

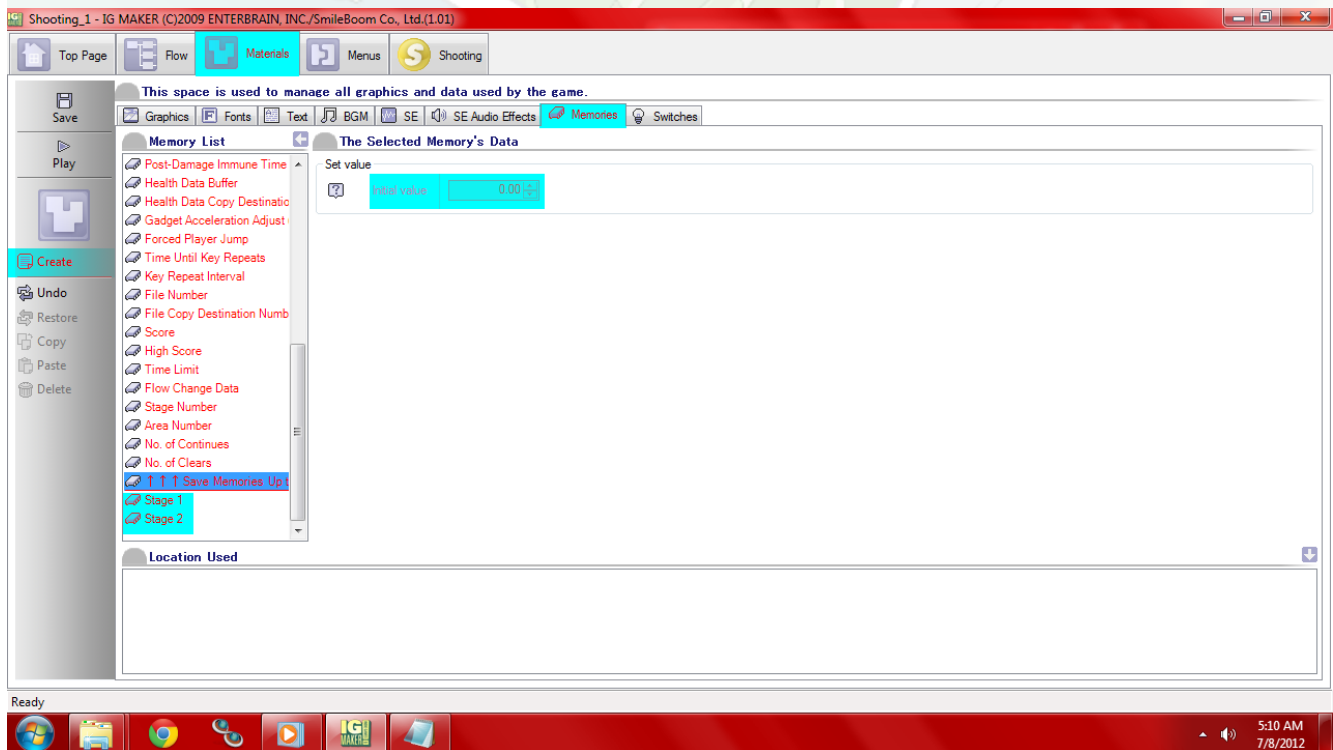


IGM Tutorial XVI: Flow

by Kain Vinosec

We've worked with the "Flow" tab previously, but now we're going to look at it with a bit more depth. Load up your shooting game, or grab this [GPD](#) real quick and let's get started!

