see the information in the SpyNet section.

Next you are asked about gender. You can choose to be male, female or neuter.

Finally, your character has four attributes to which you allocate stat points: strength, stamina, intelligence and dexterity. The game automatically sets them at 35 each, but you can change them if you wish; you have a total of 140 points and each attribute can have a minimum of 20 and a maximum of 70 points. (You only have to type numbers for the first three stats; the game can add up and will calculate the last one automatically.)

Each of these attributes has a different function. At this stage, some of the stats have more significance than others:

- Strength - determines how many items you can carry, which isn't all that vital at the moment
- Stamina - a general measure of your health, probably the most important stat
- Dexterity - determines how good you are at manipulating things, not very important at the moment
- Intelligence - determines how powerful a computer you can install in your ship, not very important at the moment

You can play about with these stats until you are happy with them, although however carefully you choose, you will undoubtedly realise later that you got it wrong!

Once you are resigned to the fact that you cannot achieve perfection, and you accept something you can live with, the game checks if the name you have chosen is already in use; if it is not, you can proceed...

YOUR FIRST STEPS IN FED2

Having created your character, you will find yourself in the Meeting Point in Earth's busy spaceport. The exit from this room is east, and to move you type the initial letter of the compass direction in which you wish to go.

The first thing you need to do is acquire some form of transport - you can't be a space trader unless you can leave the planet Earth! Then once you are mobile you can start making groats. If you are impatient to get started, read the QuickStart Guide at <http://www.ibgames.net/fed2/manuals/quick.html> to find out how to get yourself a ship.

THINGS YOU NEED TO KNOW AT THIS POINT

Before getting down to the nitty gritty of getting a ship and earning a living, here's a few bits and pieces you need to know about.

Unlike real life, you don't enter Fed DataSpace empty-handed; you start with a communicator which is part of your personal kit, and stays with you throughout your life in Fed. You should acquire various other things along the way which will be added to your kit. Type **'INVENTORY'** or **'I'** to see what you've got.

You also start life with the princely sum of 13,000 Imperial Groats; **'SCORE'** or **'SC'** shows you your character details.

You also have one slithy tove - a certificate of ownership of a rare alien creature, which is used to bribe people. You will need this to get your ship permit. Your slithies show up on your score.

The status of your character is automatically saved by the game.

You leave the game by typing **'QUIT'**, which stops your participation in the game but leaves your front-end program running so you can review your session if you choose.

You should never close your front-end program or log off the Internet without typing **'QUIT'** first, otherwise the game might not know you have left and something nasty may happen to your character while you are not looking.

When you come back into Fed, you will usually find yourself in the location where you left.

3. HOW TO MAKE FRIENDS AND INFLUENCE PEOPLE

COMMUNICATING WITH OTHERS

One of the things you will need to do in Fed is to form alliances with other players. Sure, you can make it in the Galaxy by being the strong, silent, loner type - but that might get boring in the long run! After all, Fed is a multi-player game, and you cannot ignore the presence of other players. What would be the fun in that?

One of the first things you need to know is how to communicate with other players. You can find out who else is in the game by typing **'WHO'**, which will list the current players showing their name and rank:

```
>who  
Commander Bond  
Groundhog Dork  
Industrialist Hazed  
Commander Ivanova  
Adventurer Magellan  
Commander Newbod  
Captain Picard  
Captain Pugwash  
8 players
```

'QUICKWHO' or **'QW'** will give a shorter version by simply showing the character names.

```
>qw  
Bond           Dork           Hazed           Ivanova  
Magellan       Newbod         Picard          Pugwash  
7 players
```

If you want a more local version, **'WHO planetname'** will tell you who is currently on the named planet, and **'WHO rank'** lists the players of that rank in the game.

If you are talking to players in the same location you can use **'SAY message'**. For example, if you type:

```
say hello everyone, can I buy you a drink?
```

the players in the same room as you will see:

```
Newbod says, "hello everyone, can I buy you a drink?"
```

'SAY ' can be replaced by a single or double quote; no closing quote is necessary.

All other messages are sent and received via your communicator, which is part of your personal kit when you start the game. There are a number of ways to communicate with players who are not in the same location - by sending your message to a named individual, to all players, or to specific groups of players.

The least selective level of communication is '**COM message**' which broadcasts the message to every player in the game (provided they have their comm unit switched on). This is the most public way of talking in Fed, and conversations held on the comms are staff moderated.

Private conversations can be carried on using '**TELL playername message**' which sends the message to the named player only. '**TELL**' can be replaced by '**TB**' - that's an abbreviation of tightbeam, which is how these messages are sent!

Somewhere between the two are transmitted messages. '**XT message**' (**XT** is short for **TRANSMIT**) sends the message to all players tuned to the same comms channel, which allows players to separate up into groupings - small or large - to talk about specific subjects. Channels are created when they are needed, and vanish again when no-one is using them.

To tune to a channel, the command is '**JOIN CHANNEL channelname**' - this will join you to an existing channel, or create a new one. You can see what channels already exist, and who is tuned to which one, with '**DISPLAY CHANNEL**'. '**DISPLAY**' can be shortened to '**DI**'. To find out who is on a specific channel, type '**DI CHANNEL channelname**'. To leave the channel, either join another one or use '**LEAVE CHANNEL**'.

As you can imagine, it is possible to carry on a number of conversations simultaneously - some private, some public. To avoid embarrassment, the Idiot's Guide recommends that you learn to tell the difference between various levels of communication. Fortunately, your communicator can be a great help. For example:

Your comm unit crackles with a message from Newbod, "Hello everyone, what's happening?"

Indicates a message broadcast using '**COM**'. Had the message been sent using '**XT**', your communicator would 'relay a message'. For '**TELL**' messages, your communicator 'signals a tight beam message'. Armed with this information, you should be able to avoid blushes!

RELAYING YOUR ACTIONS

Sometimes you don't just want to tell somebody something, you want to show them. In Fed, you can broadcast your life to another person by relaying your actions to their screen. The command is '**RELAY playername**' where '**playername**' is the name of the player to whom you want to send your broadcast. Everything that you type, and everything the game sends in response, will also be sent to the named player. The relay will last until you stop it, using '**RELAY OFF**', or until you log off.

If the person you are relaying to logs off and then back on again, the relay will pick up again, unless you've stopped it in the meantime.

You can only relay to one person at a time - but if you are the receiver, you can watch as many different relays at you think you can cope with. To help keep them straight, the relayed message has the name of the relayer at the beginning of each line, like this:

Your comm unit beeps with a message, "Newbod is now relaying everything to your comm unit."
[Newbod] >act sips his pint of Diesel's Old Peculiar

[Newbod] Newbod sips his pint of Diesel's Old Peculiar
[Newbod] Dork says, "You drink like a gurl!"
[Newbod] >relay off
Newbod is no longer relaying activities to you.

Please note that it is extremely bad manners to relay to somebody without first asking their permission!

If you are such an exhibitionist that relaying to one person isn't enough for you, then you can also relay to a channel. **'RELAY CHANNEL'** will relay to whatever channel you are tuned to, so that all the other people tuned to the channel can watch you as you go about your business. The relaying will stop when you leave the channel.

It is bad manners to start relaying to an existing channel; it is far better to set up a new channel and then invite people to tune to it if they want to watch your relay.

STOPPING COMMUNICATIONS

There are times when you do not want to receive messages. (Indeed, your nature may be such that you never want to receive messages, although if this is the case you probably won't advance very far in the game). Comm messages can be suppressed using **'COMMS OFF'**; **'COMMS ON'** will reverse the effect. Typing **'COMMS'** on its own reminds you if you have comms turned on or off. XT messages can be suppressed by leaving the channel, with **'LEAVE CHANNEL'**.

Tight beam messages cannot be suppressed in general; however, if a particular player is annoying you, then you can ignore any messages they send using **'BLOCK playername'**. The block stops any message from the player - comm and say messages, TBs, relays, acts, kisses and so on. The only thing you will see is the player's presence in a room, or the player moving in and out.

You can only block someone who is in the game. The block lasts until you log off - if the annoying player leaves and comes back, the block remains. You can block as many people as you want at a time. **'BLOCK'** on its own lists the people you are ignoring, and **'UNBLOCK playername'** removes the block so messages will get through again.

Note that you cannot ignore staff!

THE NOTICEBOARD

Should you wish to communicate with someone who is not actually in Fed DataSpace at the same time as you, and should you not be adept at telepathy, you can leave a message. A Galaxy-wide electronic noticeboard which you access using your communicator allows you to leave messages, and to read what other people have scribbled. **'POST message'** will inscribe your words for all to see. You can post more than one message, although please be reasonable - you shouldn't try to write a full novel on the board!

If you make a mistake, you can erase all your messages with the **'UNPOST'** command.

'READ' will show you the last ten messages left on the board. **'READ #'** where **'#'** is a number, will show you that number of posts. **'READ ALL'** will show you all of the posts on the board.

Messages are wiped out when the game is restarted.

BUYING DRINKS FOR YOUR FRIENDS

As you trundle around Federation DataSpace, generally having a wild and wacky time, your stamina is going to dwindle. Typing **'SC'** brings up your score display so you can check your current stamina.

To replace lost stamina you eat or drink something. The usual method is to visit one of the Galaxy's many bars and restaurants, and buy yourself something to eat. **'BUY FOOD'** gets you a meal which replaces 5 stamina, at a cost of 10 groats.

The more sociable option is to **'BUY ROUND'**, which buys a round of drinks for everyone in the bar (including you) and **'BUY PIZZA'** which, as you can probably guess, provides a pizza for you and your buddies. A round costs 5 groats per person, and replaces 2 stamina. Pizzas cost 10 groats per person, and replace 5 stamina.

There is somewhere on every planet selling refreshments, but most of them are dull places, either full of boring people talking about prostate operations, or totally deserted. Only one bar is worth visiting; only one place is guaranteed not to water the beer. That is the legendary bar that is the Social Centre of the Solar System - Chez Diesel on Mars, as recommended by all travel guides and the InterGalactic press, and which, following extensive research, the Idiot's Guide feels it can whole-heartedly recommend.

After all, there is a lot more to Fed than just dashing around making loadsagroats! Making friends, chatting, forming (or destroying) alliances and taking part in wild bacchanalian parties are not only jolly good fun but will stand you in good stead for the times when you will need help to advance.

Everyone drinks in Chez Diesel, and the Idiot's Guide recommends that it is one of the first places you visit after you have bought your ship. There are directions to the Social Centre of the Solar System later in this Guide.

The best way to make friends and influence people is to buy them a drink. In our not-at-all-humble opinion, **'BUY ROUND'** is THE most important command in the whole game. If you are not satisfied with the house beverage, you can be more specific when you buy drinks for people. **'BUY ROUND a large glass of Jack Daniels'** will buy everyone in the bar a large glass of JD! Pizzas can also be customised with the topping of your choice - the command works in the same way as buying a round.

SOCIALISING WITH YOUR FRIENDS

Fed is a social game and there are many commands to let you interact with other players. You can kiss, hug, cuddle, snog, tickle, and grope players - **'TICKLE NEWBOD'** does just that. The game adds a qualifier at random, just to liven things up a bit.

Using the magic of modern technology, you can also kiss and hug people remotely - the kiss is sent via your communicator.

You can also smile, either generally, or at someone special. **'SMILE'** on its own just flashes a smile at whoever happens to be in the room, whereas **'SMILE playername'** directs the full intensity of your grin at your chosen person. Like kisses, smiles can also be sent remotely.

However, as in real life, it is bad manners to grope a stranger so these commands should be used sparingly. Kissing someone without their permission is not going to make you any friends; quite to the contrary in fact!

Relating to other people in Fed can be as simple or as complex as you like, using the more powerful **Act** command. **'ACT giggles foolishly'** will result in the message **'Newbod giggles foolishly'** for all the other players in the same room as you. This allows players to role-play very detailed scenes. While hanging around in Chez Diesel (SC of the SS) you might see such behavior as this:

Hazed taps loudly on her empty glass hoping that someone will take the hint.
Dork takes the hint and pours some water into Hazed's glass.
Hazed spits in disgust and biffs Dork around the ears.

A variation on this command is **Acts**. This works in the same way but puts an apostrophe-S on the end of your name. Typing **'ACTS heart beats faster due to the excitement of his proximity to the demi-goddess Hazed'** will result in the message **'Newbod's heart beats faster due to the excitement of his proximity to the demi-goddess Hazed.'**

Let the thespian inside you run riot!

The **'MOOD'** command lets you add a short description to the otherwise boring messages that say you have just entered, left or are simply loitering in a room. For example, if you type **'MOOD Looking confused'** then people will see you as "Looking confused Newbod is here". The mood can be up to 95 characters long.

You can check out somebody else's mood with **'GLANCE playername'** or gauge the mood of the whole room with **'GLANCE ALL'**.

The mood is saved until the game is reset, at which point you are reset to a bland, moodless state. So whether you're in the mood for dancing, in the mood for love, or just in the mood, you need to retype your mood each day.

'CLEAR MOOD' returns you to a moodless state. Typing **'MOOD'** on its own reminds you what kind of mood you are in, if any. If you have to use this too often, we suggest you try **'MOOD A forgetful'**!

BAR GAMES

While hanging about in a bar with your friends, you can play a numbers game called Lucky Louie, wagering small amounts of groats on your guessing ability.

The game can be played in any bar, and here's how it works. A player forms a game and decides what the stakes will be, between 1 and 10 groats. Two other players join the game

and put up the specified stake. Each of them chooses a number greater than zero. If all the players choose different numbers, then the one with the middle number wins. If two players choose the same number, the one with the different number wins. If all three players choose the same number, the round is a draw and the stakes remain in the pot for the next round.

The command to set up a game is **'START LOUIE amount'** where **'amount'** is the size of the stake (between 1 and 10). **'JOIN LOUIE playername'** allows two other players to join the named player's game. **'DISPLAY LOUIE'** gives you a report on the game you are currently playing.

To guess a number, just type a number - if you're taking part in a louie game, it's assumed that any line you type that starts with a number is your guess. When you make your guess, your stake will be deducted. You can change your mind and put in another number, but you'll have to pay the stake again.

The winner of the round will be given the groats in the pot, up to the daily limit of 1,000ig - nobody can receive more than that amount in any one day, either by gift or winning at louie. You can keep on playing once you reach the limit, you just won't receive any more groats. However, if you buy any rounds, the amount you spend will increase the amount you can receive accordingly.

'LEAVE LOUIE' takes you out of the game; walking out of the room does the same.

GETTING MARRIED

Having made friends with lots of people and attended many wild parties, you may find yourself becoming very special friends with one person in particular. A close relationship may form and eventually, if you are spending all of your leisure time with that certain someone, you will decide it's time to get married.

The Galactic Administration usually only registers marriages between members of the aristocracy, where matters of inheritance and the transfer of wealth, property and titles are concerned. However, the official registrar has been known to accept bribes, and will officially register your marriage for one slithy. Gather your wedding party together in the registry office on Earth and use the command **'MARRY playername'**. A notice will be posted in the SpyNet Review.

Because there are so many religions and belief systems held throughout the Solar System, the Galactic Administration makes no attempt to provide a religious service for those wishing to marry. The registrar provides a simple civil union and officially registers the details of the wedding, and it is up to the happy couple to arrange whatever religious ceremony and blessing they desire. The registrar can arrange to let you use a customizable room for the ceremony, in exchange for another slithy. Send an email to feedback@ibgames.com to ask about this service.

Once married, you will wear a wedding ring inscribed with the name of your beloved, and anyone who examines you will see who you are married to.

Should your state of wedded bliss fade after a while, then you will be able to divorce your spouse for the cost of two slithies. Go to the registrar and type **'DIVORCE'** to dissolve your union - your soon-to-be-ex-spouse does not need to be present.

STYLE AND TEXTILE

If you examine yourself (type **'EX ME'**) you will find you have the standard description:

Newbod is dressed in a nondescript grey coverall, like most of the rest of the population.

Dull, isn't it?

So change it! You can customise your appearance and change it as many times as you want, all thanks to the miracle of modern technology that is nano-chameleon clothing. This suit can be reconfigured to change your clothes to anything you please - wherever you are! Sartorial elegance can be yours at the touch of a button; no more hanging around in clothes shops, being measured and fitted in drafty changing rooms. Now you can alter your look on a whim, with no mess, no fuss.

The command is **'CHANGE CLOTHES description'** where **'description'** is what you want people to see when they examine you. The words you enter are exactly what people will see when they look at you, so you need to include something like 'Newbod is wearing...' or 'You see...' as part of the description. You are limited to 220 characters, but that should be plenty to show off your sartorial elegance.

You can change your clothes anywhere, and the Digital Clothes Management software will charge 10 groats as a licensing fee. The Idiot's Guide recommends that you invest in some decent clothes right away. You will never gain the respect and friendship of other players unless you look trendy!

It wouldn't be any use being able to dress up, if you couldn't look at other players to see what they are wearing, and perhaps criticise their fashion sense. The **'EXAMINE'** command does just that - **'EXAMINE playername'** shows you the named player's description. **'EXAMINE'** can be shortened to **'EX'**. To look at yourself, use **'EX ME'**. Humming "You're so vain" as you do so is optional.

As if new clothes weren't enough of a fashion statement, you can also decorate yourself with various items. The most prestigious thing to be in possession of is a keyring, which can be obtained with a slithy tove from Gallagher's store on Earth. The basic keyring comes with the key to the Galactic Administration executive washroom, a very prestigious perk. To buy a keyring, the command is - as you would expect - **'BUY KEYRING'**.

The keyring is also used to display special trinkets and charms. There is one new charm on sale every month, and special seasonal charms for holidays such as Christmas, Halloween and St Patrick's Day. Each charm is a limited edition item, available for short periods only and never repeated. Buy a charm with **'BUY item'** where **'item'** is the charm you want to buy. Charms are put into your inventory when you buy them, so long as you are not carrying too much! You can attach one of your charms to your keyring with **'CLIP objectname'** - for example, **'clip rose charm'**. In fact you can clip any object to your keyring, not just charms. The keyring will only hold one item at a time, so clipping something else will remove the first item. To remove the item without replacing it with a new one, use **'UNCLIP'**.

When someone examines you, they will see your keyring and what is attached to it.

There are other ways to show off the objects in your inventory so other players can see them: you can wear or carry any object. The command '**WEAR objectname**' is intended for items of clothing, jewelry or anything else that might adorn your person - although you can wear any object from your inventory if your idea of fashion is strange. You can wear as many things as you want at one time. Remove items with '**DOFF objectname**'.

If you want to show something off without trying to start a new fashion trend, you can carry it, with '**CARRY objectname**'. This has no actual effect on what you can do with an object or how you use it - it's simply a way to show it off. Once again, you can carry as many things as you want, no matter how many hands (or equivalent) you have. To put something away again and stop carrying it, you '**POCKET objectname**'.

4. FINDING YOUR WAY

GROUND TRAVEL

Having got past the initial hurdles and introduced yourself to Fed and its personalities, you will need to start exploring. You can travel to exotic parts, meet interesting people, and buy them a drink! Which is much more fun than killing them.

You move around by using the eight compass directions - **'N'**, **'NE'**, **'E'** and so on. You can also use the commands **'UP'**, **'DOWN'**, **'IN'** and **'OUT'** (or **'U'**, **'D'** and **'O'** - sadly **'IN'** cannot be shortened).

Each location you are in has a detailed description which describes where you are, and what is happening. This will give you some idea of the function of the room. The description usually tells you what exits there are, although there's no guarantee that there won't be 'hidden' exits that are not mentioned in the text.

When you enter the room, you will also be told which other players are present, and if there are any objects or mobiles in the room. Objects and mobiles are explained later in the manual.

Once you know your way around, you can choose to dispense with the long descriptions of every location. You can turn them off by typing **'BRIEF'** and then you will only be given the name of the location when you walk into it. You can turn the long description on again by typing **'FULL'**.

If you forget what room you are in you can type **'LOOK'** or **'L'** and the full description of the room will be displayed again, along with the info about who and what is present.

If you merely wish to find out with whom you are drinking when you are propping up the bar in Chez Diesel (SC of the SS) then **'GLANCE'** or **'GL'** will simply give you the name of the location and tell you who or what is there. A variant on this command lets you see a player's mood, with **'GLANCE playername'**, or gauge the mood of the whole room with **'GLANCE ALL'**.

WHAT YOU CAN DO IN LOCATIONS

There are game commands that are specific to the location, or type of location, you happen to be in. For example, in a bar you can buy rounds for your friends; in the shipyard you can buy a ship; in the offices of Armstrong Cuthbert you can get jobs; and so on. The name of the location may tell you what you can do there, or you may find out by reading the description carefully.

Sometimes a location will offer you a way to move to another part of a map without walking - for example, on Earth there is a monorail linking various parts of the planets, and on Venus a shuttle giving access to the mines. Many planets also have elevators linking different levels.

You will also find some areas on planets which you cannot just walk into. You may need to do something specific before you can proceed, such as press a button to make an elevator move or press a touchpad to open an airlock.

Some areas of the game cannot be entered without first solving a puzzle, or being in possession of a particular item (such as the key to the executive washroom), and some you won't be able to enter until you are at a higher rank.

One thing you can do in all locations is type '**SEARCH**', which gives the room a thorough going over looking for anything hidden. However, searching uses up energy - 10 stamina when you're on a planet, or 10 fuel in space - so it's not something you should do unless you have reason to believe there may be something secret to find. Taking the brute force approach and searching every single room just in case is not going to be practical!

THE SOLAR SYSTEM

Once you have a spaceship (patience - the next section tells you how to buy a ship) you can visit other planets. In addition to Earth, there are a number of other bodies in the Solar System you can visit and explore - planets, moons, smaller bodies and artificial space stations.

The main Solar System planets (or bodies) you can visit are Castillo*, Magellan, Mars, Mercury, the Moon (also known as Selena), Paradise, Pearl, Phobos, Rhea, Sumatra, Titan and Venus. There is also the asteroid belt, found between Mars and Jupiter, which you enter by typing '**IN**'. Right now, the following asteroids have been cleared for trading: Brass, Doris, Silk and The Lattice.

And of course, there is the sun, blazing brightly and providing life and energy to our Solar System, which you should avoid flying into unless you want to become crispy-coated Newbod!

Should you forget which planet you are on, after a heavy night of socialising with your friends in some obscure bar, your score display will remind you.

Clearly, flying your new spaceship to these planets would be a lot easier if there were a map of the Solar System which showed their positions. Aren't you lucky, then, that just such a thing is available? Go to <http://www.ibgames.net/fed2/mapss/solmap.html>.

You can upgrade your ship's navigation computer using one slithy so it will automatically navigate between planets. Visit Arnie's Surplus Store on the Moon to get the upgrade - the command is '**BUY NAVCOMP SOFTWARE**'. Once it is installed, '**GOTO planetname**' will zoom you to your destination faster than the speed of light. It only works from an orbit - you can't use it from the depths of the Interplanetary Wastes. If you sell your ship and buy a new one, you lose the upgrade and have to get a new one installed.

You are encouraged to explore the Sol planets thoroughly - you are going to need to know your way about when it comes to working for a living. To get you started we provide a set of maps showing the routes between the shuttle landing pads and Armstrong Cuthbert offices on each planet. Armed with these you will be able to haul cargo, which is what you do for the first couple of ranks. Go to <http://www.ibgames.net/fed2/maps/planetmaps.html>.

These starter maps can form the basis of more detailed maps which you make as you explore the rest of the planets. Hints about mapping can be found on our web site at <http://www.ibgames.net/fed2/manuals/mapping.html>.

The most important place for you to find is Chez Diesel (SC of the SS) on Mars as you will want to take every opportunity to buy a pint of Diesel's Old Peculiar for your superiors. To make your way from the Mars landing pad to Chez Diesel (SC of the SS), the directions are: E, N, N, N, N, N, N, N, U. Cheers!

Some areas of the game cannot be entered without first solving a puzzle, and some you won't be able to explore until later stages in the game.

* Amateur astronomers will be aware that Castillo should be Callisto. Abysmal spelling on the part of Bella, the creator of the Fed universe! See also the Encyclopedia Galactica entry at <http://www.ibgames.net/fed2/galactica/castillo.html>.

VENTURING OUT OF THE SOLAR SYSTEM

Players who have amassed 50 hauling credits can leave the claustrophobic confines of the Solar System and visit truly strange new worlds - those built by other players.

Star systems are grouped into economic and political units called cartels, ruled over by a Plutocrat. They own the hub system which links the cartel to the rest of the Galaxy.

Each system has an Interstellar Link, which you use to jump through hyperspace to the link in another system. When you are in a cartel, you can jump directly to any of the systems within the cartel, but to move to another cartel you must go via the hub system. If you have goods in your hold then you will pay a customs levy on the cargo when you enter a new cartel.

New systems that link to the game are automatically put into the Sol cartel, of which the Solar System is the hub.

In Sol, the Interstellar Link is situated a few sectors to the west of Titan on the edge of the Solar System. To travel through hyperspace to another star system, the command is '**JUMP systemname**', which sends you to the link in the specified system, assuming there is a direct link between the systems. Typing '**JUMP**' on its own lists the systems you can jump to from your current system. '**JUMP**' can be abbreviated to '**J**'.

