

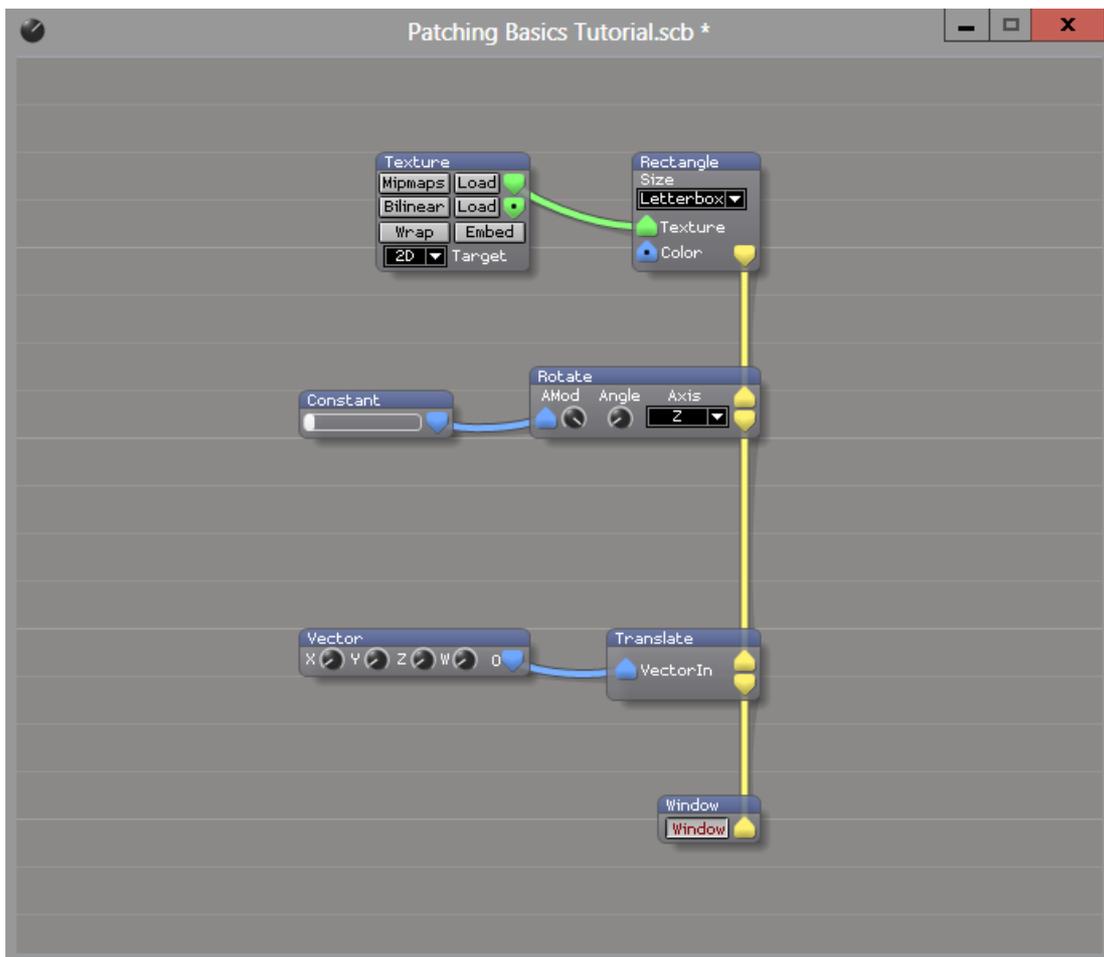
Title	Tutorial: Salvation Patching Basics		 Defining The Future <a href="http://www.avolitesmedia.com">www.avolitesmedia.com</a>
Product	Ai		
Date/Author	31/07/13	Marc Evans	
Level	Medium		
Estimated Time	10 minutes		

**Background:**  
 This tutorial will introduce you to the basics of creating your own patches using Salvation.

### **Salvation Patching Basics**

Behind the Ai front end lies the node-based programming system known as Salvation. Developed by Harrison Digital Media since 2000, Salvation is a mature application for visual programming and allows the user to have a huge amount of access and control over the graphics pipeline. Once understood, programming in Salvation allows you to create generative content, useful applications and complex user-interactive control systems for use within Ai for your live shows, performances and installs.

So, let's get a greater understanding of what we see in patch windows within Salvation. For now we won't worry about the patch itself, just the components.



Here we can see a basic patch – we can see it is made from a series of modules, which are interconnected by different colour cables. The colours show they are carrying different types of data. Blue carries control data, either a single numerical value to control properties such as rotation angles, or as an ordered list of values known as a vector, such as W X Y Z location in space. The yellow signals route graphics stream

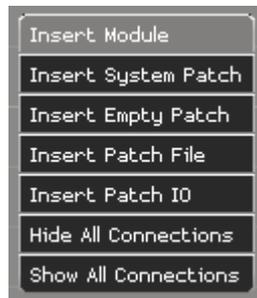
between modules. It is worth remembering that any commands within a graphics stream are not executed unless the stream is connected to an on-screen window. The green connection carries GL textures between modules, which are typically a two-dimensional image or a video file.



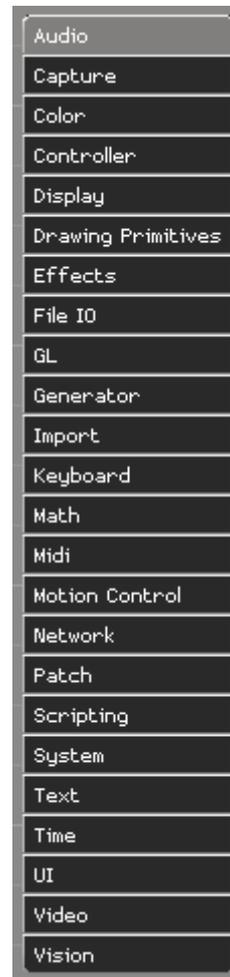
The input and output ports used in Salvation.

On each module we have ports, either an upwards facing triangle for an input or a downwards facing one for an output. When disconnected, we see a black dot inside the port to signify that it is empty. As we can see, Salvation is fairly intelligent and won't let you connect an input to another input, or the wrong data type to the incorrect port type. When it's happy with the connection you are trying to make, the pointer will turn into an arrow prompting you to plug it in.

New modules can be added to your patch by right-clicking in an empty area of the screen, choosing Insert Module and then selecting from the category menu. From the right-click menu, we also have the option to add System Patches. This is essentially a quick menu of commonly used and important patches. User generated patches can be added to the list by saving them in the System folder found within Patches in the Distrib folder.



Right-click Menu



Categories Menu

We also have the option to insert a pre-existing patch or even an empty patch. This allows you to mix and match the components of your patches when you need, instead of having to start from scratch every time.

If you right-click an existing port, you can see the options to disconnect the cable that is plugged into the port, and also to show or hide any connections. Remember, always disconnect any unwanted ports before hiding them as connections stay intact regardless of their visibility. Right-clicking a module itself allows us to show or hide ports and parameters, load an alternate skin or reset the skin to its default layout.

This concludes our overview of Salvation patching basics. For more help and tutorials, visit our website [www.avolitesmedia.com](http://www.avolitesmedia.com).