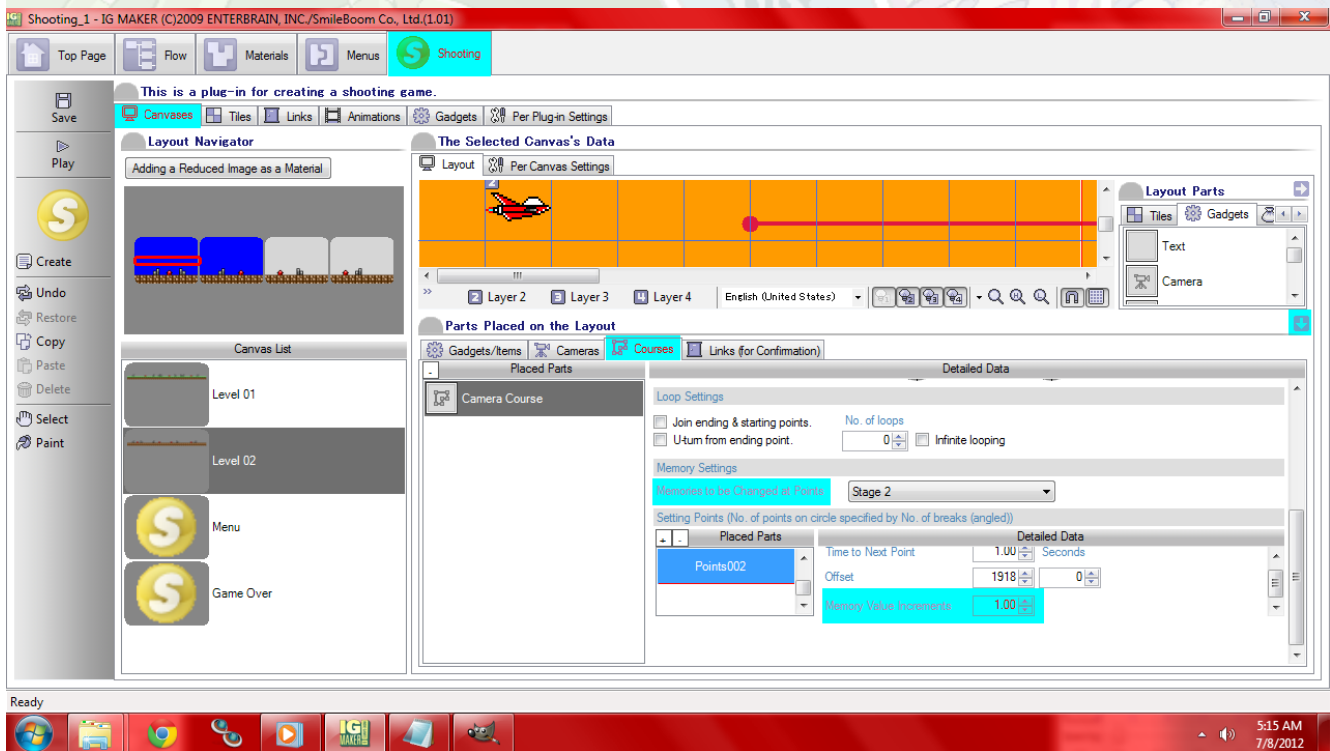
Basically what we're going to do is create two memories, then tell the game that when those memories go up by one it should switch stages. Pretty simple stuff, but it's just a small taste of what the "Flow" system is capable of doing. So first stop on our adventure is to the "Materials" tab and the "Memories" sub-tab. Create two memories named "Stage 1" and "Stage 2". Leave both of their initial values at zero.



Next head to the "Shooting" tab and the "Canvases" sub-tab. Select "Level 01" or "Level 02" (you'll need to do this for both), pull up the "Parts Placed On The Layout" details menu, and select the "Courses" tab there. If you scroll down a bit you'll see a section called "Memory Settings" and a drop-down menu for "Memories To Be Changed At Points". Select the appropriate stage memory for

