How To
by "Cajun" David Richard

This issue, I tackle something big. Real big, like Bruce Smith big (for you Bills fans). Don't ask me why, but I had this urge to discover how Escape Velocity Plug-ins work and how to build them. I know that it was quite an undertaking and boy was I surprised to learn how extensive the possibilities are. In this issue's How To, I will be looking at how Plug-ins work, how to create them, and some of the nifty possibilities that are available through plug-ins.

How Plug-ins Work

Plug-ins are used very similar to the way extensions and control panels are used on your Macintosh. Extensions and control panels need to be added to the Extensions or Control Panels folder, and the machine needs to be restarted in order for the extensions or control panel to take effect. The system extensions replaces or "patches" certain system calls, and when these calls are made, the extension's code is used in place of the regular code. (This isn't exactly how ALL extensions work, but some do work this way. Besides, I'm trying to make a point ;)

Plug-ins work very similar. You need to drag the plug-in into the Plug-ins folder and restart Escape Velocity. The resources in the plug-in replace the resources of the same ID number in the game. Because of this system, we do not recommend that you use more than one plug-in at a time. There is a possibility that two plug-ins will patch the same ID number. This will cause EV to behave strangely.

Jeremy Condit, one of EV beta testers and author of Schmelta_V, a plug-in editor, has created the EV Plug-in Auditor. This handy little program looks through your Plug-ins folder and checks to see if any of the resources are conflicting. If none do, then Escape Velocity will automatically be launched. If the Auditor does find a conflict, it displays a list of all of the resources that can potentially cause problems. From here, you can use ResEdit or something similar to make any wanted changes. You can find the EV Plug-in Auditor on our EV Add Ons page.

How to create Plug-ins

Over the last few weeks, I have been working on an official Delta_V FAQ. This FAQ is a very extensive document detailing the ins and outs of creating plug-ins. With this document and the EV Bible, plug-in design should be possible for anyone motivated to create new adventures in Escape Velocity.

It would be impossible to detail everything necessary to create a plug-in in this article. Designing plug-ins is no small task. It takes a little research and a lot of organization. If you have an idea, it

is wise to read through the EV Bible and the Delta_V FAQ to see what is necessary for you to accomplish your task. Then, create the items that you need first (such as graphics, text, etc.) before messing with editors and resources. Preparation is half the battle.

One thing to keep in mind when you are building your plug-in is that many EV resources depend on each other. For instance, a fleet of ships, a planet, a dude, a person, and a system all can refer to a corresponding government. So if you are creating one of these, you may want to consider the government you assign to them, or you may even consider creating a new one yourself.

Another important aspect of EV is the ID number offset. Resource ID's start at 128 and count up from there. However, these resources are referenced in other resources, but these references start at 1. So if you are referencing a certain ship for a dude resource, and that ship's resource ID's 128, then you will type 1 in the shipTypes field. Does that make sense? Well, jump in and trace some missions or persons or dudes that you are familiar with to see how it works. With a little determination, you will figure it out.

Nifty Plug-in Possibilities

During my travels through the EV Bible, I discovered some possibilities that folks may not know about. I thought I would jot a few of them down to entice your imagination:

- Governments can have allies, and those allies can have allies. You only need to establish a one-way relationship with allies and enemies - creating the possibility for many governments to side together for one cause. The same works with enemies as well.

- You can make systems invisible - linking their availability to a mission. You can do some neat thing with this. By replacing a system with one that looks just like it (with only slight changes), you can cause a major change with the system as the result of a mission.

- Systems can also have up to 16 links, and your universe can have over 1000 systems. How's that for adventure!

- Missions are very flexible and versatile. There are many possibilities, as you have probably seen through the "stock" missions contained in the game. But did you know that you can branch missions? Through the use of mission bits, a player, after completing a preliminary mission, can have two missions made available to him. Selecting one will disqualify the other.

Well, that's about all Plug-in info I can fit into this article. Much of the information is already available in the EV Bible and the Delta_V FAQ (coming in November). We have also set up the Delta_V mailing list for those who may have problems (or those who may be experts) to converse about possibilities and problems.

We hope that through the use of plug-ins, EV continues to offer endless adventures for the people who like to cruise the universe.

Happy Holidays!