'**DISPLAY SYSTEMS**' will list all of the systems and give a little information about each one, including the planets contained in it. It will only show you the systems that are currently open; to see all of the systems, including the closed ones, use '**DISPLAY SYSTEMS ALL**'. '**DI SYSTEM systemname**' will give you more details about the specified system and its planets, including which cartel it is in; if you leave off the system name, you will be given information on the system you are currently in. '**DI PLANET planetname**' tells you about the planets; again, you can leave off the planet name and you'll be told about the world you are on.

To find out what system a planet is in, without getting all the other information that the planet display gives you, type '**WHEREIS planetname**'.

Once you are in the new system, you can fly around, land on the planet, explore it, and die just as you can in the Solar System. Player-planets can be much more hazardous than Sol Space, so when exploring them, make sure you are insured. If the system has a hospital of its own, your death will transport you there, and insurance will be on sale at your bedside; if it does not, you will be shipped back to the hospital on Earth.

Should you annoy the owner of a star system, they could decide to deny you admittance in future by exiling you. This means you won't be able to jump into the system but will be turned back at the border. If you are already in the system when they issue the order or banishment, you will be unceremoniously chucked out. You can see a list of all the planets and those who have been exiled by typing **'EXILE'**.

CUSTOMS SEARCHES

The Galactic Administration is worried about smugglers and other nefarious types who attempt to transport illicit cargoes around the Solar System. To prevent such lawlessness, the customs service patrols the interplanetary wastes with the intent to stop and search vessels. Should you be intercepted by a customs cutter, you will be escorted off the main routes to a quiet section of Sol space, and such a search will be carried out.

Not wishing to inconvenience law-abiding citizens, the very nice customs officers will, on completion of their search, top up your fuel tank for you. They will also notify Armstrong Cuthbert that you have been delayed, so that if you are carrying cargo you will be given more time to complete the delivery.

If you find the attention of the gentlemen from customs a real nuisance, you can use a slithy to bribe one of the officers to give you an exemption certificate which will keep them off your back for 31 days. Visit the customs shed on Earth to obtain this valuable bit of paperwork - the command is **'BRIBE MANAGER'**.

STAYING ALIVE

There are only a very few places in the Solar System that can kill you, and they all have some warning so the astute can avoid them - only the really careless should fall prey to them. However, if you should be unlucky (or stupid) enough to die a horrible death, this isn't as bad as it sounds. In Federation DataSpace, death does not have to be fatal. If you purchase Life Insurance you can be cloned, then should you meet an untimely end, you simply wake up in the nearest hospital surrounded by get-well-soon cards. As part of the service, all your belongings are recreated for you so you do not lose objects in your inventory, or in your ship storage locker. Even if your ship is destroyed along with your body, the cloning service will replace it as good as new.

Your first insurance is free, and is automatically granted to you when you take your first faltering steps in this brave new world. But don't get complacent - after each resurrection you will need to purchase more insurance, because it only covers you for one death.

To make it easy for you (and to maximise the money-making abilities of the insurance industry), insurance salesmen will hover around your sickbed like rapacious vultures and be ready to sell you a new policy as soon as your clone opens its eyes (or equivalent).

The command to buy insurance is **'INSURE'**.

Your score shows whether you are insured or not, and if not, tells you how much your new policy will cost. The price increases with each death, because the more accident-prone you are, the greater a risk you become. So even though insurance means that death need not be the final farewell, the Idiot's Guide recommends that you exercise some caution and avoid jacking your premium sky-high.

As with many things in this corrupt regime, you can reduce your premiums again by 'persuading' someone to alter your record at the insurance company. You'll need to talk to the appropriate droid on Venus, and **'BRIBE ZORK857'**. For one slithy tove, it'll take 5 deaths off your record.

Speaking of death, should you wish to kill yourself deliberately, the **'SUICIDE'** command will pull the plug on your miserable existence. If you have insurance then you will wake up in hospital, at which point you can either suicide again to wipe yourself out completely, permanently, forever and with no turning back - or if you've had second thoughts, purchase more insurance to ensure your continuing existence.

TELEPORTATION

For those that are too lazy to walk, the wonders of matter transmission will let you teleport around the Galaxy with ease. You rent a teleporter from Emily's Emporium of Mechanical Delights & Electronic Wizardry on The Lattice (use the green disks) at a cost of 1 slithy tove for 30 days. The porter shows as part of your permanent kit in your inventory and is labelled with the number of days before the rental agreement runs out. To rent the porter, go and visit Emily and type **'RENT TELEPORTER'**.

'ADDRESS' gives you the teleport address of the location you are currently in, so you can compile a list of useful addresses. It only works if you have a teleporter. There's also some handy Sol addresses at the end of this page.

There are a range of teleport commands, depending on where you want to go. **'TELEPORT'** takes you to the LP of the planet you are on. **'TELEPORT address'** where **'address'** is a location number ports you to the specified location on the current planet. **'TELEPORT planetname'** will take you to the LP of the named planet, provided it is in the same system. **'TELEPORT systemname.planetname'** sends you to the LP of the named planet in the named system. You can only port to the LP of other planets - you can't go directly to a specific address.

In all these commands, **'TELEPORT'** can be shortened to **'TP'**.

There are a number of things that will stop the porter from working:

- You can't teleport to or from a location that has been teleport shielded.
- You can't teleport if you are carrying an object that has been teleport restricted, either in your inventory or your ship's locker. Restricted objects are marked when you display the inventory or locker.
- You can't teleport if you have any cargo in your ship's hold.

- You can't teleport to a planet which you have been exiled from. If you try, you'll suffer a hefty fine.
- You can't teleport to a closed system.
- You can't teleport into space, which is a relief, because if you could you would probably die!
- You cannot teleport when you are in your ship.

If you teleport to a place that would kill you if you walked into it, you will die just the same.

Should you try to port to a non-existent address you will temporarily be sent to Hilbert space, but the emergency circuits in the equipment will yank you back before too much damage can be done - you will lose some stamina, so trying numbers at random is not a good idea unless you do it from a bar where you can keep eating!

Useful Address

To get you started, here are some useful addresses in Sol:

Earth:

Galactic Admin HQ - 782

Outside Gallagher's - 651

Lucky Seven - 1479

Meeting Point - 390

Hospital Foyer - 1370

Mars:

Outside Chez Diesel - 325

Probe Graveyard - 1096

Entrance to the Ruins - 781

Mercury:

Sizzling Wok - 648

Moon:

Mario's - 847

Venus:

Cargon City Shuttle Station - 713

Museum Lobby - 523

And for those engaged in economic activities, a list of the exchange addresses:

Brass - 264

Castillo - 199

Doris - 531

Earth - 911

Lattice - 2068

Magellan - 971

Mars - 452

Mercury - 326

Moon - 591

Paradise - 455
Pearl - 141
Phobos - 277
Rhea - 653
Silk - 327
Sumatra - 1159
Titan - 713
Venus - 452

5. FED AND THE ART OF SPACESHIP MAINTENANCE

BUYING A SHIP

Federation is a space trading game. The operative word here is 'space', so you are going to need a spaceship to get around in. Of course, this is optional - you could decide to become the oldest GroundHog in the history of the game, but the Idiot's Guide does not recommend this approach because you will miss out on an awful lot of things, not least of which is the chance to visit Chez Diesel (Social Centre of the Solar System) to sample the famous ale, Diesel's Old Peculiar, and perhaps buy a pint for the regulars.

Assuming you choose to become upwardly mobile, you first need to obtain a Shipowner's Permit. This can be had from the appropriate department in the Galactic Administration's HQ, a huge office block in the commercial district of Earth. The route from the Meeting Point, where you start out, to the GA HQ is shown on the starter map of Earth at <http://www.ibgames.net/fed2/maps/earth.html>.

Bureaucracy being rampant in the Galaxy, finding the ship permit department isn't the end of your problems; getting a permit without getting tangled up in time-consuming red tape isn't an easy task - you have to resort to bribery, which involves paying out cash and a slithy tove (a token used for high-level corruption).

Having successfully outwitted the bureaucracy of the Galactic Administration, you should rush off to the Jarrow Shipbuilders office, (which you passed on the way to the GA HQ) clutching your permit in your sweaty palm (or equivalent), and order yourself a ship.

Ships come in all shapes and sizes, with many configurations of features. GroundHogs are spared the confusion of having to make a decision; the SalesDroid will offer you the starter special, a standard model for first-time buyers that is extremely good value. Type **'BUY SHIP'** and the droid will tell you about the deal; agree to the terms by typing **'YES'**, and the purchase will be complete.

Your new ship will allow you to leave the confines of the planet Earth; it has a cargo hold in which you can pack goods for delivery or sale on other planets; and it also has a ship storage locker in which you can stash objects you don't want to lug around with you. All mod cons, in fact!

DUDE, WHERE'S MY SPACESHIP?

The kind of ships used by space traders, such as you aspire to be, don't land on planets - they get parked in orbit, and the owner uses a personal shuttle to flit down to the surface of the planet, landing in the spaceport on the shuttle landing pad.

When you buy your very first ship, Jarrow Shipbuilders deliver it to Earth orbit and park the shuttle on Earth's shuttle landing pad, waiting for you.

THE FINANCIAL SIDE OF SHIPS

Now, ships cost money. A lot of money. You start your Fed life with some cash, but barely enough to buy a pushbike, let alone a superduper whizzbang trading spaceship. So as part of their services, Jarrow Shipbuilders will arrange a loan with the bank to finance the entire cost of your first ship. How generous is that? Loans are only available to first-time buyers; those trading up to a new model have to fund the whole cost themselves.

Having hocked your soul to the bank for this huge loan, you will of course have to start paying it back. The Bank will automatically skim 10% off any money you earn by doing cargo jobs. You can make additional payments at any time - **'REPAY 10'** deducts 10 ig from your bank balance, and reduces your loan balance by the same amount. The amount of your outstanding loan is shown on your **'SCORE'** display.

If you do want to make extra payments, don't use up all your groats... make sure you have enough left for fuel and for buying drinks for your friends.

SPACE NAVIGATION

Congratulations, Commander Newbod! You are now the master of a shiny new ship, and incidentally you have earned your first promotion - you are a GroundHog no longer. Presumably you will want to start cruising the spaceways, boldly going where no Newbod has gone before.

Head for the shuttle landing pad in the spaceport, and get into your shuttle using **'BOARD SHUTTLE'** or **'BOARD'** for short. The shuttle will shuttle you into orbit and connect to the mothership, and you will be ready to fly off into the Interplanetary Wastes. The same command reverses the procedure, landing you on whatever planet you are orbiting around.

To move in space you use the compass directions, just as you do on the ground (North is regarded as being towards the Galactic North Pole, wherever that might be). The other movement directions - **'U'**, **'D'**, **'IN'** and **'OUT'** - may also work in certain areas of space; for example, you use **'IN'** to enter the asteroid belt.

Judicious use of bribery can save you wear and tear on your fingers - for the cost of 1 slithy you can install an upgrade to your navigational computer that will allow you to move automatically between planets using the command **'GOTO planetname'**. Visit Arnie's Surplus Store on the Moon to get the upgrade, which lasts until you sell your ship.

Your first foray into the Interplanetary Wastes should take you to Mars - W, NW from Earth - where you can visit the legendary Chez Diesel (SC of the SS) and buy a drink for the regulars.

FUELLING UP

You've bought your new ship. You've been whizzing back and forth across the Solar System, exploring, buying drinks for people in Chez Diesel (SC of the SS) and generally having a good time. Suddenly, a warning buzzer sounds... this indicates that you are in imminent danger of running out of fuel.

When you buy your first ship it will come with half a tank of fuel, courtesy of the management. As you move around space this will be used at the rate of 1 ton per move for

the basic small ships. Of course, larger ships guzzle fuel and are consequently more expensive to run, as you will discover when you can afford to trade up.

If you look at your ship's status (type '**STATUS**' or '**ST**') it will tell you how much fuel is in the tank. The warning buzzer sounds when the level reaches ten tons and continues until you top up the tank, or you run out completely. '**BUY FUEL**' will fill up your tank. Fuel, of course, is a volatile substance so Galactic Administration regulations on hazardous materials prohibit the refuelling of ships while you are still on board unless there is an emergency. So although you can buy fuel anywhere, we strongly recommend that you arrange for your ship to be refuelled while you are on a planet, not least because of the cost.

Fuel bought when you are grounded costs 10 ig a ton; the cost in space is 50 ig a ton, since there are no service stations in the Interplanetary Wastes and the fuel has to be shipped out to you. A loophole in the regulations means that the fuel companies can charge the space premium even if your ship is in orbit, so long as you are still on board.

To avoid this embarrassment, the Idiot's Guide recommends that you refuel every time you touch down on a planet.

If you are stupid enough to run out of fuel in space, only buy the absolute minimum you need to reach the nearest planet. You can buy less than a tankful with '**BUY tons FUEL**' where '**tons**' is, of course, the number of tons you wish to purchase.

If you run out of fuel and don't have enough money to buy more, you can cadge a loan from another player - so long as you are not stranded in space. If that happens you are really in trouble!

TRADING UP

Sooner than you think, you will want to trade in your spaceship for a bigger model with go-faster stripes. You can only sell things that actually belong to you, so before you can trade her in you have to repay the outstanding loan that has been hanging round your neck like an albatross. This, incidentally, will trigger your next promotion - once your loan is repaid you become Captain Newbod.

Jarrow Shipbuilders pride themselves on providing an all-inclusive service, so they will take your rusty old ship off your hands in part exchange when you buy a new one, knocking 50,000 ig off the price. If that sounds like a pittance considering what you paid for it, don't forget that the loan you took out included a hefty interest payment - there is no such thing as free banking!

This time when you type '**BUY SHIP**' from the comfort of Jarrow's spacious salesroom, you will have a chance to specify exactly what makes up the ship of your dreams. You will be asked what size hull you want, if you require extra armor or any shielding, what weapons you want, the level of computer, the size of power plant and the size of fuel tank. At each stage of the proceedings, you are given an update of the price and the cargo space remaining, and at the end the salesdroid will show you the final specs and ask you to confirm your purchase.

There are restrictions of the size of ship you can buy. Guardian ships are only available to Merchants and above, Mammoth ships to those who have reached the rank of Industrialist, and you have to be at least a Manufacturer to fly around in an Imperial.

The Jarrow Shipbuilders Pricing Schedule gives you the options and their prices, to help you work out in advance what you can afford - read it at <http://www.ibgames.net/fed2/guide/ships/jarrow.html>. If you try to be too ambitious when custom-ordering, you will find you don't have enough money and you'll be told to get knotted.

Remember that the larger the ship, the more fuel it will consume!

Don't be tempted by all the bells and whistles the smooth salesdroid will offer. At this stage in your career your main concern is cargo space - add-ons take up room that could otherwise be used to carry lucrative cargo. Besides, the Galactic Administration is currently enforcing a strict moratorium on the use of weapons in Sol space, so there is little point arming yourself to the teeth (or equivalent).

When you buy a new ship, your storage locker is moved from the old ship to the new, along with all its contents. However, if you have bought the navcomp software upgrade, that won't be transferred to the new ship; you'll have to buy it again.

Of course, you don't have to buy your ship from Jarrow; you could visit one of the out-of-Sol planets and trade your ship in there. Planet owners can vary the prices at which ships are sold, so you may end up paying less. If you type '**DI PLANET planetname**', the planet display will show the shipyard markup. If it's a negative number the ships will be cheaper than in Sol; a positive number and they will be more expensive. A markup of zero means the price will be the same as Jarrow Shipyard.

Ships bought in Sol will be registered to Panama. Outside of Sol, some planets will have their own ship registration facility so that if you buy your ship there it will be registered to that planet. You can see a list of all the ship registration facilities by typing '**DI REGISTRY**'.

SHIP REPAIRS

Right now there's no way for your ship to get damaged so it won't need repair, but once ship fighting returns to the game you will need to patch up your leaky hull or repair any bits of equipment that have been damaged in a fight.

You can repair your ship at any repair yard – most planets will have one, usually on the landing pad. In Sol you can find a repair yard on Earth, Mercury and Venus.

To repair your ship, the command is '**REPAIR SHIP**'. This fixes everything that is wrong with the ship.

You can get an estimate first with '**REPAIR SHIP ESTIMATE**'. Note that since the materials used in the repair are purchased from the exchange, there may be differences between the actual cost and the estimated cost of the repairs – the shorter the period between the call for an estimate and the request to repair, the less likely there is to be a significant change. It also means the cost will vary from planet to planet so it will pay to shop around.

Right now you won't actually be charged for the repair, no matter what the game tells you. The charge will only be implemented when ship fighting goes in.

6. MAKING PROGRESS

RANKS

Ranks are important in Fed2, not just because they are a visible indication of the progress you are making, indicating that you are superior to some people (the lower orders) but inferior to those who have climbed higher than you, but also because what you do to earn your living changes drastically when you promote.

At any stage, you can type **'RANKS'** and see a list of all the ranks in the game, and be told what you need to do to promote to your next level. You can also use this command to find out the promotion requirements for other ranks. **'RANKS rankname'** will give the requirements to promote from the given rank; for example, **'RANKS CAPTAIN'** would tell you what you would need to do if you were a Captain.

The following sections explain all the details about how you make your living at each rank; but just to give you an overview, here is a summary.

GroundHog

The lowest of the low in Fed is the GroundHog. We all have to start out at this pitiful rank, but unless you enjoy having derision and scorn poured upon you, the Idiot's Guide recommends that you cease to be a GroundHog as soon as possible.

You will become Commander Newbod as soon as you acquire your first spaceship. This Guide contains all the information you need to drag yourself out of the squalor of GroundHogdom, so there's no excuse for not making it to Commander in pretty short order.

Commander

As you proudly display your new ship, you will soon realize that being a Commander is little improvement! You will have signed your soul over to the bank on a finance agreement and the only way to redeem it is to repay the loan. And that means working for a living. At this stage, your work consists of carrying cargo around the Solar System and being paid for the delivery. When you've done a certain number of jobs you can leave Sol, jump through hyperspace and contract for more lucrative jobs in other star systems.

After many hours of hard work, you will finally repay the loan and become a...

Captain

You are now the proud owner of your own spaceship - but not much else! You continue to do cargo jobs, but this time the bank is no longer slicing 10% off your income.

Once you make enough money, you can trade your ship in for a larger model, which allows you to carry bigger loads, which pays you more groats. At the same time, each job you do gives you hauling credits, which are important for your next promotion. Once you have completed the magic number of 850 you will become an...

Adventurer

At last you are starting to make progress! As an Adventurer, you no longer have to carry cargo; instead you are entrusted with small, valuable items to be carried between specific places on the various Sol planets.

As you do these akaturi jobs you will be awarded akaturi credits, and you need to amass 75 of those in order to qualify for your next promotion. You will also need 75,000 ig in the bank. Once you have met those targets, you need to apply for membership of the Trading Guild, by visiting their HQ on Earth. If they are satisfied that you fulfil their stringent criteria, they will admit you to their august ranks, and you will become a...

Merchant

Now you are entering the big leagues. As a Merchant, you buy commodities from trading exchanges and sell them on other planets at (hopefully) a profit.

On promotion to Merchant, you get a boost to your stats - 5 points is added to your strength, stamina and dexterity.

Each successful trade you complete will gain you two Merchant Rating points; an unsuccessful trade will lose you one point. You need 800 MR points to qualify for your next promotion. You will need to visit Messrs Trumble, Cruikshank and Bone on Earth to lodge a 400,000 ig bond and appoint them as your brokers - the command is **'DEPOSIT A BOND'** - and then you will be promoted to...

Trader

As a Trader, you stop making money from buying goods, carrying them elsewhere and selling them, and switch to buying futures contracts. Your proficiency at this enterprise is measured with trading points which are awarded and taken away depending on how profitable each contract is.

Your goal as a Trader is to achieve a Trader Rating of 500, by making profits on futures contracts. Once you have done that, you are ready to promote to the next rank. The promotion will happen when you register a business of your very own.

Industrialist

Registering a business makes you an Industrialist, the CEO of a company which owns factories churning out an endless stream of commodities. On promotion to Industrialist, you get 15 extra intelligence points.

This rank is relatively free of pressures since with a private business you are the boss and the shareholders can't overrule you. You can choose when to promote; there are no requirements at all although you'd be advised to stick with it long enough to pile up some cash in your business. Whenever you choose to do it, you launch an IPO to convert your business into a company and you will become a...

Manufacturer

As a Manufacturer, you have successfully undertaken an IPO to change your business into a public company. You continue to run factories, but now the training wheels are off. You don't get any say in who buys the shares, you have to cope with maintenance and

shareholder disaffection, but on the plus side you can buy more shares in your company and can upgrade the facilities, and can buy more factories.

Once you have run your company for four cycles without getting in such a mess you are forced to declare bankruptcy, you can sell off all your factories and depots, and at the next reset promote to...

Financier

Financiers continue to run companies, but now they are financial instead of manufacturing companies. Your company earns groats by bidding for shares in businesses and buying shares in other companies. Financial companies can also trade in futures contracts.

Your goal as a financier is to build up a nice big company balance, so that when you promote to the next rank, Founder, you have a big float to start your planet treasury off. There's no actual requirements for that promotion - you go when you are ready, by getting your planet linked into the game, at which point you become a...

Founder

Founders are planet-owners, with their very own population to oppress. As part of the promotion to this rank you link a planet into the game - you can design it yourself, or use one of our stock planets. Then you run the economy of the planet, working with CEOs to get factories set up on your soil which will boost your economy, and with merchants to ensure goods are hauled in and out as necessary.

Building infrastructure to improve your planet will eventually allow you to be promoted. You need 30 builds, two of which must be schools, and then you can become an..

Engineer

Your planet moves up an economic level, and you have more things to worry about when running your planet, such as disaffection - but you should also be able to improve things for the sake of your populace and for your treasury. You will need to undertake more infrastructure builds because a total of 70 will be needed for your planet to advance to the next rank.

Mogul

When your planet becomes an industrial world, you promote to Mogul. At this rank you can link a second world into your star system, doubling your chance to make groats. Which you will need, because your further advancement involves even more builds. You can choose which of your two planets you want to improve the most, but you will need to achieve 125 builds on one of them to become a...

Technocrat

At this rank, you can add objects, mobiles and events to your planets in order make them really exciting for players to explore. You can even make your own puzzles. On the economic side, it's more building, building, building until your techno planet has 200 builds so you can promote to the next rank.

Gengineer

Your techno planet doesn't advance but you can link a new planet with a biological economy into your star system. To advance further, it's yet more builds - your techno planet needs to have 265 builds and then you can promote. Your bio planet won't go up a level - it always stays a bio planet, but you will become a...

Magnate

Owner of a leisure planet, this is the final PO rank. And guess what - you have to build some more, as you prepare to promote to the final rank. Your leisure planet needs to have 335 builds. Your star system must have at least two planets in it. Once you fulfil those criteria, then you can promote to...

Plutocrat

The final rank in the game is where you run a cartel, an economic grouping of star systems, in your attempt to dominate the galaxy.

Exciting stuff!

TAKING A SHORT CUT

There is a way you can climb the greasy pole and attain the highest rank in the Galaxy - that of Emperor - without doing a stroke of work. You can '**CHEAT**'. Of course, the results might not be quite what you expected...

SCORE AND STATUS

As you progress in Fed you will want to keep track of how well (or how badly!) you are getting on. You can check on your personal score, or your ship's status.

Typing '**SCORE**' or '**SC**' brings up your personal details:

```
>sc
Commander Newbod
Gender: Male  Race: Human
Bank Balance: 12929  Games played: 5
Gifts:
  1 slithy tove
Loan: 199919ig  Hauling Credits: 2
Strength  max: 35 current: 35
Stamina   max: 35 current: 35
Dexterity max: 35 current: 35
Intelligence max: 35 current: 35
Insured against one (1) death in Fed2 DataSpace.
Owner of a Panama registered, Harrier class ship
You are currently on Earth in the Sol system
```

This shows you how much money you have, your outstanding loan, the number of hauling credits you have amassed and your stats, and whether you are insured, among other things.

Keep an eye on your stamina, because it reduces as you trundle around, not to mention you may do other things that cause it to plummet, so you will need to visit Chez Diesel (SC of the SS) frequently and **'BUY ROUND'**.

To find out your ship's status, type **'STATUS'** or **'ST'**.

```
>st
Status report for your Harrier class spaceship
Registered in Panama
Hull strength: 15/15
Shields:      0/0
Engines:      40/40
Computer:
Level:        1/1
Sensors:      0
Jammers:      2
Cargo space:  75/75
Fuel:         64/80
Weapons installed:
None
You don't currently have a shipping contract.
```

This shows you both the current level and the maximum level of your equipment. The one to watch is your fuel, which reduces as you fly your ship, and your cargo space, which determines the size of the load you can carry.