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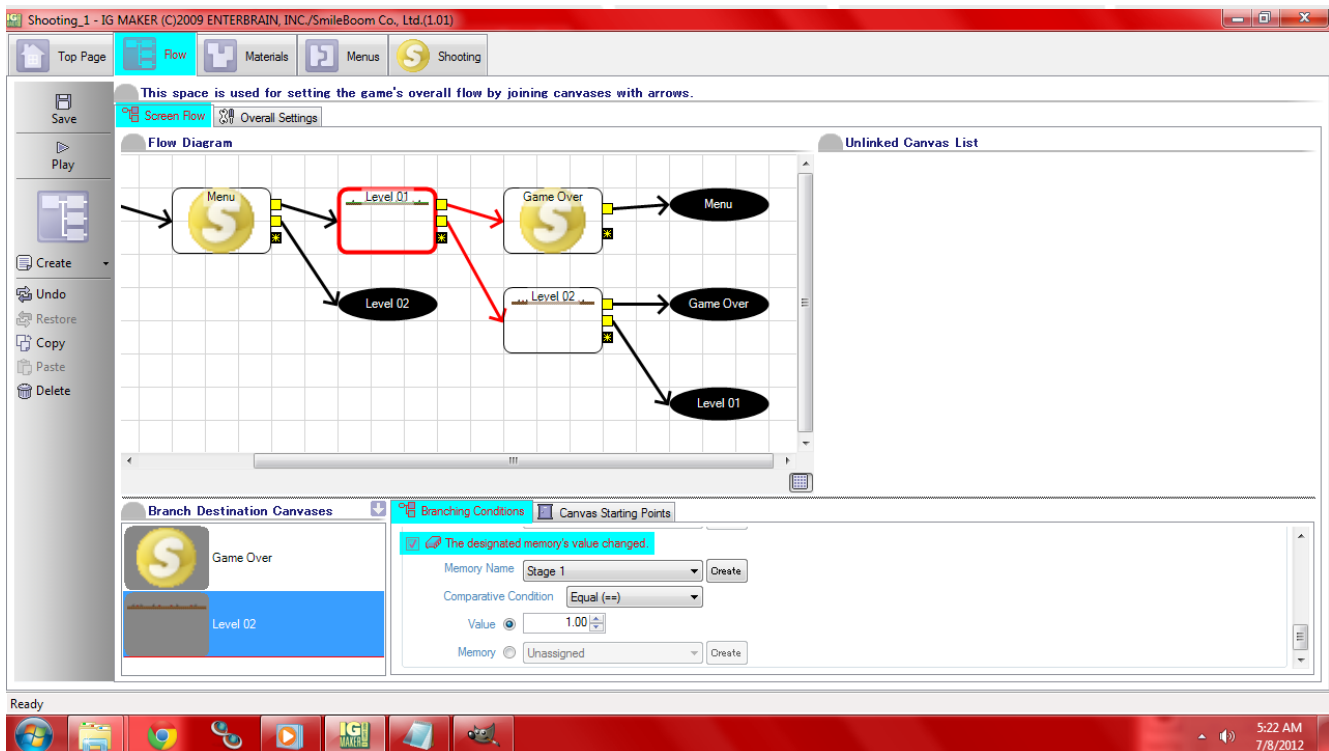
each stage. Then below that you can see the two points we've created. Select "Points002" (or if you have more just select the final point of the course) and change the "Memory Value Increments" to "1".



Now we're off to the "Flow" tab. Here click on "Level 01" or "Level 02" (you'll need to do this for both). You can see that it branches from our "Menu" screen to our "Game Over" screen. What we want to do is make it branch to the other stage. So if you've selected "Level 01" grab the black square with the sparkle on the right side of it, and drag it to "Level 02". Then do the same in the opposite order.

Now in the "Branch Destination Canvases" window for "Level 01" select "Level 02". Scroll down until you find the option for "The Designated Memory's Value Changed", set it for the "Stage 1" memory we made. For "Comparitive Condition" set it to "Equal (==)", and "Value" should be "1". Do the same for "Level 02" but remember to set the appropriate memory.

