

Galaxy Builder Help Index

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Commands

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File menu commands

The File menu offers the following commands:

New Sector	Creates a new sector. Only available from the Main Screen.
<u>Open</u>	Opens an existing sector. Only available from the Main Screen.
<u>Save</u>	Saves an opened document using the same file name.
<u>Save As</u>	Saves an opened document to a specified file name.
<u>Exit</u>	Exits Galaxy Builder.

Edit menu commands

The Edit menu offers the following commands:

<u>Undo</u>	Reverse previous editing operation.
<u>Cut</u>	Deletes data from the document and moves it to the clipboard.
<u>Copy</u>	Copies data from the document to the clipboard.
<u>Paste</u>	Pastes data from the clipboard into the document.

Options menu commands

- Show Names Turns the showing names of systems on or off.
- Relative Coordinates Toggles between coordinates relative to the origin of the axes on the screen, or to coordinates relative to the origin of the sector. This only affects the numbers displayed in the Highlighted System Box.
- Center On Centers the view on the highlighted system.
- View Dialog Displays the View Dialog .

No Help Available

No help is available for this area of the window.

About Galaxy Builder

Galaxy Builder is intended for use by GM's of space campaigns. It is suitable for any type of game system. It is designed to make the GM's life easier and his campaign more realistic.

Galaxy Builder is shareware. This means you can try it out before you decide to buy it. So if you like Galaxy Builder and want to use it, please order the registered version from our web site:
www.tform.com

Or you can send a check or money order in US dollars for \$25.00 to:

ThoughtForm
PO Box 157
Fayetteville, AR 72702

and I will send you the registered version, it allows you to save and load sectors.

Comments, bug reports, and suggestions on how to improve Galaxy Builder would be greatly appreciated. You can email me at jedm@tform.com.

Requirements

Galaxy Builder must be run in 800x600 resolution. It is highly recommended that it be run with 16-bit color. It requires Windows 95 and Direct X. If you don't have Direct X you can get it from the Microsoft web site at www.microsoft.com.

Getting Started

The first step in using Galaxy Builder is creating a new Sector. Do this by selecting 'New Sector' from the file menu. This will bring up the New Sector Dialog.

The New Sector Dialog

This is where you choose the characteristics of your Sector.

The create button tells Galaxy Builder to proceed to build the sector.

Kind of Sector:

This is where you can choose the type of sector you want to build.

Homogenous: (default) The stars are spread randomly throughout the region of space. The cluster number isn't used.

Cluster: The Stars tend to cluster close together in the center of the region of space. You should select a cluster number between 1 and 2.

Disk: The Stars tend to lay along a plane.

Spiral: The Stars will form a piece of a spiral arm.

In any of the three types besides homogenous you should make a test sector with less stars first to see if you like the look of it. Try them with different cluster values.

Degree of Clustering:

Determines how much the sector is clustered together in a Spiral, Disk, or Cluster Sector.

Dimensions:

You can also change the dimensions of the sector, and the star density. The density is number of stars per 100 cubic parsecs. The region of space around the sun is 6.67 stars per 100 cubic parsecs.

Number of Stars:

The dialog tells you the number of stars you are going to make. Though the program can make as many stars as you have RAM for it is probably best to keep it under 4000. As moving around the sector becomes really slow with more stars. If you need a bigger region of space you can always make more than one sector.

Features

Galaxy Builder will randomly generate a section of space. You can look at this section from any angle. It will tell you the distance between stars. You can make new stars or delete stars you don't want. You can look at the planets surrounding a particular star, change the data of stars ,planets, or moons, make notes about stars, planets, or moons , mark systems with user definable traits, and other functions useful for keeping track of a region of space.

System Traits

Every system has traits associated with it. There are 64 traits that you can define for the systems. Traits are useful for categorize the systems by Government or tech level or what ever is necessary in your campaign. You can view systems by their traits. This is done through the show menu.

You can change the name of traits, or make new traits, in the Main Screen. Highlight a system. In the center of the highlighted system box you will see a list of traits. You can scroll through this list. You can add new traits by simply typing in the blank box. You can change the name of any existing trait by typing in its box.

Notes

Notes are for you to put in extra information about a system ,planet ,or moon. There is a separate note for ever system ,planet, and moon. The notes are saved along with the rest of the sector.

Overview of Main Screen

This is the first screen you see when you make a new universe or load an old one. It allows you to look around the sector and select any system. If you click on a system it will become highlighted. Moving the mouse over another system will show you the distance from the highlighted system to the one the mouse is over.