SELF IMPROVEMENT

However carefully you choose the distribution of your personal statistics when setting up your character, you can guarantee that you will later come to regret it. Do not despair! Illicit operatives situated in various places in Sol offer clandestine services which allow you to add extra points to each of your characteristics. Of course, if you feel you are practically perfect in every way, you will have no interest in this, but otherwise, each stat point costs 1 slithy tove, and the command to use is **'BUY statname'** where **'statname'** is the stat that you want to improve - stamina, strength, dexterity or intelligence. There is a limit of 150 on each stat, and you can only receive one stat boosting treatment each day.

- Stamina enhancement is offered by the purveyors of all business services on the Magellan spacestation, Rotary Offices. Talk to Blythe about stamina for the details.
- Strength can be increased on the Doris asteroid, where the biolabs facility, being unregulated by the Galactic Administration, can offer a more upfront service in their automated booth.
- Dexterity boosts are performed as a sideline by the scientists in the genetics lab of Earth's mini-zoo - ask about dexterity for the details.
- Intelligence can be lifted by paying a droid who has figured out how to operate some ancient alien machinery, deep in the Mercury caves.

Admittedly, right now there is little use for having high levels of any of the stats except for stamina - but that could change in the future!

MISSIONS

As well as the core economic activities you undertake to earn your crust in Fed2 DataSpace, there are peripheral activities that you can become involved in that do not have a direct bearing on your progress through the ranks, but can confer additional benefits. In short, there are missions to go on and mysteries to solve. Completing a mission will give you a variety of rewards, and the fact that you have solved a mission will be displayed on your SpyNet Report information.

At the moment there are two missions available:

- The Magellan Society Treasure Hunt. This is aimed at new players (Commanders and Captains) although higher ranked players can take part if they wish. To start the Treasure Hunt, visit the Magellan Society Exhibition in Earth's spaceport and talk to the organizer, Victor. You will need to have a spaceship in order to do the hunt, because you will have to visit many planets.
- The Trading Guild Mission to Graveyard. This is a dangerous puzzle that should only be undertaken by those unafraid of death, whatever rank they happen to hold. To start the mission, go to the Galactic Trading Guild HQ on Earth and speak to Mr Puckleberry.

More missions will be added soon.

7. GROAT-MAKING FOR BEGINNERS

CARGO JOBS

There comes a time when even the richest of us have to interrupt our drinking in Chez Diesel (SC of the SS) and do some work. For Commanders and Captains, this means carting cargo around the Galaxy. Cargo jobs pay a pittance, but the pay does add up, and you also gain hauling credits, without which Poor People will not be able to promote.

Cargo is the business of the mega-corp Armstrong Cuthbert, who have offices on all the major Sol planets, usually fairly close to the spaceport. You can find them by looking at the starter maps at <http://www.ibgames.net/fed2/maps/planetmaps.html>. They also have a presence in other star systems, and automatically set up shop on the landing pad of planets that have been made accessible by the Interstellar Link.

Armstrong Cuthbert controls workboards, onto which they post details of the cargo jobs they have available. There is one workboard for each cartel, with jobs going to and from the planets within the cartel. **'WORK'** shows you the jobs available:

Work available from Armstrong Cuthbert:

- 22. From Earth to Mercury - 75 tons of Clinics - 7gtu 11ig/tn 2hcr
- 25. From Mars to Venus - 75 tons of Fruit - 9gtu 8ig/tn 2hcr
- 27. From Rigel 4 to Pebble - 75 tons of Sensors - 7gtu 6ig/tn 2hcr
- 30. From Titan to Castillo - 75 tons of Cereals - 7gtu 12ig/tn 2hcr
- 31. From Venus to Mercury - 75 tons of MicroScalpels - 9gtu 11ig/tn 2hcr
- 32. From Earth to Doris - 225 tons of Proteins - 8gtu 11ig/tn 2hcr

Commanders should pay particular attention to the collection and delivery planets - since you cannot leave the Solar System until you have got 50 hauling credits, you won't be able to do jobs to or from out-of-Sol planets, such as number 27 on the sample workboard above. Make sure you know which planets are in Sol and which are not - the Sol planets and asteroids are shown on the Solar System map at <http://www.ibgames.net/fed2/maps/solmap.html>, and you can also type **'DI SYSTEM'** for a list of all the planets in the Solar System.

The number is the identifier for each particular job, which you use if you want to bid for the job.

The quantity to be shifted may be larger than your cargo hold, so take care before bidding for a job.

The time allowed to complete the job is measured in Galactic Time Units (GTUs). Each move you make in space takes up 1 GTU; wandering around on a planet's surface doesn't use any GTU. If you complete the job in less than the time allowed you will receive a fast delivery bonus. Take longer than the time allowed and the payment will be reduced by a late delivery fine. Some jobs will be impossible to complete in the time allowed, but may be worth doing anyway to gain the hauling credit.

The payment for the job is shown in groats per ton.

The final entry for each job is the number of hauling credits you will be awarded on successful completion. These are important because they are the measure of when you are ready to promote to Adventurer.

Armstrong Cuthbert posts jobs onto the board in batches; new jobs appear when there are only a few left. Old jobs that are not taken will be removed from the board after a while to leave space for new ones; the cargo will be consigned to the slowest of government haulers and will probably get damaged on the way. If you want to be notified when new jobs are posted, type '**JOBS ON**' and your comm unit will flash up a message; to make it stop, type '**JOBS OFF**'. Turning jobs on also notifies Armstrong Cuthbert that you are available for work, so they will tailor the jobs available to your cargo space. Therefore, if you are not doing jobs, don't leave the notifications turned on, because you will skew the jobs posted which might inconvenience other haulers.

So, you want to do one of these jobs. First you have to bid for it, using '**ACCEPT #**' where '#' is job number as shown on the workboard. If your bid is accepted, you need to go to the Armstrong Cuthbert office on the "from" planet and '**COLLECT**' the cargo. The freight will be loaded onto your ship ready for you. You then fly to the "to" planet and go to the Armstrong Cuthbert office, where you '**DELIVER**' the goods, at which point you will be paid.

While you are a Commander, the bank manager will automatically take 10% of your job earnings to repay the ship loan.

If you forget where you are supposed to be delivering the cargo, the details of your current contract are shown on your status.

Should you subsequently decide you don't want a contract, you can cancel the job by typing '**VOID**' - and get fined for your impetuosity.

From time to time, particularly valuable jobs might pop up on the board - some pay a much larger amount, others offer extra hauling credits. Keep an eye out for those, because they really can boost your bank balance or hauling credits!

A few notes on strategy. Since the clock starts ticking as soon as you accept the job, it can be a good idea to get to the collection planet before accepting the job. However, if competition for jobs is fierce, you may find it works out better to accept the job from wherever you are, and swallow the late delivery fine. After all, hauling credits are more important than actual groats. Alternatively, work in a more leisurely fashion by waiting until a job shows up from the planet you happen to be on. And where better to wait than your nearest bar, such as the excellent Chez Diesel (SC of the SS) on Mars?

Jobs Outside Sol

Once you have 50 hauling credits you can leave the confines of the Solar System and do jobs to and from other star systems.

If you leave the Sol cartel, the workboard will change completely, with the collection and delivery planets on all the jobs being in the new cartel. In other cartels, the workboard may contain jobs placed there by POs - these are marked with an asterisk. It's worth trying for these because they pay more hauling credits than regular jobs.

You may also be offered jobs directly by a planet-owner in a Plutocrat-owned cartel. If you receive the offer of a job its details will appear on your ship's status display as a pending job. If you have a current job you need to complete that before you can accept the pending job; then you **'ACCEPT'** and the job stops being pending and becomes your current job. Alternatively, you can choose to **'REJECT JOB'** if it's an offer you can refuse.

If you choose to accept it, you deliver the cargo just as you would any job. The payment will be broadly similar to that for PO-posted workboard jobs.

AKATURI JOBS

So you've promoted to Adventurer. Now you can hang up your hauling trousers and go and do something a lot more interesting: Akaturi jobs. That's an alien term that has crept into the Earth language. What it means is that Armstrong Cuthbert, having been impressed by your work, wants you to become a trusted courier and deliver small valuable items.

To obtain an Akaturi job, go to any Armstrong Cuthbert office and type **'AKATURI'** (or **'AK'** for short). They will tell you to go to a specific location on one of the Sol planets, to pick up a package. When you get to the right place, use **'PICKUP'** to take charge of the package. You will then be told where the valuable item needs to be taken; when you arrive at the destination, deliver the package with **'DROPOFF'**.

At any point, you can check the details of the job with **'DISPLAY AKATURI'** or **'DI AK'**. The items you are carrying do not show up in your inventory, because they do not belong to you.

Successful delivery of the package gives you a payment of groats plus 1 akaturi credit. You will need those credits in order to qualify for the next promotion.

These jobs don't pay quite as well as cargo jobs, but there is no time limit on them, and no competition from other players. Akaturi jobs are only available in the Solar System.

If you decide you don't want to do the job, you can **'VOID'** it, but not only will you be fined a large number of groats, you will also lose 5 Akaturi credits - after all, you are carrying extremely valuable and rare items that the owners will not want to lose!

Now you see why knowing your way around the planets is important!

8. TRADING FOR FUN AND PROFIT

EXCHANGES

Once you have promoted to Merchant you can stop being a wage slave and start working for yourself, buying your own goods to cart from planet to planet.

You should have discovered that there is a Trading Exchange on most planets. If you haven't - go and find them at once. Exchanges are pretty easy to spot because you will notice the prices streaming across the display screens the moment you set foot inside one, something like this:

+++ The exchange display shows the prices for Livestock +++
+++ Exchange has 700 tons for sale +++
+++ Offer price is 162ig/ton for first 75 tons +++

An Exchange's sole purpose in life is to sell those goods produced by the planet and to buy those needed to support its economy.

There are 67 different tradable commodities which are divided into six categories - Agricultural, Resource, Industrial, Technological, Biological and Leisure. You can find a complete list of commodities at the end of this section. The exchange displays prices for the commodities in alphabetical order.

'BUY commodity' will buy a 75-ton container of the specified commodity from the exchange. The container is delivered to your ship and loaded into your cargo bay by the spaceport's stevedores.

You can buy another container of the same commodity, provided you have room in your ship, but it pays to check the price first, because the exchange recalculates the selling price whenever its stock changes. Fortunately, the exchange very helpfully displays the new price immediately following your purchase.

If you buy more containers than will fit into your cargo hold, you will lose the goods. Your cargo hold is also emptied out at reset, so you need to sell whatever you've bought before that happens.

Having filled up your ship with goods and hauled them across the Solar System or beyond to a planet where you hope there is a demand for them, you will want to get rid of them. **'SELL commodity'** does just that. Once again, the price will change as a result of your sale, and the Exchange will display the new price. You can't sell goods back to the planet from which you bought them - you have to take them elsewhere for disposal.

If you forget what you are carrying in your ship, the details are shown on your ship's status:

Cargo carried (75 ton containers):
Cereals - Cost: 216ig/ton - Planet of origin: Earth, Sol system

The price you paid for goods is particularly important, since checking this against the price in the exchange where you wish to sell the cargo will ensure you don't make any embarrassing mistakes, such as flogging something for less than you paid for it. Not only would that be a fine way to lose money, it will also hold up your advance, since you are required to carry out

a certain number of successful trading transactions in order to promote. A successful trade is one where you make a profit of at least 15% when you sell the goods. When you complete a successful trade you gain 2 Merchant Points, which are shown on your score display; an unsuccessful trade will lose you 1 point.

CHECKING PRICES

When you reach an exchange where you want to sell your goods, you can do a spot check of the price with **'CHECK PRICE commodity'**. **'CHECK'** can be abbreviated to **'C'**.

You can subscribe to a remote price checking service by visiting the brokers office on Earth and paying a slithy tove for 31 days access - **'BUY REMOTE SERVICE'** - and then use the command **'C PRICE commodity planetname'** to find out prices without having to leave the comfort of your favorite bar, ship or bed. **'C PRICE commodity CARTEL'** gives the price for the specified commodity on all the planets in the cartel you are in, but it won't work in Sol.

You can also buy an upgrade to this service which adds two new variants to the command. You can get a list of the prices offered for a commodity on all the Solar System planets with **'C PRICE commodity'**, which will only work outside of an exchange, and you can get the prices for a whole commodity group with the command **'C PRICE commoditygroup planetname'** - **'commoditygroup'** being agri, resource, ind, tech, biological or leisure. The upgrade costs a one-off payment of two slithies. Get it from the brokers with **'UPGRADE REMOTE SERVICE'**. It only works if you have the basic remote price subscription.

As if that wasn't enough, there's a super-duper all-in-one premium ticker that lets you check the price for a commodity on all the planets in the Galaxy. This costs five slithies. You can buy it anywhere with **'BUY PREMIUM TICKER'** and then get the full set of prices with either **'C PREMIUM commodity BUY'** or **'C PREMIUM commodity SELL'**. To see the complete list of both buying and selling prices, use **'C PREMIUM commodity ALL'** but be warned, the list is extremely long and unwieldy, even though it leaves out planets in closed systems. If you leave off the last bit, the command defaults to showing the complete list. The premium price checker, like the upgrade, will only work if you have the basic remote price subscription.

WAREHOUSES

Having to sell everything you have bought before the game resets is a nuisance. Wouldn't it be nice to be able to stash your purchases safely somewhere so they would be reset-proof?

Well, that's what a warehouse is for. The snag is that fledgling Merchants cannot build warehouses; you have to prove your trading prowess first. You do this by completing enough successful trades to have at least 300 Merchant Points. You can then go and buy a building permit from the Galactic Administration - the permits cost 600,000 ig, but you will need to have 700,000 ig in the bank. The GA very wisely insists that you have at least 100K left for trading purposes! You will also need a slithy tove, to persuade the clerk that you are a suitable person to own warehouses. The command is **'BUY WAREHOUSE PERMIT'**.

Once the necessary paperwork is in order, you can build yourself a fine set of warehouses. Go to the trading exchange of the planet on which you want to situation your storage facility, and use the **'BUY WAREHOUSE'** command. **'WAREHOUSE'** can be abbreviated to

'WARE'. The cost is 650,000 ig. You can only have one warehouse on a planet. There is no limit to the total number of warehouses you can own, at the moment, but that may change as the Galactic Administration re-examines its building codes.

There are some things to take into consideration when deciding where to build your warehouses. In Sol, while there are no restrictions on building warehouses, you need to keep in mind that depots are not allowed on certain planets - at the moment the ban prohibits building them on all planets barring leisure worlds, but this may well be extended to all worlds in the future. If you do have any warehouses on these planets, make sure you sell them before you promote to the next rank, otherwise you will eventually lose them.

If you are contemplating building out of Sol, you need to consider the possibility that unhappy citizens may riot and tear your warehouse down. If the planet-owner doesn't keep the populace happy, disaffection will increase and loss of property is one of the possible results. You can keep an eye on the how upset the people are because once you promote to Merchant, the planet display shows the disaffection level.

Once you have a warehouse, you can start putting things in it for safe-keeping. There are 20 bays in a warehouse, and each one will hold one 75-ton container of goods. To transfer a container from your ship to the warehouse, type **'STORE cargoname'** where **'cargoname'** is the name of the cargo that you want to store. If you have more than one container of the same goods in your ship, the first one will be stored. If you try to store something and there is no room in your warehouse, those thieving stevedores will find a home for the goods anyway...

To take a look at what you have stored in your warehouse, type **'DI WARE planetname'**. **'DI WARE'** without a planet name will list all of your warehouses, so you can see which planets you have built upon.

To get the goods back out of the warehouse, use **'FETCH #'** where **'#'** is the number of the bay containing the goods you want. If there is no room in your ship for the goods, then you can guess what will happen!

You can rearrange the goods in your warehouse using **'SHUFFLE'**. This moves the goods in your warehouse into the lower numbered bays, so there are no gaps. It makes it a lot easier to see how full the warehouse is.

If you want to dispose of a warehouse, you can sell it with **'SELL WARE'** - this will flog off the building on the planet you happen to be standing on. You'll get back 250,000 ig for the sale.

BEING A SUCCESSFUL MERCHANT

Now you know the mechanics of trading on the exchanges, it's time to concentrate just a little on the techniques to being a successful Merchant. The golden rule is:

Buy low, sell high!

In order to do that, you need to understand the economy of the Solar System, and have a grasp on what each planet is likely to want to buy and sell. As a general rule, the planets produce commodities from the following groups:

Agricultural:

Earth
Rhea

Resource:

Sumatra
Titan
Venus

Industrial:

Brass
Moon
Paradise

Technical:

Castillo
Mars
Pearl
Silk

Biological:

Doris
Phobos

Leisure:

Magellan
Mercury
The Lattice

This is only a general rule because they won't necessarily produce every commodity in those categories and may produce odd commodities from others. Biological commodities are the only ones which are never produced on planets at other economic levels; they are so dangerous to develop that strict rules govern where and how they can be manufactured.

Out-of-Sol planets start at Agricultural level and advance as their economies grow. You can see what level a planet is by typing '**DI PLANET planetname**'.

Each commodity has a base price, which is shown on the table at the end of this section. Each exchange then calculates the exchange price for each commodity, depending on how much is in stock, and what the planet's population demands, and is capable of producing. Different commodities behave in different ways, so you may see wild variations in the price of one commodity, whereas another commodity will remain a lot steadier. Finally, the exchange applies a markup, or spread, when calculating the buying and selling prices, to ensure it makes a profit.

Observing the movement of prices over time will soon give you a grasp of which commodities are available in abundance, and which are in short supply, as well as the way the prices change. You will then be able to formulate trading strategies.

When you sell goods to an exchange, half of the amount is absorbed by the planet; the other half is used to fill the exchange's deficits or to provide a surplus. The exchange won't

switch to selling the commodity until it has at least 75 tons - one container load - available for sale.

Things that happen in the Galaxy will also have an effect on prices. Natural disasters, new discoveries, accidents and so on could affect the stockpile of a particular commodity on a particular planet, or the production or consumption figures for the relevant commodity. On average, each planet will experience 2 or 3 of these events each day.

You can see a report of events which effect exchanges by typing **'DI EVENTS'**, which shows the events that happened since the reset (although if the list gets too long it only shows the last 30). If you just want to know about the events on one planet, use **'DI EVENTS planetname'**. These things will have an effect on prices so you need to keep an eye on them so you can take advantage of them when buying and selling goods. To help you monitor these occurrences, you can ask Messrs Trumble, Cruikshank and Bone to notify you when they happen. **'REPORT EVENTS'** will switch on the receipt of exchange notifications, and **'CANCEL EVENTS'** will switch them off again. The notifications will last until you log off.

Once you have mastered the intricacies of trading on the Solar System planets, you can venture into the exchanges on out-of-Sol planets - those owned by players. These work in the same way as the solar exchanges at the moment, but the owners will soon be given control over the economy and be able to determine whether the planets give good prices or not. Therefore it will pay to be chummy with the POs and find out their particular wants and needs.

Plutocrats will set customs levies to charge those that import goods, so crossing cartel borders in the course of your trading can get expensive. The Sol customs rate is 10% - other cartels may vary depending on whether the owner wishes to encourage imports or not.

GETTING OUT OF TROUBLE

Merchant is the first rank where it is possible to end up in a right old pickle. You need a certain amount of groats in order to be able to afford to buy a container of goods. That's why the Trading Guild insists that you have a spare 100,000 ig on top of the joining fee - so you have a float with which to start trading.

But it wouldn't take too many bad trades for that float to disappear, leaving you stuck. If that happens to you, then don't reach for the poison pills right away... there is another way out. You can declare yourself bankrupt and be demoted back down to the rank of Adventurer. The command is **'DECLARE BANKRUPTCY'**. You will then be able to work your way back through that rank before having another stab at trading. A drastic step, and a big humiliation to be sure, but better than being unable to go any further!

TABLE OF COMMODITIES

Agricultural

<i>Commodity</i>	<i>Base Price</i>
------------------	-------------------

Cereals	270
Fruit	420
Furs	650
Hides	400
Livestock	210
Meats	410
Soya	230
Spices	650
Textiles	300
Woods	700

Resource

<i>Commodity</i>	<i>Base Price</i>
Alloys	180
Clays	520
Crystals	650
Gold	600
Monopoles (monos)	720
Nickel	370
Petrochemicals (petros)	400
Radioactives (rads)	540
Semiconductors (semis)	350
Xmetals	480

Industrial

<i>Commodity</i>	<i>Base Price</i>
Explosives	470
Generators (gens)	670
LanzariK	700
LubOils (lubs)	560
Mechparts (mechs)	420
Munitions	250
Nitros	230
Pharmaceuticals (pharms)	630
Polymers	200
Propellants (props)	260
RNA	380

Technological

<i>Commodity</i>	<i>Base Price</i>
AntiMatter (anti)	480
Controllers	710
Droids	700

Electros	250
GAsChips	450
Lasers	470
NanoFabrics (nanfab)	850
Nanos	550
Powerpacks (packs)	680
Synths	560
Tools	350
TQuarks	835
Vidicasters (vids)	380
Weapons	420

Biological

<i>Commodity</i>	<i>Base Price</i>
BioChips	650
BioComponents (biocomp)	760
Clinics	450
Laboratories (labs)	470
MicroScalpels (scalpels)	320
Probes	510
Proteins	260
Sensors	470
ToxicMunchers (toxics)	470
Tracers	600

Leisure

<i>Commodity</i>	<i>Base Price</i>
Artifacts (arts)	730
Firewalls	690
Games	210
Holos	260
Hypnotapes (hypnos)	430
Katydidics (kats)	610
Libraries (libs)	680
Musiks	470
Sensamps	520
Simulations (sims)	310
Studios	390
Univators (unis)	570

9. FUTURES CONTRACTS

TRADING IN FUTURES

When you promote to Trader, you have to learn another way to make money. While you can still buy and sell goods which you personally haul between planets, there is a daily limit on how much trading you can do: once your gross sales reach 1 meg you will be prevented from buying and selling any more that day. (This restriction is lifted when you promote to the next rank.) You should also start divesting yourself of your warehouses, because you don't need them at this rank and will have to get rid of them before you can become an Industrialist - you can sell warehouses but not buy new ones.

As a Trader, your method of making money is to get involved in the futures market, and have to become a success or you will never be able to promote any further.

A futures contract is like making a wager. You purchase a futures contract to either buy or sell a specific commodity on a specific planet, at a later time. You are gambling that at some point between the time you take out the contract, and the time you liquidate it, the price of that commodity will change in such a way that you can make a profit on the deal.

For example, you might contract to buy 225 tons of alloys from Mars at a price of 29,925 groats - this is called a long contract. That works out at 133 groats per ton, which is lower than the base price for alloys. You therefore think it is likely that over time, the price will rise, so that the futures contract becomes profitable.

Alternatively, you might contract to sell 225 tons of alloys on Mars - a short contract. In that case, you would want the futures contract to be priced high, and you would be gambling that over time the exchange price would drop, so that when the futures contract is settled you make a profit.

Note that you never actually have to go out and buy or sell loads of alloys yourself - these are all paper transactions. The details are handled by your broker, who works for Messrs Trumble, Cruikshank & Bone on Earth. This means the rank can be a change of pace from previous ranks. Although you will need to visit an exchange to purchase a futures contract, once you have done so your time will be spent monitoring the movement of prices in order to decide when to liquidate the contract, rather than rushing around the Solar System - thus leaving a lot more time for socialising in Chez Diesel, the Social Center of the Solar System.

PURCHASING A FUTURES CONTRACT

Futures contracts are offered by some of the exchanges in the Galaxy, but not all of them. Those that do sell them won't deal in all commodities, and the ones they do sell won't be tied to the production or demand of the planet's exchange. Each planet decides which commodities it is going to offer futures in, and which will be long and short, when the game fires up. That list is then fixed until the next reset, and won't change - however, the price the contracts are offered at does change, and that is affected by the movement of the exchange.

You can see what futures contracts are available on a planet by stepping into an exchange and typing **'DI FUTURES'**:

Mars Futures Exchange
Margin 4000ig/contract
(Minimum 2000ig/contract)
Min movement 1ig/ton
Max hourly movement 5ig/ton
Long contract in cereals available at 315ig/ton.
Long contract in crystals available at 537ig/ton.
Long contract in droids available at 849ig/ton.
Short contract in electros available at 306ig/ton.
Short contract in explosives available at 495ig/ton.
Long contract in firewalls available at 570ig/ton.

Mars actually offers many more contracts than this; the display has been truncated for the Idiot's Guide to save using up too many bits and bytes...

To buy a futures contract, type '**BUY FUTURES commodity**' where '**commodity**' is the commodity you are interested in. You must be in an exchange to buy a futures contract. You will pay your broker a deposit which he holds as a float, called a margin. The current margin is set at 4,000 ig for all Sol planets.

When you are not in an exchange, '**DI FUTURES**' lists all your current futures contracts. You can be more selective: '**DI FUTURES planetname**' will list all your contracts bought from the named planet, and '**DI FUTURES commodity**' will list all your contracts in the named commodity. The information for each contract looks like this:

Mars Exchange - Woods Futures Contract
Long position (You to receive) Value: 131250ig
Cost: 131250ig Margin: 4000ig (minimum 2000ig)
Maximum loss: 10000ig

The cost is the actual price for the contract at the time you bought it; the value is the current price for a similar contract at the time you look at the display. When you buy the contract those figures will be the same; the value will change over time.