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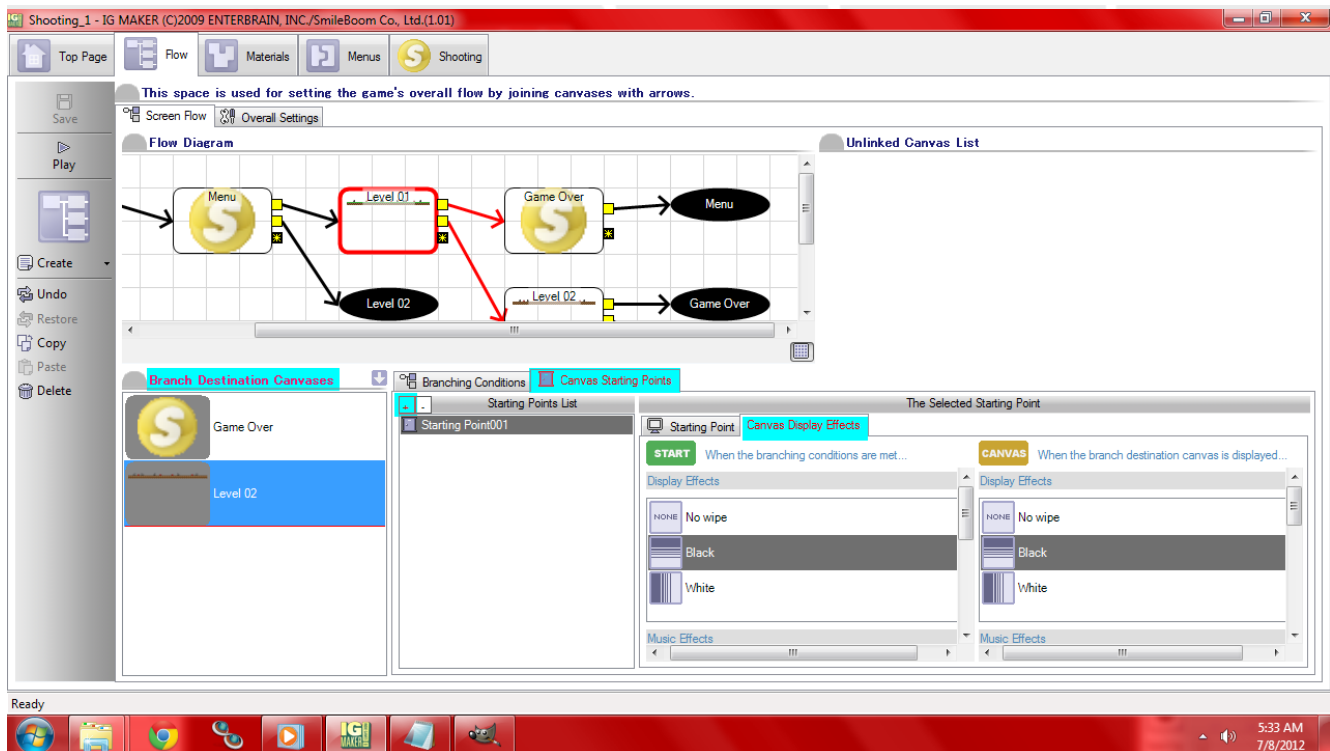


If you test this right now it works fine (the memory resets when the screen changes automatically) but it will be a little jarring and it may not work the same across all of your export options. So what we're going to do is make absolutely sure that the memories reset, and we're going to give each screen starting points so we get a nice not-nearly-as-jarring black fade before switching levels.

Seeing as how we are already on the "Flow" tab let's do the fades first. Select "Level 01" in the flow and then select "Level 02" in the "Branch Destination Canvases" window. Go to the "Canvas Starting Points" sub-tab, and hit the + button to create a new one (don't hit the "Create" option here as it will create a new plugin tab instead).

