

"How the hell do I work this god-damn thing?"

"Its voice activated."

"Oh, how clever! What do I do, say turn on, and the....What the hell, the bastard turned itself on."

"So much for neat tricks. How do I get data out of it?"

"Ask it to display what you want to see."

"That's part of the problem; I don't know what I want to see."

"Well, let's begin by viewing a map of the galaxy in two dimensions."

"Fine with me. Go ahead and tell the damn thing what you want it to do."

"I'm afraid that won't work. It will only respond to your voice."

"Show me a two dimensional map of the galaxy."

"Nothing. Now what?"

"Well you might stop being so parochial and tell it which galaxy you wanted to see."

"Oh ya, that might help. Show me a two dimensional map of the Milky Way galaxy."

An image of the Milky Way flashed on the screen.

"Damn! The resolution of the thing is unbelievable. I can see separate stars in some of the nebulae. Very impressive. I still have some problems. I'm not a big astronomy buff, but last I heard there were something like 100 billion stars in this galaxy."

"That's a fairly accurate count. Don't forget that each star system has an average of six planets, which in turn, have an average of three

satellites each. If you perform some quick computations, you will find that there are one trillion eight hundred billion items to be sold in this galaxy. If we include the asteroids and comets, we could increase the number rather dramatically, but I don't want to scare you the first day on the job."

"I quit. Take a hike, Sawyer. This is impossible, it can't be done."

"Of course it can. As a matter of fact, it happens rather frequently, although I must admit it is rather unusual for a galaxy this size. I think what you ought to do is break this task down into manageable portions."

"Manageable portions! Are you crazy! How can one trillion of anything be considered manageable."

"Wait a minute Paul. Let's concentrate on the stars. There are only 100 billion of them. There are several acceptable methods of plotting a galaxy. The one I feel most comfortable with is imagining a galaxy as a circle, and dividing it up into 360 pieces. Galactic center is the centerpoint of the circle. If we plot the Milky Way in this manner, each degree would account for approximately 275 million stars."

"How stupid of me! Of course, 275 million is a number which is easily managed. Give me a break, Nick. 275 million is still a mind blowing number."

"It's really not that bad Paul. Ask the computer to plot the galaxy in the way we just discussed."

"Plot the Milky Way galaxy in one degree increments with galactic center being the centerpoint of the circle."

The computer instantly responded to Paul's request.

"Now ask it to number each sector from 1 to 360 in a clock wise direction, with the sector containing your sun being number one. After you've done that, ask the machine to catalog each star in each sector, along with all planets and moons."

Paul repeated Nick's instructions to the computer, and waited for results. Within a few seconds, each sector was numbered, and a message appeared on the screen to the effect that the catalogs were ready.

"Finished in a matter of seconds. That's amazing. But the numbers are still too big. I won't be able to make sense of them."

Paul, no one said you had to have a separate transaction for each body in the galaxy. What's to prevent you from selling an entire section, or several sections for that matter, to a buyer?"

"Why nothing, I suppose. I just never thought of that. Wait a minute. What if there's some really great planet that is worth what an entire sector is normally worth. Anyone who bought that sector would be getting it at bargain-basement prices."

"That's true. But we can program the computer to spit out those bodies that should be expected to yield a return in excess of "x" per cent, and negotiate special deals for them."

"That's great, but how do we determine a selling price when I don't know what the medium of exchange is?"

"Each system has its own currency. Theoretically, we could price each transaction in local currency and then convert it into a currency acceptable to my client. This method might prove unwieldy since we would be dealing with extra-galactics and they probably would not want to go through the bother of foreign currency translations."

"Great, I suppose there are no standard currencies then?"

"No, there is no "standard" currency recognized throughout the universe. There are exchange standards of sorts, however. We can value each transaction in terms of appropriate units of agriculture, energy and real estate."

"OK, why don't you explain how these work."

"I'll start with the one you're most likely to be familiar with. I believe that when a piece of property is offered for sale on earth, you compare it with a like property which sold at an earlier date. You can therefore get an idea of the price the property will yield when sold. The same thing occurs on a system level in galaxies. As I mentioned before, the sale of systems and even entire galaxies is not uncommon. When a system is sold details of the transaction are logged into a database. A similar system in the galaxy offered for sale is compared with the purchase prices from prior sales and a price can therefore be determined. This method is generally only used for entire systems, and not single transactions. When a system is not suited for agriculture or recreation, it can be sold in bulk with several neighboring systems. The agricultural and energy valuation methods will usually yield higher prices than the real estate method."

"Trust me."

"I never trust someone who says "trust me.""

"So make an exception."

"Computer, display the best and highest usage figures for each body in the Milky Way galaxy with a diameter over ten Kilometers. When you have calculated these values, please arrange them in descending order of value within each one degree increment of the galactic map you have constructed. Please store the results in memory for later use."

"Ah, Paul, one small suggestion. You don't have to preface your request to the machine with the appellation "computer." Next thing you know, you'll be calling the thing Mr. computer. Comes from watching too many reruns of Mr. Rogers Neighborhood."