You cannot have more than 40 futures contracts at a time, but since you only have to shell out 4,000 groats for each one, an outlay of just 160,000 ig will get you a full portfolio. However, although the potential is there to make big gains, you can also make big losses!

WHAT HAPPENS NEXT

So you have bought yourself a bunch of futures contracts which you hope will make you rich. What happens next?

Every so often (5-10 minutes or thereabouts) each exchange recalculates the futures price - that is, the price at which it offers futures contracts - using the exchange price for the relevant commodity (the exchange price is somewhere between the buying and selling price):

- If the base price has gone up, the exchange will increase the price per ton for futures contracts in that commodity by the minimum movement figure for the planet (currently set at 1 goat)

- If the price has gone down, the contract price will go down by the minimum movement
- If the price has not changed, the futures contract price will remain the same

If you keep checking the prices for futures in an exchange, you will see them change over time.

This carries on until the end of trading is reached, which is every hour. At this point, the exchange will settle up all outstanding futures contracts. The price of your contract (the cost) is compared to the current futures price of the exchange and the difference is either added to, or subtracted from, your margin - the float that the broker holds for the contract. The value of the contract will be updated accordingly on the futures display, and the new margin amount will also be shown.

If the cumulative changes exceed 5 groats either way before the hour is up, then trading will be suspended on that commodity - nobody will be able to buy any more contracts in the commodity, and the price of your contracts is frozen until the end of the hour.

At any time you can liquidate a futures contract, in which case you get back the margin plus credit for any changes that happened since the last hourly settling up, minus the brokers charge (which is explained below). The command is **'LIQUIDATE commodity'**. You must be in the relevant exchange.

The brokers charge is a commission of 5% of the contract's profit, with a minimum charge of 250 ig. The profit is calculated by taking the amount of money left in the margin at the time of liquidation, and subtracting 4,000 ig - any margin calls made during the life of the contract are ignored.

When the game resets, any outstanding futures contracts will be liquidated, and whatever is left in the margin will be paid back to your bank account. If you are on the game at the time you will be told the results. If you are absent then your brokers will leave a message for you, which you can read next time you log in by typing **'MAIL'**.

Obviously, you hope that the margin will be higher than the initial 4,000 ig you laid out when you bought the contract - that's where your profit comes from.

If your margin goes below the minimum allowed, as shown on the **'DI FUTURES'** list in an exchange (currently 2,000 ig) then your broker issues a margin call. That means he expects you to top up your margin by paying another 4,000 ig, from your bank account.

If the losses on a contract exceed the maximum figures, as shown on the contract display (currently 15,000 ig) then your broker will automatically liquidate it for you - cutting your losses before any more of your groats are wasted!

BECOMING AN EXPERT TRADER

As a Trader you will need to demonstrate a certain competency at handling futures contracts in order to promote. Your success is indicated by your Trading Rating, which shows on your score. Points are awarded (or taken away) depending on how well a futures contract does, as follows:

- You lose 4 points for a margin call.

- On liquidation, you lose 1 point for each 1,000 groats (or part) the contract is below the margin of 4,000 groats.
- On liquidation, you gain 1 point for each full 1,000 groats the contract is above the margin of 4,000 groats

Note that this doesn't automatically mean "margin call - bad". It would be acceptable to take a margin call if you believe that by the end of trading, the future will improve enough that you will still make a profit. The trading points are given more or less in line with whether the contract makes a profit overall, by the time it is liquidated.

Clearly in order to be a successful futures trader, you need to be able to predict the movement of prices on the exchanges. This requires that you understand how exchanges calculate their prices, and what factors can make the prices change.

Each commodity has a base price, which is its absolute unchanging price. Each exchange takes the base price for a commodity, and looks at three factors: the stockpile, the consumption, and the production. That is: how much of the commodity is there in storage? How much does the planet's population require to sustain it? How much do the planet's workthings churn out? Using those three things, it sets a price for the commodity, called the exchange price.

It then uses the exchange price to calculate the actual buying and selling prices - the prices you will see on the exchange display. The difference between the two prices is called the spread, and for all Sol planets the spread is set at 20%. That means, the exchange will buy goods for 10% below the exchange price, and sell them for 10% above. Exchanges need to make profits too!

There are two things that make prices change: exchange events, and Merchants. Exchange events are natural or man-made happenings that can change the stockpile, consumption or production figures for a commodity (increasing or decreasing it). Merchants can't do anything to the production or consumption, but they can change the stockpile - obviously, buying goods makes the stockpile go down, and selling goods makes it go up.

Remember that only half of the goods sold to an exchange show up in the stockpile - the other half goes to service the needs of the planet.

There is one more piece of information you need to know, and that is that different commodities behave in different ways when one of the indicators changes. The prices of some commodities increase or decrease in small, steady increments whenever the stockpile changes; other commodities will experience drastic changes in the price, as a small stockpile change results in a massive increase or decrease in the exchange price. Observation of the exchanges over time will show you which commodities react which way. You will be helped by the fact that you can check buying and selling prices remotely for those items in which you hold futures contracts, using the command **'CHECK PRICE commodity planetname'**.

Armed with this knowledge of how exchange prices change over time, you can start to predict which futures contracts will be profitable. As the small print on all investment contracts reads, "The value of your investment may go down as well as up," but you shouldn't need a crystal ball in order to avoid those where you will lose groats!

GLOSSARY OF TERMS USED IN FUTURES

Futures introduces a whole new set of jargon for you to learn. Here's a glossary that explains exactly what they mean.

Long - a contract where you promise to buy the commodity at the given price. A good long contract is where the price is low - the value going up means profit to you.

Short - a contract where you promise to sell the commodity at the given price. A good short contract is where the price is high - the value going down means profit to you.

Cost - The price on the futures contract at the time you buy it.

Value - The current price on the futures contract, having factored in exchange movements and random events. This is adjusted hourly, every time the exchange settles up.

Margin - The money you pay to your broker when you take out a futures contract. Think of it as a float, or a deposit. Changes as the value changes.

Base price - The fixed price for a commodity, as shown on the table in the Trading section.

Exchange price - The price for a commodity on a specific exchange (somewhere between the buying and selling price).

Exchange event - A natural or man-made occurrence in the Solar System which either increases or decreases the stockpile, production or consumption for a particular commodity on one planet.

Futures price - The price on new futures contracts, as shown by '**DI FUTURES**' in an exchange, which is recalculated every 5 or 10 minutes.

Settling Up - The process that each exchange does once an hour, where it adjusts the margin depending on how the futures price has changed.

Suspension - What happens to commodities if the cumulative changes exceed 5 groats either way during the hour before settling up. The price won't move any further and no further futures contracts in that commodity will be sold until the end of the hour.

Margin call - An instruction from your broker, telling you to pay 4,000 ig groats to top up your margin, should it fall below the minimum at settling up time.

Liquidate - Closing out, or selling, a futures contract to get back the margin from your broker.

10. BUSINESSES AND FACTORIES

INCORPORATION

When you have had your fill of futures contracts, and amassed a high enough Trader Rating, you can promote once more and turn your goat-making skills in a different direction. You can set up a private business, which will operate factories producing commodities to be sold on the open market, bringing you wealth and economic power.

To register a business you must go to the brokers office on Earth and use the command **'REGISTER BUSINESS shareprice businessname'** where **'shareprice'** is the initial share price for the business, and **'businessname'** is what you want the enterprise to be called. This can be anything you like, up to 31 characters long, and can include spaces. You can see what names the existing CEOs are using with the **'DI BUSINESSES'** and **'DI COMPANIES'** commands, which list all of the businesses/companies currently in the game. **'DI CEO businessname|companyname'** will tell you who owns a particular business or company. Traders and above can get a bit more detail about a business with **'DI BUSINESS businessname'**.

Registering your business will set up the firm, and promote you to Industrialist - the boss. The business has 2,500 shares of which you are buying 250 at the initial price that you specify (the rest are available for you to sell to investors). So if you set the price at 8,000 you will pay 2 meg, and that amount will be put into the business as its starting capital.

You can look at your business details with **'DI BUSINESS'** which produces a display something like this:

```
Newbod Enterprises registered business - CEO Newbod
Status: Running
Working Capital: 7,429,337
Revenue:
  Income: 1,869,375ig
  Expenses: 444,000ig
Capital:
  Receipts: 17ig
  Expenditure: 0
Book Value: 19,247,587ig
Days left in Accounting Cycle: 2
Profit last cycle: 0
Tax last cycle: 0
Business has been running for 0 full cycles
The company has the following factories:
  # 1 producing Clays on Rigel 4 100% efficiency
  # 2 producing Cereals on Scratchwood 100% efficiency
2 factories
The company has no depots
Shareholders' register:
  Banking Corporation: 250 shares
  Newbod: 281 shares
  Dancing Phalanges: 250 shares
  Treasury: 1719 shares
```

The current average value of the shares is 121315ig/share

Your total capital invested in the business is 4850037ig.

Outstanding bids for company shares:

1. Dancing Phalanges 500 shares at 8000ig/share - bid expires in 7 days
- 1 bid for a total of 500 shares

Now you've really become a capitalist!

GETTING MORE MONEY INTO THE BUSINESS

In order for your business to actually do anything, it's going to need more operating capital which you put into the coffers by selling shares. You can buy shares yourself or sell them to investors. This, coupled with money made from running factories - the profit - will allow you to expand. However, there is a cash limit: your business can only have 100 meg working capital before the taxman smells a rat and steps in to confiscate excess profits.

You buy some more of the business' shares with **'BUY SHARES amount AT shareprice'**. There's a minimum purchase of 150 at a time, and an upper limit of 1,000 total that you can own in your business, which means that after the initial registration you can buy another 750. There's no limits on the price you pay, but since the whole point of the exercise is to put more money into the business, it doesn't make sense to make the price too low... and if you make it too high, you will deter outsiders from investing.

Or you can use Other People's Money to fund your business. Financiers can bid for shares, and it's your choice whether to accept the bid or reject it. Sensible Fins won't just launch a bid out of the blue, but will negotiate with you first so they know whether their offer is going to be acceptable to you. You can see any outstanding bids on the business display. Bids are renumbered at the reset to start from 1 again.

To accept a bid, use **'APPROVE BID bid#'** where **'bid#'** is the number of the bid in question. You could probably figure out how to reject a bid: it's **'REJECT BID bid#'**. See, sometimes, Fed2 commands are logical!

If you approve a bid, it sells the treasury shares to the Financier, and the money is put into the business's balance. However, if you delay too long before approving a bid, the Fin's circumstances may change - she may have bought shares in other businesses which put her up to her portfolio limit, in which case when you try to approve the bid, it'll get cancelled anyway. If you ignore a bid, it will expire after 7 days.

DEPOT MAINTENANCE

Before we get into the high finance details of how to manage your company and keep the shareholders happy, you need to get to grips with the nitty-gritty of depots and factories. We'll start with depots.

Depots are not the same as the warehouses you used to store goods when you were a Merchant. The depot is the company's main storage and distribution center for the planet on which it is located - it needs to be staffed and maintained, and it can be expanded to hold more goods.

You had to sell all your warehouses before you could promote to Industrialist, so now if you want your factories to be able to have any storage facilities, you will have to buy some depots at a cost of 1,000,000 ig each - one per planet. Your business can't own more than 16 depots, so choose their sites carefully! The command is, guess what, **'BUY DEPOT'**, and you must be in an exchange. Since it's the business that owns depots, the cost comes out of the business's working capital.

Your business display lists all your depots, and you can look at an individual depot with **'DI DEPOT planetname'**:

Location: Rigel 4

Capacity: 30 cargo bays Workforce: 8

Bay # 1 Clays Cost 520ig/ton (Origin Rigel 4, Rigel system)

Bay # 2 Clays Cost 520ig/ton (Origin Rigel 4, Rigel system)

Bay # 3 Clays Cost 520ig/ton (Origin Rigel 4, Rigel system)

Depots have much stronger foundations than those cheap and flimsy warehouses you used to own, which means that they can be upgraded to hold more, with **'UPGRADE DEPOT'** - you must be in the relevant exchange. The cost is 500,000 ig. This builds an extra floor on the depot, increasing its size to 30 bays.

In order to upgrade your depot to more than 30 bays, you will need to obtain a depot permit. This costs one megagroats (taken from the company's balance) and you will also have to use a slithy to persuade the clerk to give you the permit - the command is **'BUY DEPOT PERMIT'**. You can then keep on adding floors, to a total of 5 which will give you 50 bays. But there is a downside to expansion - the depot will need more workers to run it, which will cost more in wages. The depot display tells you how many workthings are needed.

There is a difference between depot workers and factory workers. Factory workers are skilled and highly trained, which come out of a limited pool of trained workers on the planet, while depot workers are unskilled labor drawn from the limitless ranks of the lumpen proletariat. Depot workers therefore have no effect on the number of workers shown on the planet display.

Each worker is paid the minimum wage for the planet (which for Sol planets is 40 ig) each factory cycle. The wages are paid at the start of the day, at reset, with the assumption that there are 16 cycles a day; therefore, the wage bill for a basic depot with 7 workers would be 4,480 ig per day.

To put goods into a depot or retrieve them you use the same commands as with warehouses - **'STORE'** and **'FETCH'**. Because the depot is owned by the business rather than you personally, when you store goods in the depot, the company will pay you the cost. When you fetch goods you pay the company the cost. You can use the **'SHUFFLE'** command to rearrange goods in the depot.

You can also sell goods from the depot direct to the exchange, without having to put them into your ship first. This will save both you and the stevedores work. The command is **'SELL BAY bay#'**. You must be in the exchange for this to work.

If the goods were produced by one of your factories then the proceeds from the sale will all go to the business. If the goods were not manufactured by your business then the sale is treated as if you had fetched the goods from the depot and then sold them personally - in

other words, the business receives the cost of the goods, and you get the profit (or take the loss) from the sale.

If a planet owner decides that your depot is unwanted then it can be expropriated. It will vanish, along with its contents, and you won't get any compensation. It therefore pays to stay on friendly terms with POs, and never build on a new planet without talking to the owner first.

DECIDING WHAT FACTORIES TO BUILD

Your shiny new business with its huge depots is no good at all unless it produces something. In order for the business to make lots and lots of lovely money, you must build factories full of whirring machinery and whizzing production lines, which are probably going to be extremely noisy, annoy all the locals, and contribute to the pollution of the atmosphere, should the planet have one. Still, that's progress for you!

But before you go rushing off to buy a factory on any old planet, it pays to put some thought into what commodity you want to produce, and where you want to produce it, since there are limits to how many factories you can build (and how many you can afford).

First, what should you produce? Each factory can only produce one commodity, and in order to run it needs raw materials out of which the commodity is made, and workthings to operate the production lines. An extremely complicated table showing the requirements in materials and labor for each commodity appears on the web site at <http://www.ibgames.net/fed2/guide/business/inputs.html>.

If you look at the table, you will see that some commodities need more inputs than others, and some need a greater number of workthings. These will affect the profit you could make on a commodity. You must also take into account how easy it is to sell a commodity - there's no use producing something that is very expensive, but that no exchange will buy!

Since you are going to buy more than one factory, it is a good idea to look at commodities that many other factories can use as inputs. This will come in handy when you expand Newbod Enterprises - you can set up a chain of factories across the Galaxy, all producing things other factories need, and move the output from one factory to become the input for another.

You should take into account what factories other players have already set up. If many other players are producing the same commodity as you, it will make it more difficult to sell your goods. If there are already lots of factories needing the same inputs as you, you may have difficulty getting enough. And if the planet on which you want to build already has lots of factories, you may have to pay over the odds for the labor force needed to run the factory. Workthings, being mercenary souls, will go work for the company which pays the highest wages. And who can blame them!

Fortunately, you can find out what factories already exist on a planet using the very useful '**DI PLANET planetname**' command. Here's what the display looks like:

Rigel, Rigel 4 system - Owner Pugwash
Economy: Agricultural Workforce: 414/1000
Shipyard markup: 0% Merchant Fleet: 15 ships

Approval rating: Satisfactory
Commercial Activities:
6 warehouses:
Depots:
 Widgets & Gizmos Inc
 Newbod Enterprises
 SuperMegaGigaCorp
 Consolidated Amalgamated Distributed Fabrications
 Cottage Industries
 Universal Exports
Factories:
 SuperMegaGigaCorp #1 plant producing Crystals
 Cottage Industries #2 plant producing Petrochemicals
 Universal Exports #1 plant producing Alloys
 Universal Exports #4 plant producing Livestock
 Widgets & Gizmos Inc #5 plant producing Nanos

The two significant things here are the workforce - that is, how many workthings are available to toil in your factory - and the list of existing factories.

Don't pick a commodity that uses inputs that are very hard to come by. Since you won't be buying a business until you've done a fair amount of trading on the planetary markets, you should have a fairly good idea of which commodities the exchanges tend to run out of quickly, and which are always available.

Don't be tempted to put too many factories on the same planet. It might be convenient when keeping an eye on prices, but you will soon run out of room in the depot, not to mention straining the planet's workforce.

If you're building on a resource planet or higher, keep an eye on the approval/disaffection level for the planet - if approval drops below zero, it turns into disaffection which means there's a chance of riots which could result in one of your factories getting destroyed.

You should also take a look at the infrastructure that has been built on the planet, using '**DI INFRA planetname**'. Infrastructure builds affect many things, but of chief importance when deciding where to site a factory are the builds which increase the efficiency of the exchange because this will have an effect on the speed with which the exchange produces inputs you need, or consumes your outputs.

The Galactic Trading Guild have decreed that no factories can be built in Sol. There are no restrictions on where you can build outside of the Solar System - you don't have to get the owner's permission to erect a factory on an out-of-Sol planet. However, POs can kick unwanted property off their planets by expropriating factories, without paying any compensation, so you shouldn't get used to building where you know you will be unwelcome.

BUILDING A FACTORY

Having agonized over all the different commodities you could produce, looked through the real estate brochures for the various planets, and decided on one which you think will make you rich, you can actually build the factory.

The command is '**BUY FACTORY commodity**' and you must be in the exchange of the planet where you want to site the factory. The cost is 2,000,000 ig per factory (2 megagroats).

A business can own up to 8 factories. You can only build on out-of-Sol planets.

RUNNING YOUR FACTORY

Now you have a factory, you can sit back and let it get on with making you money. Well, almost. Factories do take a little bit of management!

You can look at the factory details with '**DI FACTORY factory#**':

Newbod Enterprises: Clays Production Facility #1
Location: Rigel 4 Status: Running
Finance:
Working Capital: 38125 Top Up Level: 100000
Income: 1248000 Expenditure: 630825
Profit last company accounting period: 0
Structure:
Nominal Efficiency: 100% Current: 100%
Maximum Storage: 150 tons Available: 75 tons
Workers:
Required: 120 Hired: 120 Wages: 40
Inputs:
Mechparts Required: 10 Available: 75
LubOils Required: 15 Available: 75
Output:
Stored: 75 tons of Clays
Dispose of Clays to exchange where possible
Next batch is 1% complete

First, you have to make sure the factory has the raw materials it needs - look at the Inputs part of the display. The factory will first look for its inputs in the depot on the planet. If there are none in the depot (or if you don't have a depot) it will try to buy what it needs from the local exchange. If it still can't get its requirements, it won't be able to run. It will always take a 75 ton container, regardless of how much the factory actually needs.

If the goods are taken from the depot, the factory pays the business the base price for them. If the goods are bought from the exchange, the factory pays the current exchange selling price.

The factory also needs workers, so you need to hire yourself a labor force, by setting the level of wages you are willing to pay, using '**SET FACTORY factory# WAGES amount**' - for example, 'set factory 1 wages 40'. Workthings will not show up for work if you set the wages at less than 40. If there is a shortage of workers on the planet, they will go to the factory paying the highest wages. The factory won't run unless it can get the full number of workthings needed.

Since wages cost money, and so does buying inputs from the exchange, part of the cost of building a factory is given to the factory as a float - the working capital, which starts out at 100,000 ig. This goes down as the factory pays for inputs and workers, and up as it receives payment for the output. The factory display shows the current working capital level. Each day at reset the business siphons off the surplus, or tops up the deficit (should the factory have made a loss), to bring the working capital back to the top off level.

The first factory cycle after you buy a factory, it will show a huge loss. Don't be alarmed - this is simply because before it can produce anything at all, the factory will buy up 75 tons of each required input, and pay wages for the first cycle. But after a few cycles, when the output is distributed, that will bring money into the factory to offset the expenses. The factory display shows the income and expenditure for the factory, which is cumulative until the end of the business accounting cycle; it also shows the profit for the previous cycle.

Assuming the factory can get the inputs and labor it needs, it will start the production lines rolling.

The factory takes one factory cycle to produce a 75 ton container of the product - the progress through the cycle is shown on the factory display as a percentage. If you leave Fed2 DataSpace, the factory will continue to run, but at a reduced speed - 75% to be precise. The running speed for the whole cycle is determined by your presence or absence at the start of the cycle.

At the end of the cycle, your first container of product will appear. Cause for celebration, break out the bubbly...

The finished product is stored in the factory's storage space. There's room in the basic storeroom for 150 tons of goods - two containers. When the third container is produced, the goods in the storeroom are distributed, and the third one placed in the storeroom. Should you wish to distribute the goods before the storeroom is full, you can flush them using **'FLUSH FACTORY factory#'**, in which case they will be sent on to their destination.

When the goods are distributed, they can either be stored in the depot or sold directly on the exchange. You specify the destination with **'SET FACTORY factory# OUTPUT exchange|depot'**. Of course, if you set the output to depot but the depot is full - or you don't have a depot on the planet - the goods are sold on the exchange anyway.

You should be careful about directing the output to the exchange if you're not going to be around to keep an eye on it. Prices and planetary requirements fluctuate, so if you don't keep an eye on the exchanges, you may find you are selling goods for less than the base price, which is no way to make a profit. Make sure your depot doesn't fill up, either - if it does, the factory will end up selling to the exchange. Empty your depot before you log off.

If the exchange wants to buy the goods, it will pay the current exchange buying price. If it doesn't want them the exchange will look for a private buyer for the goods, at a reduced price.

At the end of the cycle, the work force is released back to the labor market, and has to be rehired for the next cycle. That's the power of the unions for you - always trying to negotiate a better deal. If you can't hire workers, you will have to wait until one of the other factories finishes a batch and workers come onto the market, for you to try to recruit at a higher wage.

Should you wish to halt production in a factory temporarily, you can mothball it using the command **'SET FACTORY factory# STATUS STOP'**. This is a good idea if you're going to be away for a while, and won't be able to keep an eye on the factory. To start it up again, use **'SET FACTORY factory# STATUS RUN'**, at which point it will take up from where it left off.

If you realize you've bought a duff factory, you can dispose of it with **'SELL FACTORY factory#'**. You will receive between 500,000 ig and 1,500,000 ig for a factory which is at 100% efficiency; the price will be adjusted up and down accordingly if the efficiency is higher or lower.

You can also sell a depot with **'SELL DEPOT planetname'**, for which you will realize 500,000 ig for a basic depot, and 750,000 ig for an enhanced one.

BUSINESS MANAGEMENT

Running a profitable factory is only half your job as an Industrialist. You are also the owner of Newbod Enterprises and that involves running the actual business. You will end up with a string of factories, all of them (you hope) making money for the business. Looking at the income and expenditure figures for your factories will enable you to sell off the unprofitable ones.

The business itself has revenue income and expenditure figures, which are the true measure of how well you are doing as a boss. The business display shows figures for income and expenditure, which is operating money coming in and out as the factories buy inputs, pay workers and sell the finished product. It also shows capital income and expenditure which is the buying and selling of capital assets like factories and depots; only the figures for the current day are shown. Both types of income and expenditure affect the working capital, that is, the number of groats the business has in the bank.

The business also has a book value, which is calculated each day when the game fires up after the reset. It consists of the cash in the business plus the cost of all the factories (2 meg each) and depots (1 meg each). Goods stored in the depots or in factory storage are not counted, neither are any enhancements you may have made to factories and depots. The book value is important because when you float the company on the stock exchange at your next promotion, the sale price of the shares will be based on the book value.

Businesses run on accounting cycles which last 7 days. The end of the cycle is when the greedy taxman takes his cut. The rate for Sol is a swingeing 20% of the profits for the cycle. Ouch! And no, you don't get any tax rebates if you happen to make a loss. This rate applies even if you have built factories outside of Sol - since your company is registered on Earth, the taxman isn't going to let you get away with that excuse. There are no offshore tax havens in Fed DataSpace.

The business display reminds you how long to go until the end of the cycle.

DECLARING BANKRUPTCY

Running a business can be a challenge, and if you really mess up you might prefer to wipe the slate clean and start again. Fortunately, you don't have to go right down to GroundHog:

you can declare yourself bankrupt and be demoted to Trader, with enough trader credits to set up a new business whenever you are ready. The command is '**DECLARE BANKRUPTCY**'.