The box in the lower left corner shows information about the highlighted system. In it you can change the name of the system, edit the system's traits, and add text to the note of the system. It shows you the systems coordinates either relative to the center of the view or to the origin of the sector depending on what you have chosen in the options menu. The coordinates are always in parsecs.

There are two ways you can move a system relative to the rest of the systems. You can drag the tabs that appear on each axis. This will move the system to that place along the axis. The other way to move systems is by entering the desired coordinates into the highlighted system box. If you have selected relative coordinates from the options menu, then the coordinates you enter are parsecs from the center of the screen. Otherwise, the coordinates you enter are parsecs from the origin of the sector.

If you click again on a highlighted system it will bring up the system view for that system.

You can move around the Main Screen by clicking any of the arrows at the ends of the axes. You can zoom in and out by clicking the zoom arrows on the right side of the screen. The number by the end of each axis is the length of the axis in parsecs.

If the three buttons in the top right labeled x, y, and z are not dimmed then you can drag the mouse to rotate the system. Do this by clicking on one of the three buttons and dragging left and right. The left button rotates and the right button translates. You can also click and drag in the middle of the screen to rotate around either the x or the y axis. If you hold down the right button it will translate the sector along the x or y axis.

The View Dialog

The View Dialog is used to select which systems are shown on the screen. It is very useful for getting around a big sector. In it you are shown a list of the system traits. You exclude or include systems from view based on their traits. Each trait has a viewing characteristic. These characteristics can be one of the following:

Blank The trait has no effect on how the systems are viewed.

OR A system will be displayed if it has this trait, unless it is not displayed because of a NOT or AND trait.

AND The system must have this trait to be displayed.

NOT If a system has this trait it won't be displayed.

Simply select the traits you want to have a certain characteristic and then push the button of the characteristic you want.

If the "show all" box is checked all the systems will be shown no matter what.

Overview of System View

The System View shows you what planets are orbiting the star and what moons are orbiting each planet. The sizes of all the bodies are relative to each other. The distances from the star are in a logarithmic scale, and are not relative to the sizes of the planets. The moon's orbits are just in order. They are not to any scale.

Clicking on a planet or moon highlights it and puts all its information on the screen. You can change any property of the moon or planet. Some properties are related and so will also change. For example, changing the radius of a planet also increases its mass.

You can scroll through the planets by holding down the left button in the center of the screen and dragging.

The data of the system's star is in units of our sun. So a star of luminosity .5 is half as luminous as our sun.

The data of the planets and moons is in terms of our Earth. For example a moon with radius .2 is 1/5 the radius of our Earth.

If you change the luminosity of a star it doesn't update the data for the planets or moons. If you want them to be updated, select each planet and press reform. This will correct the planets data, but will also delete any notes that were stored with the planet or its moons.

Useful data

speed of light = 299,792,458.0 meters/sec

1 AU = 1.495×10^{11} meters

1 Parsec = 3.261633 light years

1 Parsec = 206,264.806 AU

1 Parsec = 3.08×10^{17} meters

Sun: Mass = 1.989×10^{30} kg

Sun: Radius = 696,000 km

Sun: Temperature = 5770 K

Sun: Luminosity = 3.827×10^{26} J/sec

Earth: Mass = 5.9742×10^{24} kg

Earth: Radius = 6,378 km

Earth: Density = 5.515 grams/(cm³)

Earth: Solar Constant = 1,368 Watts/(meter²)

Useful Information

Solar Constant: This is the amount of light hitting the upper atmosphere of the planet.

System View: Delete Button

The Delete button removes the highlighted planet or moon. If you delete a planet it will also delete all its moons.

System View: New Button

The New button will make a new planet if nothing or a moon is highlighted. If a planet is highlighted, it will make a new moon around it.

System View: Reform Button

The Reform button will replace the currently selected planet or moon with a randomly generated one. A reformed planet will also reform all its moons. The notes associated with the planet or moon will be destroyed.

System View: Back Button

The Back button returns you to the Main Screen.

Plans for Future Versions

I would like to make a version for those campaigns with jump points. The main view would be different as the actual distances between systems would become irrelevant. All that would matter would be the lattice of jump stations.

But the next version will depend largely on user response, so if you would like Galaxy Builder to do something it doesn't now, please tell me.

Again, thanks for using Galaxy Builder. If you have any comments or questions please send them to me:

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Change Picture Menu

This Menu allows you to change the picture of any planet or moon. Simply highlight the planet or moon you would like to change the picture of. Then select the picture you want it to be from this menu. The planet or moon will now be represented with the new picture. None of the planet's data will be affected.

No Help Available

No help is available for this message box.