"Stick it, Nick."

The screen says its done. That can't be. It took less than one minute."

"What do you think this is, an IBM PC? Of course its done."

"Holy shit, that sucker really hums. What's inside the thing"

"Not to get too technical, the mainframe it's connected to uses organic VLSI cell technology."

"The computer uses organic cells?"

"Yes, its the only way we could attain blinding speed without burning out circuits due to overheating."

"There are more things in heaven and earth than are dreamt of in my philosophy."

"What the hell are you talking about?"

"Forget it, Nick."

"Now that I've got the best and highest use, do I have to sell each one for the recommended price?"

Mind explaining those two methods?"

"Why, not at all. The agricultural method is also quite simple. We assign each habitable planet an agricultural quotient which is an expression of yield relative to a star system in my home galaxy. For instance the total yield of earth is equivalent to .63 of the star system I mentioned. We can get a pretty good estimate of agricultural yields by determining star type and water content on the planet in question. We find that the yellow to red spectral class stars have the greatest agricultural values. These stars are generally cooler and have one to two planets capable of supporting plant growth. Of course, location affects the yield slightly due to the transportation costs involved in harvesting and distribution of crops.

The energy valuation method is the most complicated of the three. If a particular system has several blue to white spectral class stars or if it is composed of nebulae or high concentrations of gas, the energy valuation method is sometimes selected. As you can well imagine, energy output is vital for space travel as well as for sustaining the more advanced civilisations. A disproportionate number of inhabited systems are centered around yellow and red spectral class stars. These stars typically have low energy outputs. The demands for energy in these systems exceed the output of the home star. Energy must therefore be imported from elsewhere in the galaxy or neighboring galaxies. Entire systems are sold and drained of energy, and that energy is made available to other galaxies. The standard for measurement of energy is a star similar to Rigel in your galaxy. Each star in the Milky Way can be measured in terms of its energy-producing ability when compared to the Rigel-prototype.

"We assign a value for each star in the galaxy using all three valuation methods. We also assign special situation values for stars which might have unique applications, such as your own sun. We then list the highest value for each individual star, and wherever possible we group stars and obtain a cumulative high value."

"Thanks for the galactic economics lesson, Nick. Now what the hell does this have to do with this assignment! I could spend years plotting out the best possible selling price for each star and still be no closer to doing this deal than I was this morning. This whole goddamn idea of yours is stupid."

"Well my friend, I see you're still unaware of the power of this machine. I believe I told you that we catalog all selling prices of every star sold. Why don't you ask the machine to give you the best and highest usage figures for each of the stars and catalog them into the sectors of your galactic map?"

"You mean that this machine can provide me with best and highest usage figures for every goddamned body in the galaxy just by asking? I don't believe it."

"Would you for a deal such as this on earth?"

"Of course not, I'd sell it for what the market would bear. I'd also keep track of actual sales price versus best use price."

"Well, it seems you catch on, after all. Do the same thing for this assignment."

"Now that I have indications of selling prices, where do I go to find buyers? I don't suppose there's a multiple listing service available."

"No, that's true: we don't have such a service. We do have a very powerful alternative, though. You see, the computer network your terminal is connected to reaches some two hundred and fifty thousand galaxies. I would imagine we would be able to find an interested party or two out there."

"How do I access the network?"

"Why Paul, all you have to do is talk to Mr. computer."

"Oh."

"Just write a classified ad and tell the computer to distribute it to the network. The difficult part will be checking credit ratings, arranging exchange media, etc."

"Speaking of exchange media, how does one arrange paying for the transaction once a selling price has been established?"

"In their standard currency, a swap of comparable real estate in another galaxy, agriculture, energy or one of a number of acceptable noble metals."

"That sounds a lot like the exchange values you talked about earlier."

"That's why they are acceptable exchange values."

"Right. So now all I have to do is write an ad. Let's see, I'll start it like this "For sale, by owner. One Galaxy, like new, first time on market. Prime location, must be seen to be believed. Has all the amenities: food, energy, recreation. Interested parties, please contact the owner's agent, Paul Phillips, on the planet Earth, satellite of Sol in the Milky Way Galaxy. Principals only; we are an equal opportunity organization."

"Very good, Paul; why not tell Mr. computer to send it to the network?"

"Are you shitting me? That was a joke. I would'nt expect the most unscrupulous used car salesman in the world to use some of those lines."

"Send it the way it is. Most of our potential clients will appreciate the hokeyness. Might even think you're a rube and try to get a better price that way. At least we'll get a lot of people dropping by to check us out."

"Computer, please place a want ad in the "for sale" section of your connecting network. Use the wording I just indicated in my discussion with Mr. Sawyer. Also please log-in appointments with clients after they have passed an appropriate credit check."

"Hey Sawyer, I've got a few questions to ask you about documents of title and real estate laws as they apply to the transactions we're about to make."

"Listen Paul, we've covered a lot of ground today. I've got to meet someone in for an appointment. Save your questions till tomorrow; I'll see you at about 8:00 AM. Till then."

"Yeah, its been a slice."