SUMMARY OF COMMANDS FOR BUSINESSES AND FACTORIES

APPROVE BID bid#
BUY DEPOT
BUY FACTORY commodity
BUY SHARES amount AT shareprice
DI BUSINESS
DI BUSINESSES
DI CEO businessname|companyname
DI DEPOT planetname
DI FACTORY factory#
DI PLANET planetname
FLUSH FACTORY factory#
FREEZE BUSINESS
IPO markup
LAUNCH IPO markup
REGISTER BUSINESS shareprice businessname
REJECT BID bid#
SELL BAY bay#
SELL DEPOT planetname
SELL FACTORY factory#
SET FACTORY factory# OUTPUT exchange|depot
SET FACTORY factory# STATUS stop|run
SET FACTORY factory# WAGES amount
UPGRADE DEPOT

11. COMPANY MANAGEMENT FOR MANUFACTURERS

PROMOTING TO MANUFACTURER

The rank of Industrialist is your probationary period as a CEO; you are running a private business and while you will have had investment from venture capitalists, they won't have had any say in how you run things. You also won't have had to worry about problems such as maintenance of your facilities. But now all that changes.

You can promote to Manufacturer whenever you want - there are no requirements, but if you prefer you could remain in charge of your small business forever.

Promotion involves floating your business on the Galactic stock exchange by undertaking an initial public offering to convert it into a public company. To do this you decide on the price that shares will be sold for. This price is based on the book value of the company to which you apply a markup of between -20 and 20. You can see what effect a particular markup would have by using the command **'IPO markup'** where **'markup'** is the markup you want to apply. You'll be given an evaluation of how the resulting IPO would work:

IPO Valuation for Newbod Enterprises
Markup 10%
IPO share price 2,560
IPO capital raised 23,296,000
Brokers fees 3,494,400
IPO net capital raised 19,801,600

When you're ready to promote and have decided on the markup, you float the business with **'LAUNCH IPO markup'** where once again the markup is between -20 and 20. You'll become a Manufacturer and your business will become a company. The total number of shares increases to 10,000 with the extras held by the broker, and the company gets the money raised.

Running a company isn't all that different from running a business, but some of the commands change - instead of **'DI BUSINESS'** you use **'DI COMPANY'**, **'FREEZE BUSINESS'** becomes **'FREEZE COMPANY'** and so on. You can also own up to 15 factories now.

As a Manufacturer, things get much more interesting. Your opportunities for making money increase, but so do the obstacles in your way! This section of the Guide details the advantages and disadvantages.

SHARE TRADING

You can increase your personal shareholding in the company by buying some of the shares held by the broker. The advantage of this is that you, personally, will get more money whenever you issue a dividend. You can also sell some of your shares back to the broker. Buying and selling shares may affect the share value, depending on how many you buy or sell at a time.

The commands to buy and sell your shares are **'BUY amount SHARES'** and **'SELL amount SHARES'** where **'amount'** is the number of shares in each case. You can buy or

sell up to 100 shares at a time, but you cannot own more than 2,000 or less than 500. The broker will charge a fee of 1%, with a minimum charge of 250 ig.

As well buying extra shares for your personal shareholding, the company can buy treasury stock - that is, it buys back some of the shares from the broker. The more shares the company itself owns, the less money actually leaves the company when you issue a dividend.

The commands are **'BUY amount TREASURY'** and **'SELL amount TREASURY'** and like personal shares, you can buy or sell up to 100 at a time, and the company cannot own more than 2,000. It can sell all of its stock, though.

UPGRADING YOUR FACILITIES

As a Manufacturer you can upgrade factories in two ways - you can increase their efficiency, and you can expand their storage.

Expanding the storage means that the factory will be able to hold more containers of output before it sends them to the depot or sells them on the exchange. The command is **'UPGRADE STORAGE factory#'**, which adds 75 tons to the storage and costs 250,000 ig. However, it's not quite as simple as that - the Galactic Administration's bureaucracy will allow you one upgrade, but to increase the storage any further you need a storage permit. As you can probably guess, a hefty bribe is needed - 500,000 ig (paid from the company) and one slithy tove - the command is **'BUY STORAGE PERMIT'**. Once you have the permit you can continue to upgrade the storage, to a total of 450 tons capacity.

Increasing the factory efficiency means that you need fewer workers to run the plant. The goods take the same amount of time to produce, but you save on labor costs, and if there is a shortage of workers that can be very significant. The command is **'UPGRADE FACTORY factory#'**, which adds 5% to the efficiency for a cost of 1,000,000 ig. As with the storage, you need a permit to do more than one upgrade, and the permit costs 5,000,000 ig and two slithy toves - the command is **'BUY FACTORY PERMIT'**. With the permit, you can carry on increasing the efficiency to a limit of 150%.

MAINTAINING YOUR FACILITIES

Now for the downsides. As a Manufacturer, the forces of entropy come into play and your factories and depots will start to decay and break down. The result of the decay is a loss of efficiency - every time the company cycle finishes, the efficiency will go down 5%. For both factories and depots, the result is that operating the facility will take more workers and will therefore cost more.

To stop the rot, you need to make repairs, with **'REPAIR FACTORY factory#'** which restores 5% of efficiency. The basic cost is 500,000 ig, but the more the factory has deteriorated, the more it will cost to bring it back to full operating efficiency.

To repair a depot, you use the command **'REPAIR DEPOT planetname'**. The basic cost is 200,000 ig for a 5% repair, but again, the cost increases the more decrepit the depot is.

If you fail to carry out repairs, the efficiency figure will keep on dropping, making the facility more and more expensive to run, and once the efficiency gets as low as 75% there will be a risk that the whole building will collapse. Every day the probability is calculated by subtracting the efficiency from 80 - so at 75% efficiency, the probability is 5%, and on the next cycle when the efficiency is 70%, the probability increases to 10%, and so on.

If a building collapses it vanishes completely, along with its contents, looted by the local lowlife or the fleeing workthings.

KEEPING THE SHAREHOLDERS HAPPY

As a Manufacturer, your honeymoon period as a new CEO is over, and the shareholders expect results. If you don't perform to their satisfaction, they will be unhappy and if their disaffection gets too great, they will revolt and sell off the company's assets, using the resulting cash to pay out a dividend!

Unlike businesses, companies have to issue detailed accounts so the shareholders can keep an eye on what you're up to. Companies run on accounting cycles which last 7 days. At the end of the cycle, the accounts for the cycle are calculated - you can see them with '**DI ACCOUNTS**', and they look something like this:

Newbod Enterprises Accounts - Cycle Number 5

Share value: 1580ig (+80)

A total of 10000 shares have been issued

Assets: 26Mig (+50Kig)* Dividend: 1ig

Cash: 47Mig (+28Mig)

Income: 152Mig Expenditure: 107Mig

Profit: 44Mig (+3Mig)

Price-Earnings (P/E) ratio is 0

Price-Dividend (P/D) ratio is 1580

Earnings-Dividend (E/D) ratio is 4467

*All assets valued at nominal sale prices.

The figures in brackets show the change in value for that entry from the previous cycle.

Assets is the value of all the depots and factories, valued at the price you would get if you sold them. Cash is the working capital. Income and Expenditure are the operational figures - capital income and expenditure are not included because they are counted in the assets. Profit is also the operating profit, and is pre-tax.

Financiers can now buy shares in your company without your approval, and they will examine your books to see how well you have been doing. If they like what they see, they may invest. These shares will come from the broker, so the total number of shares will remain the same. The company display shows who owns the shares. If you are online at the time somebody purchases shares in your company, you will be told about it.

Investors trading in your shares is going to have an effect on the share price. When Financiers buy shares, it will make the price rise; when they sell them, it will make the price fall.

Assuming your factories are humming away and producing lots of valuable goods, and your company is making a profit on them, you may want to issue a dividend - a payment to all the shareholders in the company. This is one way to reward yourself for all your hard work as a CEO. The command is '**ISSUE DIVIDEND amount**', where '**amount**' is the amount per share you want to give. The company always has 10,000 shares, so if you issue a dividend of 100, the company will pay out 1,000,000 ig to the shareholders. Since you only own 500 shares, you would get 50,000 ig of that payout - the rest goes to the broker and to Financiers who have bought shares in your company. There is an upper limit on dividends of 2,000 ig per share, and you can only issue two divvies per day.

Paying regular dividends keeps your shareholders happy. It's a good idea to issue a divvy at some point during your first cycle, to keep them sweet while you get to grips with being a Manufacturer.

If your shares turn out to be very popular, you can split the shares so that the company has twice the number, each of them at half the value. If you have 10,000 shares valued at 4ig each, then splitting the stock will give you 20,000 shares at 2ig each.

The command is '**SPLIT STOCK**'. You have to pay the brokers a commission of 5,000ig - after all, they have to do the paperwork for you. You can only split the stock four times, giving you a total of 160,000 shares, and the share price cannot go below 2ig a share.

Splitting your stock does have an effect on the running of your company, and you shouldn't do it without thinking through the implications, particularly the timing of the split in terms of where you are in a cycle. You will benefit greatly by talking to other, more experienced CEOs and asking their advice.

DEALING WITH DISAFFECTION

Shareholders are a stropky bunch and if they don't think you're running the company properly they will become dissatisfied and may even stage a rebellion. The disaffection level is shown on the company display. There are several things that affect it. The change in share price is one: increased share values tends to reduce disaffection, while falling share values do the opposite. Issuing a dividend could also have a positive effect, and the larger the dividend, the more likely it is that disaffection will go down. Failure to issue a dividend during an accounts cycle is really going to annoy your shareholders. During a cycle, the dividend figure on the company display is cumulative, but it is set to zero at the start of each cycle, so it's better to issue one divvy each cycle, rather than three divvies in one cycle and none in the next two.

However, share prices and dividends only have a relatively small effect on disaffection, and the major effect is the result of the accounts for the previous cycle. Shareholders are keen readers of balance sheets, and they will study the company's accounts at the end of each cycle. If they don't like what they see, they will get more disaffected. They don't just look at the profit figure, they look at how that profit relates to such things as the share price, and the dividends paid out. There's a bit of jargon to be learnt here:

- Earnings - this is the earnings per share, which is calculated by dividing the company's profit for the cycle by the number of shares. A company always has 10,000 shares, no matter how they are distributed between the broker, the treasury and you, so if the profit figure is 40,000 ig, then the earnings are 4 ig per share.

- P/E ratio - this is the ratio between the share price and the earnings. If the share price is 1,000 ig, and the earnings 4 ig, the P/E ratio is 250. The higher this figure, the worse the company is doing.
- E/D ratio - this is the ratio between the earnings per share and the dividend. If the earnings are 4 ig per share, and you paid a dividend of 2 ig, then the E/D ratio is 2. The lower this figure is, the happier the shareholders will be.
- P/D ratio - this is the ratio between the share price and the dividend paid out during the cycle, and it's the one that shareholders really care about. If the share price is 1,000 ig, and you paid a dividend of 2 ig, then the P/D ratio is 500. The lower this figure is, the happier the shareholders will be.

The first three of these measures indicate the overall economic health of your company. They will be studied by players who are at the Financier level to decide whether to invest in your company. The fourth measure, P/D ratio, has the largest effect on shareholder disaffection.

Disaffection is a percentage, which represents that proportion of the external shareholders that are unhappy with your performance. The key figure is 50%. If the disaffection level is greater than 50, then you are in danger of suffering a shareholders revolt, and the higher the disaffection, the more likely the revolt will happen. However, it takes shareholders time to organize a revolt, so you do have time to do something about disaffection, even if it goes over 50%. The fastest way to calm your disaffected shareholders down is to issue a dividend. You can also buy some of the shares from the brokers, to reduce the power of the independent shareholders.

Every day at reset, the game checks the disaffection level to see whether the shareholders are disgruntled enough to stage a rebellion. The only day a rebellion will not happen is the day the cycle's accounts are made up - that gives you a day's grace to try to get the disaffection below 50%.

If the shareholders do rebel, it's pretty drastic! They take control of the company's assets and sell all the depots, and all but one of the factories. All of the company's money, including the proceeds from the sell-off, is used to pay out an extraordinary dividend, leaving just one meg in the company. The share price drops by half, and the disaffection level is set back to zero.

You are then left in control of a much reduced company and can try again.

If you are going to be absent from Fed DataSpace it's a good idea to freeze the company for the duration, to stop the shareholders from rampaging in fury every cycle. It works just like it did for your business, but now the command is **'FREEZE COMPANY'**.

ATTRACTING INVESTORS

As a Manufacturer, the shareholders have to be kept sweet, and as well as the broker your shareholders may include other players at the rank of Financier. This means you have real live people to keep happy, as well as the game-generated broker shareholders.

If you are battling with shareholder disaffection, and you have maxed out the number of shares you can hold yourself, and the treasury shares the company can hold, then wooing Financiers and persuading them to invest in your company is a good way to calm the virtual stockholders down.

However, once somebody has bought shares in your company, it's going to be important that they hang onto them because sudden sales will make the share price go down, which will increase dissatisfaction.

DECLARING BANKRUPTCY

If you get yourself into a real mess as a Manufacturer, by not paying attention to keeping the shareholders happy, the company may end up without enough money to operate properly. As an alternative to just throwing in the towel and starting over as a GroundHog again, you can **'DECLARE BANKRUPTCY'**. This liquidates your company and pays out a final dividend, using your payout as starter capital for a new business with the same name as your ex-company. You are demoted to Industrialist.

SUMMARY OF COMMANDS FOR MANUFACTURERS

In addition to the commands used by Industrialists, Manufacturers can use the following commands:

BUY amount SHARES
BUY amount TREASURY
DECLARE BANKRUPTCY
DI ACCOUNTS companyname
DI COMPANY
FREEZE COMPANY
ISSUE DIVIDEND amount
REPAIR DEPOT planetname
REPAIR FACTORY factory#
SELL amount SHARES
SELL amount TREASURY
UPGRADE FACTORY factory#
UPGRADE STORAGE factory#

12. MAKING INVESTMENTS AS A FINANCIER

PROMOTING TO FINANCIER

Once you have run your company for four cycles as a Manufacturer, without getting into such a mess that you are forced to declare bankruptcy, you can promote to Financier whenever you choose. All you need to do is sell off your factories and depots, and at the next reset you will promote.

You are not forced to become a Financier; you can stay a Manufacturer forever if you choose. Indeed, rushing the promotion as soon as your four cycles are up might be counter-productive, because your company is going to need a decent wedge of cash to operate as a financial institution.

As a Financier, your company stops being an industrial business, interested in producing physical goods, and instead becomes a financial institution that makes its money by investing in businesses and in other companies and by playing the futures market. It is also no longer subject to the whims of the shareholders and won't suffer rebellions.

Because you are no longer directly involved in the messy business of industry, you can no longer buy or sell commodities on the trading exchanges.

If you really mess up as a Financier, you can **'DECLARE BANKRUPTCY'**. You will get put back to Manufacturer level and all your company's accounts will be zeroed. You will have 5 megagroats with which to start this rank again. You get to keep any shares you have in other companies, so you'll reap the benefits of divvies that get issued - but you can't sell those shares or buy any new ones until you make it back to Financier.

FINANCIERS AND FUTURES

Financiers who wish to play the futures market use exactly the same commands as Traders. The only difference is that the money you spend, and the profits you (hopefully) reap, will come from/go into the company rather than your personal bank balance.

BIDDING FOR SHARES IN BUSINESSES

Buying shares in a business is not something that will make you money right away; it's a long-term strategy. Your reward will come when the business turns into a public company and starts to pay out dividends, and even more so when the company is dissolved upon the owner's ascension to Founder, if you happen to still be a Fin then. But this is also the start of a relationship that should last a long time, as you gain followers who will eventually become members of your cartel. You can see a list of all the businesses in the game with **'DI BUSINESSES'**. You can find out who owns shares in a business with the command **'DISPLAY SHARES name' - 'name'** can be a business, company or CEO name. A business with a reputation for doing well is likely to have more shares owned by individuals than by the broker.

You can get basic information about businesses that you might want to invest in with **'DI BUSINESS businessname'** but before you try to buy any shares you should talk to the

owner of the business to find out if your bid for shares is going to be welcome, and what kind of price she thinks is reasonable. Then you can put in a bid. The command is '**BID amount SHARES AT shareprice IN businessname**', for example, '**bid 200 shares at 10000 in Newbod Enterprises**'. There's a minimum of 150 on the number of shares you can bid for, and a maximum of 1,000. Also, you are subject to the limit of 35,000 shares in total in your portfolio, and if your bid would take you over that amount then it won't go through. In addition, the value of your bid cannot exceed 50% of the value of the owner's stake - ie, the total money she has paid for her shares.

If your bid is accepted, the shares will be added to your portfolio. You can't sell shares in businesses until they convert into public companies.

BUYING SHARES IN OTHER COMPANIES

As well as bidding for shares in businesses, then waiting for them to convert into shares in a public company when the owner promotes to Manufacturer, you can buy shares in existing companies too. When a business launches an IPO and becomes a company, the broker will have a bunch more shares for sale, so it pays to keep an eye (or equivalent) out for new public offerings.

Before you start investing in other players' companies, you need to do a little research to find out which companies are going to be worth investing in. You can see a list of all the businesses in the game with '**DI COMPANIES**'. You can find out who owns shares in a business with the command '**DISPLAY SHARES name**' - '**name**' can be a business, company or CEO name.

You can inspect the books of other companies to see their details before you decide whether to buy shares in them. '**DI ACCOUNTS name**' - company or player name - will show you the accounts for the last five cycles. This will let you judge how well the company has been doing, and whether it is worth investing in. It'll also tell you the current share price at the end of the most recent company cycle, so you know how much you would be spending if you buy any shares.

If you keep an eye on the SpyNet Financial reports, you will also see when dividends are paid out, which will also affect your decision on who deserves your investment.

You should also talk to the CEOs about how they manage their companies. There's nothing like the personal touch to help you make a judgment on their success. It pays to cooperate with other players and build up business relationships with other companies, just as it does with businesses.

You can invest in any company, without the owner's permission, but buying shares without talking to the CEO first is going to cause bad feeling. The company could be owned by a Manufacturer or by a fellow Financier, but your peers are not subject to dissatisfaction so may not pay out dividends as often as you would like.

When you have decided that you want to invest in a particular company, use the command '**BUY amount SHARES companyname**', where '**amount**' is the number of shares you want to buy. You can only buy 100 in any transaction, although there's nothing to stop you making more than one purchase. You can't own more than 1,000 shares in a company, and the

broker will always hang onto 1000 shares, so you can't invest in a company once that limit has been reached.

The price you pay for the shares is determined by - as you can probably work out - the share price, as shown on the company accounts. You will also pay the broker's fee of 1% (or 250 groats).

The act of you buying shares in a company is going to increase the share price, which will go some way towards keeping the other shareholders happy, thus staving off disaffection. The other main method that CEOs use to keep the shareholders from rioting is to pay them dividends - and that means your company gets the money. The more shares you own, the more money you will get when the divvy is paid out.

Should you find yourself disappointed with a company's performance, you can sell some or all of your shareholding, with '**SELL amount SHARES companyname**' where '**amount**' is the number you want to sell - 100 at a time. Once again, you will pay the broker a fee for the transaction. Selling shares in a company will make the share price go down, so it is a courtesy to warn the CEO that you intend to offload your investment.

There is a limit of 35,000 on the total number of shares you can own in other companies. Should any of the companies in which you have invested split their shares and bring your total portfolio above this limit, you won't be able to buy any more shares without first offloading some of the ones you already own.

Your goal as a Financier is to make money - a lot of money. You are going to need a seriously large heap of groats to finance your move to the next rank, which is going to involve buying a planet and paying to have it terraformed and linked to the rest of the Solar System.

13. PLANETARY CONSTRUCTION

HOW TO BUILD YOUR VERY OWN PLANET

When you reach the rank of Founder you become the owner of your very own star system, with a planet that other players will be able to visit for exploration and for trade. You have full control of the planet's economy and can manipulate production and consumption in order to make a vast amount of groats at the expense of your downtrodden populace.

You get promoted to the rank of Founder when your planet is linked into the game. It is up to you when that happens: you can stay a Financier for as long or as short a time as you like. When you promote, your company sells all the shares it owns, with the proceeds being added to the company balance. The company is then liquidated and a final dividend is paid out to all the company's shareholders. The portion belonging to the company's treasury stock and to you personally is transferred to the planet treasury as a starting balance. You should therefore remain a Financier long enough to ensure that your company has enough money to give your new planet a decent sized float.

You can either design your own planet using the Fed2 Workbench, or you can use one of the stock planets as supplied by Slarti's outfit on the space station Magrathea and make the whole process automatic. The only requirement for having a planet linked into the game at the moment is that you must be a Financier.

If you already know what you want to call your system and planet before you get to Financier, and you want to make sure that nobody else uses the name you have set your heart on before you are ready, you can reserve the name for a cost of two slithy toves. See <http://www.ibgames.net/fed2/workbench/planetnames.html> for details and to see the names already reserved.

CLAIMING A STOCK PLANET

If you're not interested in designing your own planet, or want to get a planet linked quickly which you can then customize later, you can use the **'CLAIM'** command to automate the process.

The command is: **'CLAIM SYSTEM systemname PLANET planetname TYPE stocksystemname'**. **'Systemname'** is the name you want to give your system, **'planetname'** is the name you want to give your planet, and **'stocksystemname'** is which of the stock systems you want to use.

Names have to be unique - you cannot call your planet or system something that is already in use by another planet or system. They can be up to 32 characters long, and can contain spaces. You can use letters and numbers, but no punctuation or symbols, and they must start with a letter. Do not use the words system, planet or type as part of the names.

For example, you could call your system Big Star, and your planet New World 1.

There are six different stock systems - here's a list:

- Beach - contains a water planet, with sandy beaches, beautiful warm oceans, and lots of sunshine.

- Furnace - contains a fire planet, close to its sun, with erupting volcanoes and rivers of lava.
- Iceberg - contains an ice planet which is (as you would guess) very cold.
- Rescue - has a space station, or habitat.
- Stone - the planet is a rock, with all the interesting stuff happening underground in caves.
- Sweet - the candy planet, where everything is edible. Yum.

You can examine the six stock systems in the showroom on Magrathea (west of the Sol interstellar link).

An example of what the command would look like is: **claim system big star planet new world 1 type sweet.**

Warning: make sure you have spelled the system and planet names correctly before you press return, because you can't change them once you have issued the command!

The new planet will be linked into the game at the next reset at which point you will promote to Founder.

Making Changes to your Stock Planet

Once your stock planet is in the game, you can change the name and description of any location, by redecorating the location you are in. You can change the location name with the command '**CHANGE NAME new_name**' - for example, 'change name Big Bertha's Bar and Grill'. You can change the description of the room with '**CHANGE DESC new_description**' - for example 'change desc This long and winding road winds along for a long way, linking the Fool's Hill to the east, to Strawberry Fields which is south.'

The '**CHANGE DESC**' command has some restrictions. You are limited to the number of characters the game will accept for any input, so you won't be able to use all the 1,000 characters that the Workbench location editor allows for a description. You will also be unable to split the text up into paragraphs - the whole description will be one paragraph. And you won't be able to put any spaces at the start of the descriptions, to indent the text. You can decide whether these changes should be permanent or whether they should disappear at reset. Normally, the changes are just temporary and when the game resets, the planet files will be loaded in as they were before, reverting to the stock version. So you could redecorate a room for a party or other special event, safe in the knowledge that the decor will revert to the its normal state once the festivities are over.

However, if you want your change to stick around, then use the command '**SAVE MAP**' and the current version of your planet will be saved to disk, and will load back in at reset. Note that the command only affects the map you are on, so if you have made changes to both ground and space locations, you will need to use the command twice, once on the ground and once in space.

Customizing Your Stock Planet

If you later decide you want to customize your planet you can start over from scratch and design a brand new planet which will replace the stock planet, or you can ask us to send you

the stock planet files that the game created for you, and use them as the basis for your amendments. If you want the files, email feedback@ibgames.com (don't forget to put Fed2 in the subject line) and give your Fed2 character name.

USING THE FED2 WORKBENCH

The Fed2 Workbench is a set of tools that let you create and edit the various files that make up a planet. There are two editors in the basic workbench: the location editor and the message editor. At higher ranks, you can add objects and mobiles to your planet, and write events to make interesting things happen; you use the advanced workbench editors for this.

You can download the Fed2 Workbench from <http://www.ibgames.net/fed2/workbench/index.html>. The download includes the manual that explains how the Workbench works and what you can and can't do on your planet - you **must, must, must** read the manual because there are things you need to know that you won't be able to figure out for yourself. If you don't do things right, your planet won't work!

There is a version of the Workbench for Windows and for the Mac. The Windows version can also be run under Linux with the WINE emulator.

SUBMITTING WORKBENCH FILES

Files that you have created yourself get uploaded to the game and linked in manually by Bella.

Once your planet files are ready, email them to feedback@ibgames.com (don't forget to put Fed2 in the subject line) and ask for them to be linked into the game. Your email should include the following information:

- Your Fed character name
- The planet name
- The system name

Your planet will normally appear in the Galaxy in a couple of days, although planet files generally only get linked at weekends. New planets show up when the game fires up after a reset.

Having submitted your files, you should stop work on the planet - don't make any further changes to the files until the planet actually opens up in the game. The reason is that Bella sometimes needs to make some changes to the files in order to get them to work. She will then mail you back a copy of the files, and you should save the files she sends you in the same place on your computer as the files you sent to her - you want to overwrite your original files with Bella's changed versions. Then you can carry on working and make further changes to the planet if you wish.

If you don't do this, then your copy of the files and the one that Bella has put into the game will be out of sync, and as a result one of two things will happen. Either you will lose the further changes you have made, or you will lose the changes that Bella made. The former is annoying; the latter could be a disaster.

Once you have got back the amended files from Bella - or she has told you that there were no problems with your files (it has been known to happen, occasionally!) then you can make any further changes to your planet, such as fixing typos and movement errors, or adding new locations. Updates to the files should also be mailed to feedback@ibgames.com, and will show up at reset in one or two days.

MAKING CHANGES TO YOUR CUSTOMIZED PLANET

You can keep on making changes to your planet and sending the files in so they can be linked to the game, as often as you like - although if you send in a new set of files too frequently, they will be given lower priority than those from new planet-owners!

There is a command that will help you to keep track of whether new files you have submitted have been linked into the game: **'VERSION'**. This displays the file version number of your planet map. The file version number also shows on the status bar of the Workbench map editor, and it increases by 1 every time you save the map.

If you feel cramped for space and wish you could expand your planet further than the 50 locations available to Founders, you can buy an expansion in your allowance. Two slithy toves gets you an extra 30 locations, bringing the total for your system to 80. Email feedback@ibgames.com if you want to take advantage of this increased space. Promotion to Engineer automatically gives you the extra 30, and at that level you can purchase 30 more to give you a total of 110. Higher ranks can increase the number further.

If you want to make temporary amendments to a location you can use the **'CHANGE NAME'** and **'CHANGE DESC'** commands – or make the changes permanent with **'SAVE MAP'**. You can also use them to correct any typos you spot in your locations - fixing the mistakes right away, rather than having to wait for new files to be put into the game. Don't forget to make the change to the files on your computer, so the names and descriptions all match.

OPENING AND CLOSING YOUR PLANET

There are times when you are not going to welcome visitors to your brave new world. Specifically, you might want to check it over carefully to make sure everything works OK before letting other players take a look at your handiwork. Fortunately, planet-owners have the power to close the system to stop people from jumping in.

To close the system, use the command **'CLOSE LINK'** when you are on the space map. This stops anybody except the owner (and game management staff) from getting there. The close command does not kick everyone off the planet, but it does stop new visitors jumping in.

When you are ready to receive visitors again, you open the system up with the command **'OPEN LINK'** - once again, you must be in space for this to have any effect.

When the planet is first linked into the game, the system will be closed so nobody will be able to get to the system (except you) until you have checked it out and opened it up. Thereafter, you control when the planet opens and closes.

If you send updated files to be put in, it is a good idea to close the system before the reset when you expect the files to go in, or when you log off the night before. That way, you'll be able to check over your corrections before other players are let loose on them.

ADDING MORE PLANETS TO YOUR SYSTEM

When you promote to Mogul, you are allowed to add a second planet to your system. It's not obligatory, you can stay with just one planet if you prefer, but if you do decide to expand your system, you can add the second planet at any time after you promote. A few ranks later, at Gengineer, you can add another planet to act as your biological asteroid. Plutocrats get a fourth agri planet and can then buy more planets by paying us some slithy toves.

Auto-linking a New Planet

You can use the '**COLONIZE**' command to auto-link the second, third and fourth planet, and it will appear in the game at the next reset.

The command is '**COLONIZE PLANET planetname TYPE planettype**' where **planetname** is what you want to call the new planet, and **planettype** is which of the stock planets you want to use: water, fire, ice, habitat, rock or my favourite, candy.

For example: **colonize planet new world 2 type fire.**

The planet name must be unique, up to 32 characters long, and can contain spaces. It can contain letters and numbers but must start with a letter. So World Number 2 would be fine, but 2nd World would not. No punctuation or other symbols, and none of the reserved words: system, planet or type.

This command will only work if your space map confirms to the template used for the stock star systems: the interstellar link must be in location 460, and the location for the new planet's orbit must be empty. For a second planet, that's 461 and for a third it's 397. If your space map doesn't match these requirements, you will have to make your own map as explained below.

Plutocrat Planets

Plutocrats can get a fourth agri planet when you form your cartel - and can also purchase more planets which can be either agri or bio, for the cost of some slithy toves:

Fifth planet – 4 slithy toves

Sixth planet – 10 slithy toves

Seventh planet – 20 slithy toves

Eighth planet – 40 slithy toves

The sixth and subsequent planets have to be linked manually, so you will need to create the files using the workbench (see below).

If there's some reason you cannot use the Workbench at all, because you don't have a Windows or Mac computer, or you are partially sighted or blind and cannot use this kind of

software, then you can ask us to do the work for you. Email feedback@ibgames.com and ask for details.

Adding a New Planet Manually

If you can't use the auto-link commands because you designed your system from scratch, then to add another planet to your system, you design the new planet just like you did the first one. The new planet should have an exchange, and it can also have a hospital/insurance office, although if players die anywhere in your system they will always be transported to the hospital that is on the planet that is loaded last.

You need to amend your space map, adding an orbit location for the new world somewhere on the map, and then add that orbit location number to the map information for the new planet map. When adding the orbit to your space map, you are advised to put it reasonably close to your first planet. Even though you can use the remote trading controls to fiddle with your planets' economies, you are still going to spend a lot of your time commuting between the two. Remember to set the space property on the new orbit location.

Don't forget to add movement links both ways from the new orbit location, and check over the rest of the space locations to make sure that mention of the new planet and its location is made somewhere - otherwise players won't be able to find it easily!

If you want to add a new stock planet to your system then you can follow the step-by-step guide on the website at <http://www.ibgames.net/fed2/workbench/stock/index.html>.

Increasing Your Location Allowance

Adding a new planet to your system means you will need an increase in your location allowance:

- Moguls can have an extra 50 locations, bringing your total to 130. In addition, you can purchase a further 30 per planet by paying two slithy toves for each of your planets (in other words, 60 extras for 4 slithies) which means you can have a total of 190 locations in your system.
- Gengineers get a further 50 locations, bringing the total to 180, and can purchase 30 extras for each of the three planets in the system (90 extras for 6 slithies) bringing the total to 270.
- Plutocrats get an addition 50 locations to go with the new fourth planet, giving a total to 230, and can purchase 30 extra for each of the four planets (120 extra for 8 slithies) bringing the total to 350.

Yes, that's complicated, so here's a table to make it easier to follow:

Rank	Basic loc allowance	Extra locs bought with 2 slithy toves per planet	Max possible locations at this rank
Founder/Engineer	50	30	80
Mogul	130	30 per planet = 60	190
Gengineer	180	30 per planet = 90	270

Plutocrat	230	30 per planet = 120	350
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When you're ready, send in the space map and the new planet files to feedback@ibgames.com, giving the system name, the new planet name (which obviously must be different from the original planet) and your character name.

14. PLANETARY ECONOMIES

INTRODUCTION

Designing and constructing your very own planet makes you a Founder, but then you need to run your planet's economy. You need to keep your population happy, by ensuring they have enough of all the things they need to live, and you need to make sure the planet's treasury remains healthy, by selling off the things the planet has a surplus of. To do this, you will need to work closely with CEOs and encourage them to build factories that use as inputs the things you have in excess, and produce an abundance of the things you are short of.

You will also need to encourage Merchants to come and trade on your planet, hauling goods in and out for mutual profit. Plus, once you leave the Sol cartel, you can contract haulers to shift goods for you by posting jobs directly onto the cartel's workboard.

You spend the groats that your planet makes building infrastructure to improve conditions for your populace and enhance the economy - thus making even more money. When you have done enough builds, you can use the **'PROMOTE'** command and your planet will promote at the next reset. Promotion means the planet's economy goes up a level; the exchange gets re-rolled which changes all the production and consumption figures and wipes out your existing stocks and deficits.

Assuming you set your planet up correctly, it should make enough money to allow you to build infrastructure using the planet's own money. However, if you find your personal cash is mounting up and your planet is struggling, you can inject some of your own groats into the treasury with **'TRANSFER megagroats'**, where **'megagroats'** is the number of meg you want to transfer, up to 100. **'TRANSFER'** can be abbreviated to **'XFER'**. Since the Galactic Administration frowns upon large amounts of groats being shifted out of Sol into independent economies, they levy a rather hefty tax of one third on the transfers.

At later ranks, you are allowed to have more than one planet in your system. You can transfer money between two treasuries using **'TRANSFER megagroats planetname'** which takes the money out of the planet you are standing on, and puts it into the treasury of the named planet. You have to own both the planets - this isn't a sneaky way of letting you fund a friend or ally.

An alternate way to finance infrastructure builds is to convert four slithy toves to 10 meg, using the command **'TRANSFORM SLITHIES'**. The cash is added to your treasury where it can be used to build something useful. You can do this once every two weeks for each of your planets.

Should your planet turn out to be super-successful, you need beware of hoarding your groats instead of using it to better the lot of your citizens. There is a 1 gigagroats limit on the size of planetary treasuries - if your treasury has more than that then the taxman will seize it at reset.

Most planet commands will only work if you are actually on your planet.

YOUR PLANET DISPLAYS

If you look at the planet display for the planet that you own, using the **'DI PLANET planetname'** command, you also see the planet's treasury:

Bodville, Newstar system - Owner Newbod
Economy: Agricultural Workforce: 700/1000
Shipyards markup: 0% Merchant Fleet: 10 ships
Approval rating: Satisfactory
Treasury: 14,642,063ig
Commercial Activities:
6 warehouses:
Depots:
Widgets & Gizmos Inc
Newbod Enterprises
SuperMegaGigaCorp
Consolidated Amalgamated Distributed Fabrications
Cottage Industries
Universal Exports
Factories:
SuperMegaGigaCorp #1 plant producing Crystals
Cottage Industries #2 plant producing Petrochemicals
Universal Exports #1 plant producing Alloys
Universal Exports #4 plant producing Livestock
Widgets & Gizmos Inc #5 plant producing Nanos

The heart of your planetary economy is the exchange. When your planet is first linked into the game, exchange data is generated - which commodities the planet produces, which it consumes and so on. This is based around the economic development level of your planet (agricultural when it is first linked into the game) with a strong element of randomness thrown in.

You can get a list showing the status of every commodity with **'DI EXCHANGE'** or you can get one of the commodity groups with **'DI EXCHANGE commoditygroup'** (the economic commodity groups are agri, resource, ind, tech, biological and leisure, and the secondary commodity groups are bulk, consumer, defence, energy and sea). You need to be somewhere on your planet for these commands to work.

The display looks something like this:

Bodville exchange - agri products:
Cereals: value 199ig/ton spread 20% Stock: current 800/min 100/max 800 Efficiency: 100%
Fruit: value 318ig/ton spread 20% Stock: current 800/min 100/max 800 Efficiency: 100%
Furs: value 482ig/ton spread 20% Stock: current 800/min 100/max 800 Efficiency: 100%
Hides: value 505ig/ton spread 20% Stock: current -303/min 100/max 800 Efficiency: 100%
Livestock: value 155ig/ton spread 20% Stock: current 800/min 100/max 800 Efficiency: 100%
Meats: value 310ig/ton spread 20% Stock: current 800/min 100/max 800 Efficiency: 100%
Soya: value 175ig/ton spread 20% Stock: current 800/min 100/max 800 Efficiency: 100%
Spices: value 482ig/ton spread 20% Stock: current 800/min 100/max 800 Efficiency: 100%
Textiles: value 229ig/ton spread 20% Stock: current 800/min 100/max 800 Efficiency: 100%
Woods: value 535ig/ton spread 20% Stock: current 800/min 100/max 800 Efficiency: 100%

This shows the exchange base price for the commodity, the spread, which is the difference between buying and selling prices, the stock the planet currently has, the minimum and maximum levels that you want the exchange to maintain for the commodity if it can, and the efficiency with which the commodity is produced.

You can see the details of your planet's native production and consumption with '**DI PRODUCTION commoditygroup**', which gives something like this:

Bodville exchange - agri production and consumption:

Cereals: production 57, consumption 18 (39), efficiency 100%
Fruit: production 41, consumption 26 (15), efficiency 100%
Furs: production 34, consumption 14 (20), efficiency 100%
Hides: production 18, consumption 19 (-1), efficiency 100%
Livestock: production 40, consumption 9 (31), efficiency 100%
Meats: production 64, consumption 34 (30), efficiency 100%
Soya: production 43, consumption 35 (8), efficiency 100%
Spices: production 68, consumption 29 (39), efficiency 100%
Textiles: production 36, consumption 3 (33), efficiency 100%
Woods: production 37, consumption 31 (6), efficiency 100%

This command also works with the secondary commodity groups.

Each exchange cycle, the population of your planet will produce and consume the specified amount. These values are set when your exchange is configured, but they will change as you do such things as building infrastructure. (The length of an exchange cycle will vary depending on a number of factors, including whether you are logged on or not.)

The number in brackets is the production minus the consumption. If it's a negative number it means the planet consumes more than it produces of that particular commodity, which means you will end up with a deficit unless you make arrangements to get the commodity shipped in. When Merchants sell goods to your exchange, half of what they sell gets added to the stock, the other half is eaten up by the population right away.

There are several things that will increase the efficiency of a commodity. Some infrastructure builds increases the efficiency of commodities in certain groups, and building up your merchant fleet will also boost the efficiency. If a commodity's efficiency is greater than 100%, it means that over time the exchange is going to produce more of that item - it simply speeds up the production line. It doesn't have any effect on the actual production points.

You can check up on the factories on your planet and find out whether the owner has directed the output to the exchange or to a depot, with the command '**OUTPUT**'. This lists all of the factories and tells you the output destination. For more detail, '**DI FACTORIES**' also tells you the status of the factories - whether they are running or not - and the efficiency levels.

ADJUSTING YOUR ECONOMY

At the moment there are two things that you can change: the spread and the stock levels.

Changing the Spread

The spread is what will determine how much money the planet makes when the exchange buys or sells a commodity. It defaults to 20% but you can change it, either by setting the overall spread for the whole exchange with '**SET SPREAD amount**', or setting it for an

individual commodity with **'SET SPREAD amount commodity'**. As with the display commands, you have to be on your own planet. The spread must be between 6 and 40.

Whichever command you issue, it will overwrite the previous spread value, so you should set the overall spread first to whatever you think is a reasonable number, and then tweak the individual commodities that you want to differ from the rest.

The higher the spread on a commodity, the greater the difference between buying and selling price - so the more profit the planet will make. However, that doesn't mean you should just whack all the values up to 40%, because that will mean bad value for your potential customers, who might take their trade elsewhere, leaving you with no profit at all! You may also want to have "special offers" on commodities you particularly want the exchange to buy or sell, reducing your potential profit in order to fulfil demands or offload surpluses.

Changing the Stock Levels

The stock levels reflect the amount of each commodity that the exchange has, and how much it wants to have - the maximum and minimum levels. While the current stock is somewhere between the max and min, the exchange will both buy and sell the commodity; should it rise above the max, it will just sell it, and if it falls below the min, it will just buy it.

You can change the max and min stock levels for every commodity with the command **'SET STOCKPILE min|max amount'** - use min to set the minimum level, and max to set the maximum level you want the stockpile to go. You can also use the command to set the stockpile for an individual commodity with **'SET STOCKPILE min|max amount commodity'**. You must be on your own planet. When setting the max, the level must be between 20,000 and 200. When setting the min, it must be between 2,000 and 100.

The exchange will change its behavior when the stock gets to within 75 tons of the levels for the min or max that you have set, since it only deals in 75 ton loads.

Just like setting the spread, these commands will overwrite all previous stock values, so you should first set the min and max stock levels for the exchange as a whole, and then set the levels for the individual commodities that differ.

RUNNING YOUR PLANET REMOTELY

Checking your planet displays and tweaking the economy can be done from the comfort of your favorite bar as you hang out with your friends and gossip. With many of the commands, you just put your planet name on the end and they will work remotely.

The remote control commands are:

```
DI EXCHANGE planetname
DI EXCHANGE commoditygroup planetname
DI PRODUCTION commoditygroup planetname
DI FACTORIES planetname
SET SPREAD amount planetname
```

SET SPREAD amount commodity planetname
SET STOCKPILE min|max amount planetname
SET STOCKPILE min|max amount commodity planetname

JOINING A PLAYER CARTEL

A cartel is an economic grouping of planets that trade with each other, share a workboard for hauling jobs and cooperate to further the interests of all the members. The head of a cartel is a Plutocrat.

When your planet is linked into the game it is placed in the Sol cartel. The owner of this cartel is a hands-off kinda guy, and the tax rates, import duties and so on will never change. (The rates will be set soon...) There is no membership fee to join the Sol cartel.

You should start to shop around for a more active cartel to join as soon as you become a Founder - in fact, you should have formed links with high-up players much earlier in the game, so with any luck you will have a slot waiting for you.

To see a list of all the cartels in the game, type **'DI CARTELS'**. **'DI CARTEL'** gives you the details of the cartel you are currently in, including a list of the member planets. For the info on another cartel, without actually having to fly there, use **'DI CARTEL cartelname'**.

To join a cartel, use the command **'JOIN CARTEL cartelname'**. You must be somewhere in your star system. This puts your request into a pending queue to be dealt with by the Plutocrat at his, her or its leisure. The owner of the cartel can accept or reject your membership bid, and whichever they do, you'll be informed of the result. If you're not in the game at the time, you will find there is mail waiting for you when you return - type **'MAIL'** to read it.

The cartel owner may set a membership fee for the cartel, which will be taken from the treasury of your highest-level planet on joining; alternatively, she may give out a joining bonus which will be paid when you join.

If you manage to annoy the Plutocrat then your star system can be expelled from the cartel, in which case it is put back into the Sol cartel.

Cartel Mail

If you want to leave a message for one of your cartel-mates, you can do it using cartel mail. You can send the message to an individual, or to all of the cartel members. The command is **'SEND MAIL playername message'** where **'playername'** is either the name of one of your fellow cartel members, or the word **'all'**, and **'message'** is what you want to say. You must be on one of your planets to send cartel mail.

This facility is not available to members of the Sol cartel.

You are notified when someone sends you mail - if you're not in the game, the notification will show up when you next log on. To read your mail, type **'MAIL'**. When you read your mail, it is deleted.

Be warned - over-using the function to spam the cartel members is likely to get you kicked out by an irate Plutocrat!

OFFERING JOBS TO POOR PEOPLE

Once you leave Sol cartel and join a player-owned cartel, you have two alternative ways of shifting goods out of one of your exchanges - you can post jobs onto the cartel's workboard to be delivered by a Poor Person, and you can offer jobs directly to haulers.

Posting Jobs on the Cartel's Workboard

When you post a job onto the workboard or your cartel, the job is generated from the exchange of the planet you are standing on, so long as you own that planet, and can be set up to deliver to one of the other planets in your star system or to any other planet in the cartel. The command is **'POST JOB commodity planetname'** where **'commodity'** is the trading commodity you want to shift, and **'planetname'** is the name of the destination planet.

The job will be posted onto the workboard as a 75 ton job. The goods will be taken out of your stockpile at the time the job is created, and held in storage ready for the hauler to pick them up; the hauling cost is also taken right away and kept by Armstrong Cuthbert until the job is delivered, at which point it will be paid to the hauler.

When the job is delivered, the goods are sold to the destination planet's exchange and the proceeds taken out of that planet's treasury and paid to your planet. The cargo will be added to the destination's planet's stockpile assuming the exchange is buying the commodity; otherwise the goods will be sold to a private buyer at a heavily discounted rate. So don't send jobs to another star system without checking whether the planet needs them!

You can't post a job on the board if there are already 40 jobs on the workboard, but any jobs not taken by haulers will expire after a few minutes, thus freeing up space for your job. If your jobs don't get snapped up by other players, they too will expire - the goods will be delivered by Armstrong Cuthbert's robotic trading ships.

Haulers can't void your jobs but that doesn't mean your cargo is completely safe... jobs on the board are not preserved over the reset, so any that are posted on the board but haven't been delivered will vanish, the cargo being appropriated by the stevedores (they consider it one of the perks of the profession) and if a cargo is in a hauler's hold over the reset, the paperwork that credits you as the owner of the goods mysteriously vanishes and the job reverts to being an ordinary job.

Offering Jobs Directly to Haulers

You can bypass the cartel's workboard and offer your jobs directly to a named player. The recipient of the job must be a Commander or Captain.

The command is **'OFFER playername JOB commodity planetname'**, where **'playername'** is the poor person you want to give the job to, **'commodity'** is the goods you want to shift, and **'planetname'** is the destination planet, which must be in the same cartel.

The job becomes a pending job for the hauler, until they either accept or reject it. You can't offer a job to a player who already has a pending job. Should they accept it, you will be notified when the cargo is delivered. But be warned: the hauler can choose to reject your offer, in which case you lose the goods, so don't offer jobs to players without prior arrangement. And don't forget to check that the hauler can leave Sol before you offer the job!

MAKING MONEY ON SHIP SALES

Adjusting the Shipyard Markup

Your planet treasury rakes in a 5% cut of all ship sales on your planet, applied to the amount the player actually pays for the new ship, so the second-hand value of the old ship is deducted first. This represents money being pumped into the economy by the activities of the shipbuilders.

In order to attract custom to the shipyard, you can decide to subsidise the building of new ships. This lowers the price for customers, which means your planet's rake-off on each sale will be lower - but the difference should be made up in volume as hordes of punters flock to buy the cheapest ships in the galaxy. Alternatively, you can add a surcharge to the ship price so they get more on each individual sale, even if the higher prices mean fewer ships sold.

The command to set a discount or a surcharge is **'SET YARD amount'** where **'amount'** is the percentage of the price that you want the ship mark-up to be, between -10 and 10. Setting it to a negative number makes the price cheaper for purchasers; setting it positive makes ships more expensive. The percentage is applied to the gross price - that is, before the trade-in price for the old ship is applied. When a potential buyer is given their quotation, the final amount of the invoice includes the discount or surcharge so there will be no hidden extras.

Building Up a Merchant Fleet

Normally, all ships sold anywhere in the Galaxy are registered to Panama. However, you can purchase a ship registration facility for your planet, so that any ships bought there will instead be registered to your planet. A ship registration facility costs 5 slithy toves, and the command to get one is **'BUY REGISTRY'**. The facility never breaks down or expires - once purchased, it lasts as long as the planet does. You can see what other planets have their own registration facilities with **'DI REGISTRY'**.

Ships registered to your planet become part of your merchant fleet, and an entry on your planet display shows you the size of the fleet. This is only calculated when the game fires up after the daily reset, so new ships bought on the planet don't get counted right away. Ships belonging to players who have not logged on for a month or more are not counted. You can find out exactly who has bought a ship on your planet with **'DI FLEET'** - you must be on your planet.

Having a merchant fleet will boost your economy - for every ten ships in your fleet, there will be a 1% efficiency increase in your exchange and in all the factories on your planet, up to a maximum of 10%.

As well as the efficiency improvements, there is of course be the cachet of having ships flying around the Galaxy with your planet name on them - the registration details show on the SpyNet Report for a player.

SETTING UP A REPAIR YARD

A ship repair yard is an extra source of income, because commodities used to fix the holes in battered ships come from your exchange, so you get the money. When ships are repaired on your planet, if the goods come from the exchange, then the treasury gets the money, and your stocks are reduced - but if the goods are sourced elsewhere, you get zilch. So it's well worth setting things up so you have everything needed readily available, and then encouraging battered ships to make your world their first port of call.

Having a repair yard is also an incentive for ships to join your merchant fleet, because they'll get a discount on ship repairs on the planet the ship is registered to.

Setting up a repair yard is a simple matter of flagging a location with the Ship Repair property. You then need to ensure that all the commodities needed for repairs are available in your stockpiles.

Here's the schedule of what commodities are needed for repairing the various bits of a ship:

Engines

For each point of damage the following commodities are required (amounts are in tons):

Alloys - 2
Monopoles - 1
Xmetals - 1

Shields

For each point of damage the following commodities are required (amounts are in tons):

Crystals - 2
Lanzarik - 1
Xmetals - 1

Computers

For each point of damage the following commodities are required (amounts are in tons), subject to level multipliers:

Monopoles - 3
Semiconductors - 4
Nanos - 3
Biochips - 5
Firewalls - 1
Alloys - 3

Level multipliers mean the commodities needed increase for each extra level:

From level 1 to 2 - x 1
From level 2 to 3 - x 1
From level 3 to 4 - x 5
From level 4 to 5 - x 10
From level 5 to 6 - x 30
From level 6 to 7 - x 50

For example, the monopoles needed to repair a level 5 computer which has been reduced by damage to a level 3 or below would be $3 \times 5 \times 10 = 150$ tons.

KEEPING OUT UNDESIRABLES

Planet-owners can close down the whole system, which stops anybody except the PO from jumping through the link, but that's a bit crude - it's all-or-nothing. This is fine if you are feeling completely anti-social and don't want to receive any visitors at all, but not much use if you want to invite a few friends to your planet but keep out the masses, or if there's one specific person you particularly want to exclude.

Fortunately, it is possible to remove named individuals from your star system and stop them from returning, by exiling them. **'EXILE playername'** will chuck the offending player off your world, moving him to Earth, and will prevent him from jumping through the link to your system. You need to be somewhere in your system to use the command. It doesn't matter if the player is not in your system - the command works wherever he is, even if he is not logged on at the time.

If you change your mind and decide to forgive the exile, you can **'PARDON playername'** which will allow him to return. Until such time as he annoys you once more and you exile him again...

As well as exiling unwanted persons, you can also get rid of factories and depots that you don't want. **'EXPROPRIATE FACTORY factory# companyname'**, where **'factory#'** is the number of the factory you want to get rid of, and **'companyname'** is the name of the owning company - for example, **'expropriate factory 4 universal exports'**. You must be on the planet. The offending factory is eliminated with no compensation to the owner.

'EXPROPRIATE DEPOT companyname' does just that.

PLANETARY DISAFFECTION

The Causes of Disaffection

The population of your planet can be a fractious bunch and if you don't keep them happy, disaffection will start to build up. Founders don't have to worry about the effects of disaffection but once you promote to Engineer, it becomes a big concern. If you don't placate your grumbling citizens, they will riot. You need to keep an eye on the approval/disaffection level which appears on your planet display. A satisfactory approval rating equates to zero, which is what you start out with; if it gets higher then it shows as a percentage approval rating. If your approval rating drops below zero, it turns into disaffection, which has all kinds of nasty consequences.

There are two main causes of disaffection: infrastructure builds, and unemployment.

Infrastructure builds can have an effect on disaffection in a number of ways. Some builds cause disaffection; some reduce it. The absence of some necessary builds can also increase your disaffection levels. Check the information about builds in the next section of the Idiot's Guide carefully to see which ones are necessary, and which have unpleasant side-effects which need to be offset. Since resource planets need some builds which cannot be done until you promote to Engineer, you should make sure you have enough groats to do the builds right after the promotion, to stave off disaffection - the same applies to promotions to the higher ranks, too.

Unemployment is more straightforward - workthings without jobs get unhappy and if enough of them get together to moan, they can have a serious effect. So long as your unemployment rate remains below half the available workthings, the grumbling will remain just that.

Once the unemployment rate reaches 50%, then 5% will be added to the planet's disaffection. At 60% unemployment, the extra dissatisfaction will be 10%. Then it'll jump to 15% should unemployment go up to 70%, and so on, up to a 30% increase should there be no work at all on your planet.

This means it is going to be all the more important for resource planets to attract factories to your planet, so as to provide jobs for the boys (and the girls and the things).

You can see how the disaffection or approval rating for your planet was calculated at the last reset with the '**DI DISAFFECTION**' command. This doesn't show any changes due to things that happened since the game fired up.

What Happens if there's a Riot

Careful management should keep disaffection at bay, but if it does rise then you could be in for some trouble. The disaffection figure is a percentage, and the higher it gets, the higher the chance that something horrible will happen. Every day at reset, the game will generate a random number between 1 and 100, and if the resulting number is lower than or equal to your disaffection figure, there will be a riot. For example, if your disaffection is at 20%, then there's a 20% (1 in 5) chance there will be a riot.

If there is a riot, a number of things could happen. First, one of your stockpiles will be wiped out at random.

Then things get more serious, and one of the following will happen:

- One of your infrastructure builds will be sabotaged, and will have to be rebuilt from scratch
- A factory on your planet will get razed to the ground
- A depot will be torched
- A warehouse will be looted then destroyed
- Disaffected hackers will hack into your planetary treasury or your personal bank account and embezzle between 30% and 60% of the balance

Rioting doesn't make the citizens feel any better, it just encourages them; unless you do something to lower the disaffection, the riots will continue. So it pays to keep disaffection at bay and deal with discontent before it gets out of hand.

MANAGING A SECOND PLANET

When you promote to Mogul, you are allowed to link a second planet into your system. It's not obligatory, you can stay with just one planet if you prefer, but if you do decide to expand your system, you can add the second planet at any time after you promote.

You deal with your second planet in exactly the same way you did the first. It will start out as an agricultural world, and you will build infrastructure until you are ready to advance it to a resource world, and then an industrial one. You will have the same pressures of keeping the populace happy, and the same opportunities to make money.

Your personal rank will be tied to the highest economic level of the planets in your system. You could, if you wanted, keep your original planet at industrial level and advance your new planet to technical and beyond; you'd promote to Technocrat when one of your planets becomes technical.

When your new planet gets linked into the game, it starts out with a treasury balance of zero groats. As soon as the exchange starts to operate, it will probably start to generate groats (unless you have been very unlucky in the roll). You can also use the **'XFER megagroats'** command to move money from your personal balance into the treasury of the planet you are standing on, and the **'XFER megagroats planetname'** command to move money from the treasury of the planet you are standing on, to the treasury of the named planet. You can also swap four slithies for 10 megagroats with **'TRANSFORM SLITHIES'** - you are limited to one transfer every two weeks, but that limit applies to each planet.

BECOMING A GENGINEER

To become a Gengineer, you need to increase the infrastructure on your technological planet to a certain level (see the next section for how builds work) and then type **'PROMOTE'** when you are situated on that planet. After that, things do not work the same as the other planet owner promotions.

You will promote to the new rank right away, instead of having to wait until the next reset. Your techno planet will not advance; it will remain at that economic level.

At any time after you promote to Gengineer, you can have a new world added to your system, which will have a biological economy. Although you can then build up the

infrastructure of your bio world, it will never advance - its economy will always stay at biological level. Meanwhile, you can continue to build on your techno planet until you have enough builds for promotion to Magnate; at which, the economy will jump to leisure.

Another difference is that bio planets do not suffer from disaffection because the workthings are largely made up of robots, which don't get unhappy. Of course, they will be missing many of the infrastructure that is needed for a high-level planet so will be less efficient than they should be, and have fewer workthings, until you carry out the necessary builds.

15. PLANETARY INFRASTRUCTURE BUILDS

INTRODUCTION

When your planet is linked into the game and you become a Founder, it has a basic economy, which will make you money if you set things up right. But you will never be able to promote to the next rank without enhancing your planet considerably. You do this by building infrastructure.

There are approximately 50 different things you can build, split into 10 categories: communications, defense, ecology, education, energy, health, housing, security, social security and transport.

Some of the builds cannot be done until your planet is at a certain level. Some require you to do other builds first as a prerequisite. The effect of some of them will be permanent; others will expire when your planet gets to a certain level.

Builds are vital not just to enhance your planet, but also for your promotion. To climb the planet-owning ranks, you are required to complete a certain number of builds. The '**RANKS**' command will tell you how many. If you've not yet reached the requirement, the '**PROMOTE**' command tells you how many builds you have done; once you have made the target, the command will initiate the promotion, which will happen at the next reset. You will move up to the next rank and your planet will advance to the next economic level.

BUILDING INFRASTRUCTURE

The cost for a basic infrastructure build is 10 meg; the money comes out of your planet's treasury. The command is '**BUILD infrastructure**', where '**infrastructure**' is the type of build you want to do. With some builds, you will also specify where the resulting production point should go - for example, the command to build a heliograph is '**BUILD HELIOGRAPH commodity**', where '**commodity**' is one of the agri or resource commodities.

You must be on your planet in order to build infrastructure.

You can see the builds you have done with '**DI INFRA**'. This also gives a count, telling you how many builds you have done, which is important when you start to consider promotion.

There is a complete list of all the builds, together with detailed information about each build that has been implemented, on the web site at <http://www.ibgames.net/fed2/guide/builds/list.html>. Builds for the higher economic levels will be added as necessary.

If you decide you no longer need a build, you can demolish it with '**DEMOLISH infrastructure**'. You will get back between 3 and 7 meg for the land which is released and the recycled materials. As with the building, you must be on your planet. Note that some builds cannot be demolished until the planet has advanced to a level where they can no longer be built. They are: heliographs, telegraph, bases, satellites, defence and oil.

THE EFFECT OF INFRASTRUCTURE BUILDS

Builds have a number of effects on your planet. The most common is a boost to productivity or efficiency - either to an individual commodity which you specify, to a group of commodities, or to the economy as a whole. Where the effect is on a group of commodities it may be one of the regular economic groups (agri, resource and so on) or it may affect a particular type of industry such as defense industries or sea-based industries. There's a list of these commodity groups on the definitions page at <http://www.ibgames.net/fed2/guide/builds/def.html>.

Builds can also increase your population, reduce disaffection, or allow you to increase the size of your merchant fleet. With most infrastructure, there is a limit to the number you can build - or at least, you can build as many as you like, but once you exceed the limit you won't get any further effect.

Sometimes failure to build the required number of certain installations will have a negative effect, such as increasing disaffection, so like the Red Queen's race, you will have to build the infrastructure just to keep things as they are.

Some infrastructure builds will themselves have negative side-effects, such as increasing disaffection or reducing population, so will need to be balanced with other builds to mitigate the bad effects.

The good news is that disaffection and population reduction are not in effect at agricultural level - they only kick in when the planet advances to resource.

Builds that increase the population are not cumulative but always operate on the base level - for example, if you have a build that adds 1% to the workforce, it will increase the population from 1000 to 1010. Building something that adds another 1% will add another 10 workers - not 11.

Builds that affect the workforce, either positively or negatively, will have another effect. For every 100 workers above the base level of 1,000 there is a 1 point increase in the consumption of all consumer goods. Similarly, for every 100 workers below the base level, there is a 1 point reduction in consumer goods consumption. This change does not take effect until the next reset.

When your planet promotes and the exchange is re-rolled, you lose the effect of any extra production points that were given by builds. The build itself remains in the list until you demolish it, although it no longer has an effect.

To help you see the effect that some builds have on your planet, the **'DI POPULATION'** command shows how the planet's workforce was calculated at the last reset and **'DI DISAFFECTION'** shows how the disaffection or approval rating was calculated. These won't include any changes due to builds you have done since the reset.

BUILDS ON HIGHER LEVEL PLANETS

Agricultural planets have it easy: they are shielded from some of the side-effects of infrastructure builds, such as disaffection and reductions in population. However, once you promote to Engineer, and your planet becomes a resource level planet, the bad side-effects kick in.

Your planet's population is adjusted as you build infrastructure, so the effect - both positive and negative - should be immediately apparent. It's also recalculated every day at reset to make sure it remains accurate.

Disaffection is calculated at reset, so you won't see the effect of a build right away.

Biological planets are linked into the game at that level, without having to go through the earlier economic levels. This means they will be missing much of the infrastructure necessary for the rank, and you will have to do a lot of building in a hurry to avoid the negative consequences.

16. JOINING THE PLUTOCRACY

PROMOTING TO PLUTOCRAT

The highest rank in the game, the position to which all members of Fed DataSpace aspire, is that of Plutocrat. Being a Plutocrat means that you collect together a group of star systems owned by different players, and place them under your wing (or equivalent).

To become a Plutocrat you do much the same as you did at earlier planet-owning ranks - build, build, build until you've reached the requirement. The builds must be on your leisure planet. There are a couple of other conditions, though. You must have at least two planets in your system, otherwise Armstrong Cuthbert won't be able to generate any jobs to put on the cartel's workboard. You must be on your leisure planet. And the star system must be open - closed systems cannot become the hub of a cartel.

When you type **'PROMOTE'**, assuming you fulfil all those criteria, you will promote immediately, and become the Plutocrat of a cartel with the same name as your system. Your planets will stay at their current economic levels, but your star system will become the hub of the new cartel.

RUNNING A CARTEL

Now you have a cartel you can admire it by typing **'DI CARTEL'**. This shows you your cartel balance.

The first thing you need to do is to recruit some members for your shiny new cartel. After all, a cartel of one system isn't going to be much of an economic powerhouse. Your cartel can have up to 15 systems, including your own.

With any luck, you'll already have some candidates lined up, who were just waiting for you to promote so they could join you. Otherwise, you'll have to start scurrying around selling the benefits of your cartel to attract potential members.

If a PO wants to join your cartel the request will go into the pending queue. You can see if there are any outstanding membership bids on the cartel display. To accept a star system into your cartel, use **'ACCEPT systemname'** and to reject it, **'REJECT systemname'**. You need to be in your hub system to accept or reject members.

If you change your mind, you can get rid of a cartel member with **'EXPEL systemname'**. This puts the star system back into the Sol cartel.

You can charge new members a joining fee, or you can pay a signing up bonus to those that join your cartel. The command is **'SET CARTEL fee|bonus megagroats'**, where megagroats is the fee or bonus you want to set, up to 100. For example, **'set cartel fee 10'** would charge joiners a fee of 10 meg, whereas **'set cartel bonus 20'** would pay out a joining bonus of 20 meg.

When you accept the joining planet into the cartel, the fee or bonus is automatically transferred between the cartel's treasury and the highest level planet in the new member system. If you are paying bonuses, this may send the cartel balance into the red, but don't panic - you'll soon be able to claw that money back.

Transferring Money

You can move groats from your personal bank balance into your cartel treasury using a variant of the **'TRANSFER'** command - **'TRANSFER megagroats CARTEL'** where **'megagroats'** is the number of meg you want to transfer. You cannot transfer more than 100 meg. The good news is that taxman doesn't take a cut of this transfer.

Customs Dues

Another way to make money for your cartel - and to make it more economical for people to keep their trading within your borders - is to levy customs dues on those jumping in from other cartels. The command is **'SET CUSTOMS percent'** where 'percent' is the percentage you want to levy, between 0 and 100%. You need to be somewhere in your hub system to use this command.

The customs fee is levied against all goods in the cargo hold of ships that enter your cartel. The Sol level is always set at 10% so if you want to encourage imports then set your levy lower than that. The money your customs staff take goes into the cartel treasury.

CARTEL BUILDS

Just as a planet owner has infrastructure builds that affect the economy of the planet, so a cartel has builds that can be targeted at any planet in the cartel, or even affect the whole cartel. These builds will be added over time, starting with...

Graving Docks

A graving dock is an orbital shipyard. Jarrow Shipyard on Earth has one that it uses to construct the ships it sells, as do all the planets that sell ships, and many other organizations such as the Imperial Navy have their own graving docks.

Plutocracts will use graving docks to construct Blish cities, which are spacefaring cities that can move around from star system to star system, adding production points to the economy of whatever planet they are in orbit around. They are built by the cartel, and can then attach themselves to any planet in the cartel, producing income for the cartel as well as production for the planet.

They will have an additional benefit: while a Blish city is being built, the planets in the hub system of the cartel will not suffer any disaffection, because all the troublemakers will be on their best behavior as they hope to be chosen to populate the new spacefaring city.

But that's getting a bit ahead of the technology: right now, all you can build is the graving dock itself. It is constructed on the cartel's prime planet, and that's where the cities will subsequently be put together.

Building a graving dock isn't like other planetary infrastructure builds. It takes money, time and commodities. You start by issuing the command to build a dock, which is **'BUILD**

GRAVING DOCK', at which point the cost - 20 meg - is immediately taken from the cartel's treasury. You can only build one graving dock in a cartel. You can see the progress of your build with '**DISPLAY GRAVING**'.

Nothing much will happen without the materials needed, so you need to start transferring them to the partially-built dock's warehouse facility. Assuming all of the commodities are in the warehouse, the build will take 5 days to complete, and each day at reset one-fifth of the commodities will be taken from the dock warehouse and put towards the build. If not all the commodities are there, no building will happen that day.

Here's the commodities needed, in tons:

Graving Dock: 20 meg 5 days
Alloys - 9,450
Clays - 6,000
Nickel - 3,000
Xmaetals - 4,050
Mechparts 1,950
Polymers - 4,125
Droids - 1,125
Lasers - 2,025
Nanos - 675
Synths - 3,000
Tools - 4,875

In order to get the required commodities into the dock warehouse, you need to divert goods that would otherwise be delivered to your exchanges. Once you have issued the command to build the graving dock, you then type '**DIVERT**'. After that, whenever any goods are delivered to any of the planets in the cartel's hub system, if they are required by the build then they will be diverted to the dock's warehouse. This will happen with goods that are sold to the exchange, and loads delivered by haulers. When the warehouse has enough of a particular commodity to complete the build, no more of that item will be diverted.

You can stop the diversion happening with '**UNDIVERT**' which turns off all of the diverting until such time as you turn it back on again.

When the build is finished, the diversion will be turned off automatically, and any unused commodities in the graving docks will be stolen by the construction workers.

You can only build one graving dock in a cartel.

BLISH CITIES

Building a Blish City

Once you have built a graving dock for your cartel, you can put it to use building some Blish cities.

A Blish city is a mobile habitation, built in space by the cartel and able to move to other star systems in the cartel where it adds its production facilities to another planet. Building a city costs money, uses commodities and takes time, just like when you built the graving dock

itself. It also takes workthings from your population, to crew the ship when it launches. You can build as many Blish cities as you like (or you can afford) and the cities can vary in size, with the larger cities giving more production slots to the planets they visit, but taking more time and resources to build.

You start by issuing the build command: **BUILD CITY cityname'** where '**cityname**' is what you want to call the city. You can have spaces in the name. Note that if you want the name to include the word "City" then you have to specify that along with the name - for example, for a city called Nutbush City, you use the command '**build city Nutbush City**'.

The city name doesn't have to be unique - since your city will only operate within your cartel, it doesn't matter if there is a Nutbush City in another cartel, too. In fact, the game will let you build more than one city with the same name within a cartel, but that's not a good idea because you won't be able to control them both!

The city name cannot be the same as the name of a production group, ie agri, resource, sea, tech etc, so you can't call your city Tech - although Tech City would be fine.

When you have started the build, you can see the details on the graving dock display with '**DISPLAY GRAVING**'. The build process is the same as when you built the dock: you use '**DIVERT**' to get the commodities needed sent to the dock.

The initial requirements for building a Blish city are:

- Blish City 6 meg, 5 days
- Alloys - 3,975
- Monopoles - 1,200
- Generators - 2,700
- Droids - 3,525
- Nanos - 1,350
- Workers - 10

The workers won't be taken from your pool until the build is completely finished and the city is launched.

While the city is being built, the planets in the hub system won't suffer from disaffection, because all the usual trouble-makers are hoping to be given a job in the impending city so are on their best behavior. Once the city has been launched, disaffection will return as those left behind start to grumble!

When the five days are up, you have a choice. You can fit the city out as a basic size 1 city, or you can expand it. A size 1 city will have one production slot, enabling it to produce one commodity for its host planet, a size 2 city two slots, and so on up to a size 5 city which will offer five production slots. To increase the city's size, you type '**BUILD CITY**' - you don't have to specify the name because you can only build one city at a time.

Obviously, the larger the city, the more benefit it will bring to its host planet - size matters! But each expansion takes more time, more commodities, and more money. The details vary depending on the size. The next page gives you the requirements.

Fitting Out

Building a Blish city to its maximum size takes 15 days. Then you have to fit it out. This is the point where you decide which economic level it will have, which will determine which commodities it can give a production boost to when it is docked with a planet. The command to fit out the city is **'BUILD CITY level'** where **'level'** is either agri, resource, ind, tech or leisure. Blish cities cannot be fitted out to bio level - the risk of spreading contamination throughout your cartel would be far too great!

Just like building the city in the first place, fitting it out uses up commodities and takes time, and the requirements are listed on the next page.

When the fitting out is complete, your city will launch, and at that point the workers required to run it will be taken from your population. (Don't worry, though, they will gradually be replaced over the next couple of weeks.)

Launching the Blish city will clear the graving dock so it is ready for its next building project - which means you can start to build another Blish city. Eventually you can have a whole flotilla of them, ready to go and spread their economic cheer throughout your cartel.

Meanwhile you can check out the status of your new city with the command **'DI CITY cityname'** which will show you its details, including its whereabouts and its production slots.

Moving the City

Having launched your Blish city, you have to decide where you want it to go. The command to move the city is **'MOVE cityname TO systemname'** where **'cityname'** is the name of the city you want to move, and **'systemname'** is the destination star system, for example **'move Nutbush City to Limits'**. The destination must be in your cartel.

The journey will take a while - between 3 and 5 days - because moving something the size of a large asteroid takes a lot of power, and the city's engines are not tremendously powerful.

Of course, you don't have to move the Blish city to another star system - you could leave it in the hub system of the cartel, where it was built, and use it to boost production of one of your own planets!

You can change your mind about a city's destination in mid-journey - just issue the **'MOVE'** command again. If you do, the current journey is cancelled and the trip to the new star system starts from scratch. So if you're not sure where to send your city, while you dither you can have fun steering your city around the Galaxy!

Allocating Production Slots

Once your city arrives at its destination system you need to tell it which planet it should attach itself to, and then tool it up to produce specific commodities.

'ALLOCATE cityname TO planetname' will dock the city to the specified planet, for example, **'allocate nutbush city to church house'**. The planet must be in the star system where the city currently resides. This happens straight away.

Once the city is docked, you can tool it up to produce something. **'SET PRODUCTION cityname TO commodityname'** will set up the first free production slot to produce the named commodity, for example **'set production nutbush city to furs'**. The commodity must match the city's economic level - a leisure city cannot produce an agri commodity. You use the command as many times as needed to set up all the available slots. It then takes 2 days for the city to tool itself up to produce.

In order to change what a slot is producing, you have to cancel the production so it becomes a free slot again, and then you can issue a new instruction to set the production. The command is **'STOP PRODUCTION cityname slotnumber'**, for example **'stop production nutbush city 3'**. This happens right away, and you can then set the production up again, which will take the usual 2 days.

If you change your mind about what you want a slot to produce during that 2 days, issue the stop command and the tooling up will be cancelled, clearing the production slot.

You can re-allocate the city to any other planet in the star system, and this will clear all the production slots. If you move the city to another star system, that will also clear the production.

Producing the Goods

You've built your city, you've fitted it out, you've moved it to another star system, you've docked it with a planet and you've tooled it up... so finally, it's ready to produce.

For each production slot, the city will dump a load of commodities into the planet's exchange at reset. The amount produced will be between 20 and 200 tons. That means, if you have 5 production slots, you could potentially get 1,000 tons every day. Of course, the nature of randomness means you probably won't... and sod's law means you're more likely to get 100 tons a day!

The Blish city display will show you how much was produced at the last reset.

BLISH CITY REQUIREMENTS

Building

Blish City size 1 - 6 meg, 5 days

Alloys - 3,975

Monopoles - 1,200

Generators - 2,700

Droids - 3,525

Nanos - 1,350

Workers - 10

Blish City size 2 - 4 meg, 2 days
Woods - 2,025
Xmetals - 5,100
Polymers - 4,725
Synths - 2,100
Katydidics - 975
Workers - 10

Blish City size 3 - 4 meg, 2 days
Semiconductors - 6,825
Pharmaceuticals - 3,225
Controllers - 1,050
Laboratories - 1,800
Clinics - 2,400
Workers - 12

Blish City size 4 - 5 meg, 3 days
Soya - 7,950
Clays - 3,975
Vidicasters - 450
Firewalls - 900
Libraries - 1,125
Workers - 12

Blish City size 5 - 6 meg, 4 days
Crystals - 1,350
Tools - 3,825
Tracers - 675
Musiks - 2,700
Simulations - 1,275
Workers - 16

The amounts given are the totals needed for the whole build, so divide them by the number of days required to figure out the daily needs.

The workers are not taken from your population until the city is launched, and the amounts are cumulative, so for example a size 3 city would need 32 workers in total (10+10+12).

Fitting Out

Blish City fit-out Agricultural - 8 meg, 2 days
Livestock - 5,025
Soya - 8,025
Woods - 2,025
Petrochemicals - 2,775
Mechparts - 3,675
Alloys - 3,350
Probes - 825
Sensamps - 1,050

Blish City fit-out Resource - 10 meg, 3 days
Explosives - 6,075
Polymers - 5,925
Nitros - 4,050
Tools - 975
Sensors - 375

Blish City fit-out Industrial - 12 meg, 4 days
Petrochemicals - 4050)
Radioactives - 2325
Alloys - 6,975
Lasers - 2,025
Nanos - 1,050
Synths - 1,200

Blish City fit-out Technological - 14 meg, 5 days
Monopoles - 3,000
Semiconductors - 5,400
Xmetals - 502
Pharmaceuticals - 2,700
Droids - 1,125
Clinics - 2,100
Tracers - 1,875);

Blish City fit-out Leisure - 16 meg, 6 days
Katydidics - 2,850
Libraries - 3,150
Sensamps - 2,025
Studios - 4,125
Vidicasters - 3,975
Proteins - 2,475
Woods - 4,650

17. OBJECTS AND MOBILES

FINDING AND USING OBJECTS

Scattered around Federation DataSpace are various objects. These show up at the end of the description when you walk into a room, or type **'LOOK'** or **'GLANCE'**.

Crossroads

The city's main crossroads has become a gathering place for the locals. From here streets go out to the four points of the compass, but everyone stops on their way, to pass the time of day with each other. To that end, benches have been placed on all four corners.

You can see a tree.

The tree in the last line is an object. You can look closely at it with **'EXAMINE objectname'**. This will give you the object's description. For example, examining the tree tells you:

It was brought from Earth as a tiny sapling, along with the first colonists. It is now a tall and spindly specimen, due to the low gravity on the planet. To the locals, it is a symbol of the colony's success on an alien world.

There are two types of object: objects you can pick up and carry around with you in your inventory, and objects that are fixed in place - such as the tree in the above example, signposts, posters, and so on.

Objects that you can pick up may not be simply lying on the ground - they may appear when you do something else. Usually there will be an inexhaustible supply of them, so just because one player has one, it doesn't mean other players cannot also have one too. Dork cannot corner the market in a particular valuable item in order to stop Newbod from using it! This means that you may end up with more than one object with the same name in your inventory, or more than one in the same location. When you try to do anything with an object - examine it, drop it and so on - the game will look for things in your inventory first, and then things on the ground, and it will stop with the first one it finds.

If an object is just lying around, then to pick it up use **'GET objectname'**. This places it in your inventory, which you can look at with **'I'**. You can get rid of the object again with **'DROP objectname'**. However, this may not just leave the item on the ground; dropping it might have some unforeseen effect. Many objects vanish if dropped, which is just as well since the Galactic Administration takes a dim view of littering.

You can give objects to another player with **'GIVE playername objectname'**, for example **'give newbod top hat'**.

Most objects will remain in your inventory - even if you leave the game. Come back to Fed and the object will still be there, even if the game resets. There are a few exceptions to this; some objects (such as perishable items of food) can be marked as non-persistent which means they will be deleted at reset. Objects dumped on the ground and left lying around as litter will be tidied up at the reset.

There is no limit to the number of objects you can tote around with you; however, the weight of the objects will put a limit on what you can pick up. Your strength determines your carrying capacity. You can carry one third of your strength, so if your strength is 35, you can

carry objects weighing 11 units. Objects all weigh at least 1, but may weigh more depending on what they are - obviously you will be able to carry fewer elephants than you can feathers!

Ship's Lockers

If you own more clutter than you can carry, you can dump the things you want to keep for a rainy day in your ship. Spaceships come equipped with a storage locker which will hold up to 75 items, regardless of weight. **'STASH objectname'** puts something into your locker, and **'RETRIEVE objectname'** gets it back out, provided you can carry it - if it will put you over your weight limit, it stays in the locker. You can look at what's in the locker with **'DISPLAY LOCKER'**. You have to be in your ship to do all of these things. Persistent objects will stay in your locker forever; non-persistent objects will vanish at reset. If you sell your ship, the locker and its contents get transferred to the new ship.

Uses for Objects

What else can you do with objects? Well obviously, you cannot pick up a fixed object, although something odd might happen if you try. But you may be able to do something else with it. For example, if you see a lever, you may be able to pull it. Buttons are made to be pressed. You can open an umbrella or a box; use a hanky, ride a bicycle, read a book... just try what seems natural. The object's description may give you a clue as to what you can do with it. When in doubt, try **'USE objectname'** - even if that doesn't actually do anything useful, it may give a hint about how the object can be used.

You can also show off the objects you have found, bought or been given by using the **'WEAR objectname'** and **'CARRY objectname'** commands, so that they show up when players examine you. You can wear and carry as many things as you like. Stop wearing something with **'DOFF objectname'** and stop carrying it with **'POCKET objectname'**. Note that carrying an object makes no changes to what you can do with it.

You can also clip one object at a time to your keyring, if you have one, with **'CLIP objectname'**. **'UNCLIP'** removes it.

Display Cabinets

One other place you can find objects is in a display cabinet. All star systems have one of these which can be viewed from the landing pad of any planet in the system, thanks to the magic of quantum entanglement. You will see the cabinet as part of the LPs description. If you **'EXAMINE CABINET'** you'll be shown a list of the goodies inside the cabinet. You can then look at the individual items with **'EXAMINE objectname'**. As always, **'EXAMINE'** can be shortened to **'EX'**. You can't take an object out of the cabinet unless you are the owner.

If you are the owner of the star system then you can put objects into the cabinet with **'STASH objectname'** and take them out again with **'RETRIEVE objectname'** - the same commands used with your ship's locker. Objects put into your cabinet will stay there safely across resets.

You can only conceal objects in your cabinet, so they are kept safely but won't show up for other players, using **'HIDE objectname'**. You'll see the objects when you examine the cabinet, and you retrieve them as normal.

The basic display cabinet holds 57 items. An object only takes up one display slot, no matter how heavy it is - you could store 57 nano-crystals or 57 kalindras and the cabinet will reconfigure itself to accommodate them.

If 57 slots isn't enough to hold all of your precious things, then you can make the cabinet bigger - for a price. One slithy tove gets you an extra 13 slots, with **'EXTEND CABINET'**. You can keep on adding new shelves as long as you have a slithy to pay the carpenter; there is no limit on the total size of a cabinet.

ENCOUNTERING MOBILES

As you explore Federation 2 DataSpace, you are going to meet characters that are not played by real people, but are controlled by the game. These non-player characters are called mobiles.

Mobiles might be humans, aliens, droids or animals. The name suggests that they move but some of them will always be found in the same place. If they do move then they will have a movement area that they will move within at random, so if you're looking for a particular mobile you may have to hunt around for it. A mobile will only move around one planet (or in space). They may move very fast, or very slow, or somewhere in between, depending on how the planet owner has designed them.

When you meet a mobile it will show up on the end of the room description, just like objects do. You can examine a mobile to find out more about it, and the description will give you some idea of what you can do to, or with, the mobile.

One of the most important things that mobiles do is hold conversations - you can talk to them and get useful information. Not all mobiles will talk. Some will be incapable of speech, such as non-genetically-modified animals, or aliens that don't speak our language, or communicate in some esoteric way such as flashing colored lights, exchanging smells, or thought transference.

Even some humans, who you would think would be capable of speech, will have nothing to say.

The only way to find out if a particular mobile has anything to say is to try and start up a conversation. To talk to a mobile, type the name of the mobile followed by what you want to say, for example, **'Priest hello'**. Or you can use the **'TELL'** command which has the same effect, for example **'Tell Priest hello'**. All mobiles that do talk will respond to a greeting of "Hello".

Conversations work like this: the game examines the message you type and looks for keywords that it recognizes, and then gives the appropriate response. For example, if you type "Priest is the design of the temple significant?" the game will seize on the word "temple" and the mobile will reply. So you could just type "Priest temple" and get the same response.

Here are some guidelines about what words or phrases will elicit a response from mobiles in general:

- All talking mobiles will respond to Hello. The message you get when you say hello to a mobile should also give you some hints about other things they will talk about.
- They will all talk about the planet they are on. Sometimes, they may have opinions on some of the other planets in the Solar System.
- They will all respond to Bye, which is of course the polite way to finish a conversation.
- They will talk about personal things, such as their job - try Job or Profession.
- They may talk about the location or area that they are found in - for example, the priest talks about the temple.
- They may talk about other mobiles on the same planet (once we have more mobiles in).
- They may talk about things of inter-planetary significance, such as the Galactic Administration, Ming, the Cult of Gaelaan and so on.

If you type something the mobile doesn't know about, you'll get a message telling you so, and that may give you more hints about what the mobile does know about. Read the information contained in the mobile's responses carefully - that may give you clues about other subjects the mobile will talk about. In some cases, particularly in a puzzle, information from one mobile may help you to get information from another.

Of course, not all mobiles will be chatty right away. You might have to carry out some other actions, such as buying them a drink or giving them a present, to get them in a receptive mood first.

Sometimes a mobile will do something else as a result of a conversation. Say the right thing, and he, she or it might give you an object or cause you to move somewhere else. Of course, say the wrong thing and the mobile might clam up and refuse to talk to you any more, or do something more serious.

18. SHIP FIGHTING

VIOLENCE AND MAYHEM

Fed is not a fighting game. Indeed, until recently it was calm and peaceful, full of gentle, caring and kind players. The Galactic Administration's strict rules, enforced by the Imperial Navy, prohibited firing weapons anywhere in civilized space.

But then, under pressure from lobbyists working for the military-industrial complex, the rules were loosened – allowing players to unleash a plague of mayhem, bloodshed and gratuitous violence upon each other.

Still, the powers that be tried their best to ensure that weapons could only be fired in designated fighting zones, so we won't see a return of the bad old days when unsuspecting traders could be ambushed by vicious killers.

No, fighting these days is strictly for those that choose to indulge in blood sports, and if you are one of those violent types, then here's how you go about it.

ARMING YOURSELF

Should you wish to become involved in a battle, you need to be well equipped for both offence and defence.

Since weapons are an integral part of your vessel, you need to get them installed when you buy the ship – you cannot retrofit them later. The Jarrow Shipbuilder pricing schedule (in the [ships section of the manual](#)) lists all the details and prices for armour, shielding, weapons and so on.

Shields and Armour

Shields give you protection against lasers. Armour is extra thickness for your hull – the higher your hull strength, the more hits your ship can take before it disintegrates.

Types of Weapon

There are two different kinds of weapon you can use to attack an opponent: missiles and lasers.

Missiles are used in open range. They are stored in a magazine, and then loaded into a missile rack in order to be fired. So if you want to use missiles you need to have a missile rack installed in your ship, and you need a magazine. You choose how big the magazine is, which determines how many missiles your ship can carry. You can have more than one missile rack to give you some redundancy should it take a hit during a fight.

Lasers are for close-range fighting. They come in three varieties: laser, twin laser and quad laser. (Open and close ranges are explained later in this section.) You can have more than one of each type, which is a good idea because although you can only fire one at a time, if

one of your lasers takes damage your ship will always choose the least damaged one to fire, so it pays to have some spares installed.

Even if you only plan to use missiles or quad lasers as weapons, you should also get a single laser installed, because it will be used as a defensive weapon, attempting to destroy your opponents missiles before they can hit your ship.

Jammers and Sensors

Sensors help you to aim your weapons, and jammers spoil your opponent's aim. They can be fitted and removed from a ship at any time. To add more sensors or jammers, go to any repair yard and use the command '**BUY number jammers|sensors**' where '**number**' is the number of sensors you want to install in your ship and '**jammers|sensors**' is which of the two things you want to buy. For example, '**buy 3 sensors**' or '**buy 5 jammers**'. The cost is 10K groats each.

Sensors and jammers take up cargo space – 2 tons each. That size is because a sensor is not just one tiny little sensor, it's a bank of sensors fitted to a large panel which slots into your ship's hull. It has shielded cables to connect it to the ship's electronics, and a not-so-mini-computer to process the data before it is sent to the command centre. So it's no wonder it takes up cargo space.

This has a drawback: if you calculated the size of your cargo hold for an exact multiple of bay sizes, then just adding one sensor will effectively knock out a whole cargo bay. So you can reclaim that space by removing one or all of your sensors or jammers. '**REMOVE jammers|sensors**' takes all of the specified item out, or '**REMOVE number jammers|sensors**' gets rid of the specified number.

Incidentally, a new groundhog's starter special ship comes with two jammers already installed, to provide some protection against suddenly being attacked by a homicidal maniac.

Missiles

Missiles are bought separately and since they get used up during a fight, you are going to need to replace the ones you fire. You buy missiles from a weapon shop – in Sol, you will find such establishments on Earth, Mars, Mercury and the Moon, and many out-of-Sol planets will also have weapons shops.

The command is '**BUY MISSILES**' which fills up your magazine, or '**BUY number MISSILES**' where '**number**' is the amount of missiles you want to buy – limited by the size of your magazine. Warfare isn't cheap: missiles cost 5,000 groats a piece. You'd better be serious about going after your enemies.

READY, AIM, FIRE!

Where to Fight

Having armed yourself to the teeth (or equivalent) you will no doubt be keen to rush out and murder somebody in cold blood. But hold on there... the Galactic Administration is keen to protect innocent players who are going about their trading business from being ambushed by a homicidal maniac. Fighting should be for people who have agreed to fight – the equivalent of a duel – not to wreak havoc on anyone and everyone.

Fighting is therefore only allowed in space locations which have been designated by the planet owner as fighting zones. Interstellar links and planetary orbits will always be safe locations; any other space location can be set to allow weapons to be fired. You can tell if you are in a fighting zone because the location title will say it is not patrolled.

In Sol, there is a large area called Arena Space which is designed for ship fighting duels. You will find it if you head for the most north-easterly point of Sol space, then keep going towards the utter east.

Setting Your Target

Assuming you find someone else to have a fight with, you need to designate them as your target. Your ship will then direct its missiles and lasers at that person – you can't just fire them off willy-nilly and hope they hit somebody or something. Neither can you have more than one target at a time, so there will be no all-out melee fighting, just one-on-one duels.

The command is '**TARGET playername**'. '**TARGET**' on its own reminds you who your current target is, and tells you if anyone else is targeting you; '**CLEAR TARGET**' removes the target. You can set up your target in advance of the fight, even if the player isn't in the game.

Attack!

You start a fight using the '**ATTACK**' command. This will only work if you are in a fighting zone, and your opponent is also in the location.

When you attack, your ship will fire one missile at your opponent. After that, you fire further missiles with '**LAUNCH MISSILE**'. Whether your missile hits the opposing ship depends on your sensors, your opponent's jammers and defensive lasers, and a little bit of luck.

Should it hit, it will inflict damage to the hull, and may also damage other bits of the ship. If you are the victim, you will see the damage on your ship's status display.

If you are the recipient of a missile attack you can start launching missiles right away – you don't have to use the '**ATTACK**' command first.

You cannot use your lasers unless you move into close range...

Open and Close Range

If you want to bring your lasers to bear during a fight you will have to move your ship closer to your opponent's vessel. You can only move into close range if you are already involved in a fight – either you have launched an attack or you have been the subject of an attack.

The two ships engaged in a fight move closer together in three stages, which means there are four levels of proximity:

- Open range – that's the normal range at which you can use missiles
- Intermediate range 1 – you can still use missiles
- Intermediate range 2 – you can't use missiles or lasers
- Close range – you can use lasers

You move into a closer range using the command '**CLOSE RANGE**'. This moves you through those levels of proximity, so type it three times and then you can use your lasers. Back out using '**OPEN RANGE**' in the same way to move through the levels by typing it three times.

Of course, while you are moving in or out of range, your opponent may also be doing the same thing. If you type '**CLOSE RANGE**' twice and your opponent types it once, then you will be in laser range. Or, if you type it once and your opponent types '**OPEN RANGE**', you'll be back to square one.

Firing Lasers

Once you are in close range you can fire your lasers at your opponent, with '**FIRE weapon**' where '**weapon**' is either '**laser**', '**tl**' or '**ql**'. The game will utilise the least damaged of the specified laser – a damaged laser won't be as accurate as one with no damage.

When you fire a laser the usual calculations will be made to determine whether you hit your target, taking into account any sensors you have which will improve your targeting (jammers have no effect on laser fire). If you do hit then the laser will inflict damage on your opponent's ship – generally lasers do half as much damage as a hit by a missile, twin lasers the same amount and quad lasers twice as much.

However, the damage can be mitigated by shields. Each point of shielding will reduce any incoming laser strike by two percent, which means that the standard 10 points will reduce the potential damage by 20%.

RUN AWAY!

If you are in the middle of a fight and you think you are losing, then you might want to retreat. Better a live coward than a dead hero.

If you're in open range, being pounded by missiles, you can simply move your ship out of the location to escape the hail of destruction. However, in close or intermediate range you can't move without first moving back to open range.

The alternative way to escape a fight is to '**FLEE**' which will take you to the interstellar link where you will be safe. As with moving, you can only flee from open range.

You can use the command anywhere in space, even non-fighting locations – you don't have to be involved in a fracas to flee.

Your flight will inflict damage on your ship so under normal circumstances it's not something to do lightly. Fleeing also uses up fuel, so it's not a free way to travel from one side of a system to the other, just a very fast one.

Remember, he/she/it who fights and runs away lives to fight another day.

DYING FOR YOUR CAUSE

So you decided not to run away – or you weren't fast enough to react when you realised your ship was taking damage. You watched as holes were punched into your hull until it resembled a colander. Your ship's status kept on reporting on the damage, as your hull strength crept lower and lower... until it reached zero.

Zero hull strength is the end of your ship. With no hull, the whole thing just falls apart, leaving you stranded in space with just the air in your spacesuit to sustain you. It doesn't take long before you die an agonising death...

To wake up in a hospital bed. Because you did have insurance, didn't you? Of course you did – nobody would be foolish enough to take part in a ship fight without life insurance.

Your ship will be repaired as part of the resurrection package, and will be waiting for you, all shiny and new, in orbit.

Just don't forget to reinsure before you leap back into the fray!

REPAIRING THE DAMAGE

Whether your ship sustained damage by fight or flight, it's not good practice to fly around in a ship that isn't up to snuff. Damaged engines use more fuel, which will be a constant drain on your finances, and if there's a chance you'll get into another ruction, well you don't want to have shields or a computer that aren't as good as they can get.

So you need to repair your beaten up ship by taking it to a repair yard. Swift-Fix Ship Repairs on Earth is just northeast of the LP, there are other facilities on Mars and Mercury. and out of Sol planets may have yards of their own if the POs have provided them.

The command to repair your ship is '**REPAIR SHIP**'. This fixes up everything that is wrong with it. If you are short of cash, the repair droids will carry out the work anyway and you will end up overdrawn.

If you want to know how much it's going to cost you before you commit yourself, then get an estimate with '**REPAIR SHIP ESTIMATE**'. Bear in mind that the ship repairs use raw materials purchased from the exchange so the price will vary from planet to planet – it pays to shop around, unless your damage is so severe you can't make it to another planet without your ship disintegrating around your ears (or equivalent). If the planet's stockpile doesn't have a commodity needed for repairs then it will be sourced from a private buyer and will be more expensive.

There may be differences between the actual cost and the estimated cost of the repairs due to fluctuating exchange prices. The shorter the period between the call for an estimate and the request to repair, the less likely there is to be a significant change.

Thanks to the Galactic Administration's programme called the OutSystem Business Development Subsidy, the repair will be cheaper if your ship is registered to the planet on which you are getting the repairs done. There is also a discount if the planet happens to be in a non-Sol cartel.

You can't repair sensors and jammers – if they get shot up they need to be replaced.

You can't repair bits of your ship and leave other bits damaged - the entire thing gets repaired. It's not economical to repair odd components, because the whole ship has to be opened up to get at them, so you might as well fix everything that needs it in one go. Besides, insurers refuse to insure partially repaired ships - apparently they have worries about compatibility issues with brand new components interacting with damaged stuff.

19. ODDMENTS

MONEY AND TAXES

The unit of currency in Fed DataSpace is the Imperial Groat, or ig. A thousand groats is a kilogroat. One million groats or 1,000,000 ig equals a megagroat or meg. Add some more zeroes and you have a gigagroat, 1,000,000,000 ig.

You can give groats to another player using the command '**GIVE playername amount**', for example '**give dork 137**'. However, there is a limit which stops you from passing large quantities of cash to another player - a player can only receive 1,000 ig each day. If the amount you try to hand over would take the receiver over the limit, then the amount will be reduced accordingly.

Having said that, the 1,000 ig limit is subject to your generosity in buying rounds - the amount of money you spend on drinks for your friends is added to the limit for the day.

The Galactic Administration keeps a tight rein on the Galactic money supply, and acts to curb any inflationary pressures. As part of this rather restrictive monetary regime, it has instructed the Interstellar Revenue Service to investigate those who seem to have way too much money for their rank, on the grounds that anyone with excess groatage must be a dodgy character and up to no good.

The IRS investigators will swoop and confiscate any earnings that are deemed to be suspicious. The threshold at which the IRS will take action is as follows:

- Commander - 250,000 ig
- Captain - 400,000 ig
- Adventurer - 600,000 ig
- Merchant - 900,000 ig
- Trader - 2,100,000 ig
- Industrialist - 2,100,000 ig
- Manufacturer - 2,100,000 ig
- Financier - 2,500,000 ig

Each day at reset, they will remove 20% of your excess groats.

The taxman doesn't tax the personal money of planet owners; however, planetary treasuries are subject to a strict 1 gigagroat limit, and at the reset any excess groats are confiscated.

The same limit is applied to companies - at the reset, any groats in excess of 1 gig in the company balance are removed.

SPYNET

The exact origins of SpyNet are unknown, although it is rumored to have evolved from the merger of the 20th century organizations known as the FBI, CIA, KGB, AAA and MFI. One of their fields is now commercial intelligence. Such information as they gather is available to anyone, for no charge. Such altruism - they must have a sinister ulterior motive, but until we find out what it is, let's take advantage of their freebies. It is rumored that SpyNet has its offices on Earth, but nobody knows where.

SpyNet provides a number of services for players.

SpyNet Notice will notify you when players log on and off the game. **'SPYNET NOTICE'** toggles this information on or off. The setting only lasts for your current game session - it defaults to being off, and if you want the notifications you will need to switch it on each time you log on.

SpyNet Report will give you a report of the status of a player in the game. **'SPYNET REPORT DORK'** will provide a report on Dork - his ship details, current location and so on. If he's a planet-owner it will tell you what cartel he is a member of.

SpyNet Review is a report on births, marriages, deaths, promotions and other notable happenings. The command to read the report is **'SPYNET REVIEW'**. It is cleared whenever the game fires up.

SpyNet Financial reports give information about company information such as dividend payouts. Read the report with **'SPYNET FINANCIAL'**.

The SpyNet Organization has asked the Idiot's Guide to stress that it does not guarantee the accuracy or completeness of the information it supplies.

SpyNet will change the entry for your race in return for 2 slithy toves. The new race will be all lower case and with no spaces (so it can only be one word). Email feedback@ibgames.com and give your Fed2 character name, and the new race that you want.

RESETS AND MAINTENANCE

Once a day, the game shuts down for a few minutes to perform housekeeping chores. To find out the current reset time, type **'TIME'**. You will be warned beforehand so you know it is coming; if you are still online when it happens, you will be gently removed from the game. You will be able to come back almost straight away.

In addition, the game may be closed down at other times in order to put in new code. Once again, you will be able to come back after just a few minutes.

ACCOUNT MAINTENANCE

There are a number of commands that allow you to make changes to your Fed 2 account.

'DISPLAY EMAIL' will show you what email address is attached to your account - the registered email address. **'DISPLAY'** can be abbreviated to **'DI'**.

To change the email address for your account, the command is **'UPDATE EMAIL new_email'** where **'new_email'** is what you want the email address to be changed to.

It is important to make sure your registered email address is correct, because if you forget your password you will need to email us from the registered address.

You can change your password in the game with the command **'UPDATE PASSWORD newpassword'** where **'newpassword'** is what you want the password to be changed to. Passwords must be between 8 and 15 characters, and can only contain letters and numbers.

If your Fed front-end saves the password, then don't forget that if you change it in the game, you have to tell the front-end about the new password, or it won't be able to log on again.

If you forget your password, email us with the Fed2 character name and request that the password be changed. The mail must come from the registered email address for the account.

For security reasons, remember that you should never have the front-end remember the password if you share your computer with other people, otherwise they will be able to log on using your account.

MISCELLANEOUS COMMANDS

'TIME' gives you the date and time (in US eastern time), and tells you the stardate, and what time the reset is going to happen. It also reminds you how long you have been in the game for your current session.

Most front-end programs, including FedTerm, know how to neatly wrap the lines of text that Fed sends so they fit into the window. However, if you log on using less orthodox methods, you may need the termwidth command, which allows you to format text to the specified width so that the game will take care of wrapping the lines for you. The command is **'TERMWIDTH #'** where **'#'** is the number of characters you want each line to have. You cannot set it to less than 40.

The setting lasts for your game session, or until you turn it off with **'TERMWIDTH 0'** or **'TERMWIDTH OFF'**.

Here's another obscure technical command... Some generic game front-end programs include the ability to send ANSI codes along with the text. These codes allow the sender to specify what color the text will display in, so anybody else using a front-end that supports ANSI will see messages from the player in glorious technicolor. This actually goes against our philosophy for Fed, where we prefer to leave it up to the receiver how to decide how text should be displayed, rather than imposing it on them.

Usually, the game strips out ANSI color codes, otherwise anybody not using a front-end which supports them would see strange characters along with the text. At least, the game does its best, but there are no guarantees! However, you can stop the game stripping out ANSI codes so that if your front-end knows what to do with them, you can see other players' messages in color. The command is **'ANSI ON'** to get the codes, and **'ANSI OFF'** to stop them from appearing.

BUGS AND ERRORS

In the extremely unlikely event of your finding a bug in Fed2 (no, don't laugh...), send some mail to the Federation 2 team by mailing feedback@ibgames.com.

When reporting a bug, please provide as much information as possible about what you were doing and what the problem is. "There's a bug in jobs" is not particularly helpful! If you can send a capture or log file of the bug in action it makes troubleshooting a lot easier. If you are reporting a bug that made you lose groats or other data, then you must send in a capture that clearly shows the loss happening.

If you find a typo or something that doesn't work as it should on an out-of-Sol planet, you should tell the owner.

In the game, you can ask questions of the staff, who are there to help new players get started. However, they are not obliged to answer your every question. You are expected to find some things out for yourself, by reading the game manuals, watching other players, and trying different things.

And if you get really cheesed off about something, then you need to go to the Galactic Administration HQ on Earth and lodge a complaint!