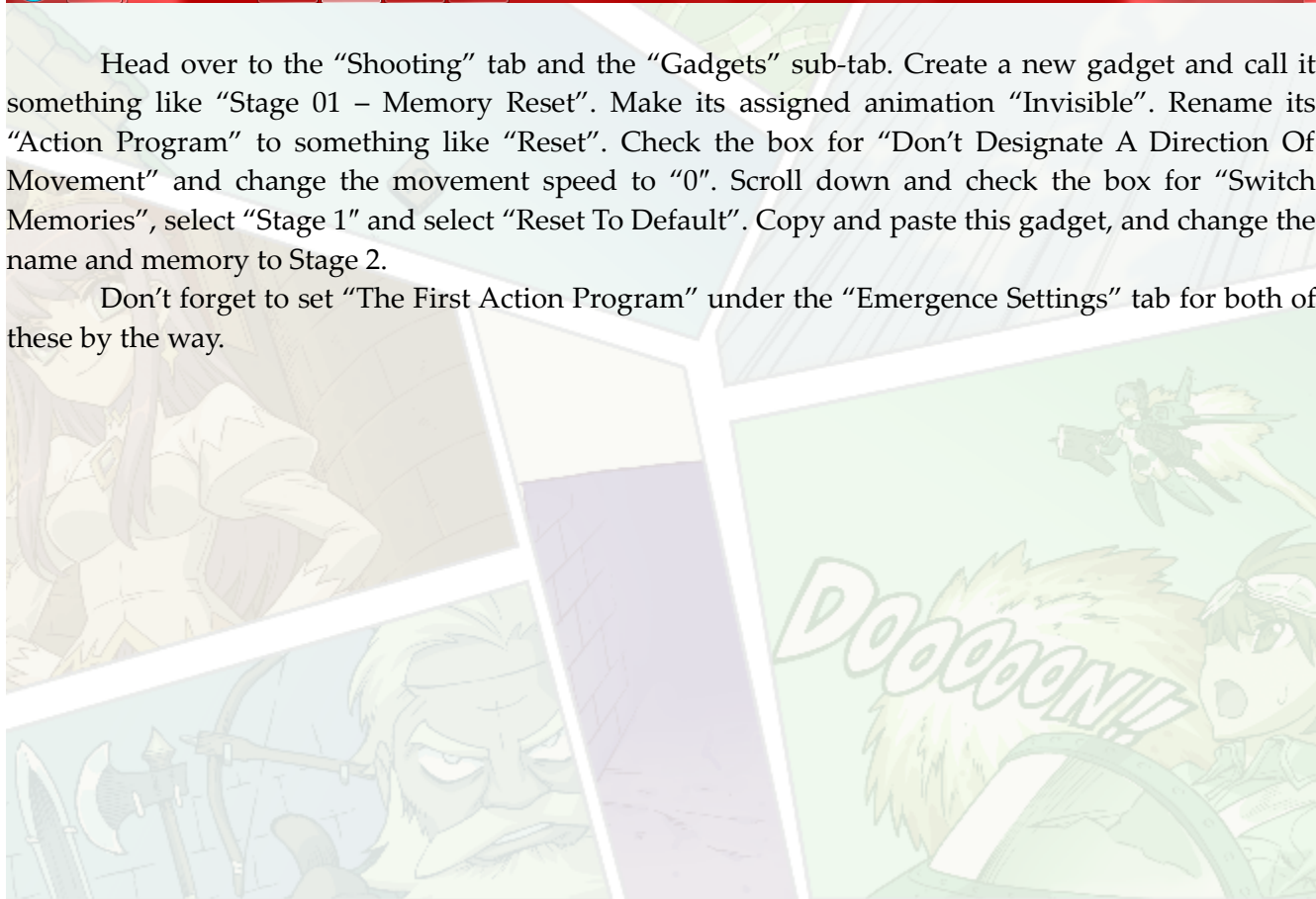
Under "The Selected Starting Point" switch to the "Canvas Display Effects" tab and choose the "Black" option for the "Start" and "Canvas" "Display Effects" options. Now click back to the "Branching Conditions" tab and set up your "Starting Point" at the top of the window. Now select "Level 02" in the flow and do the same thing for it.

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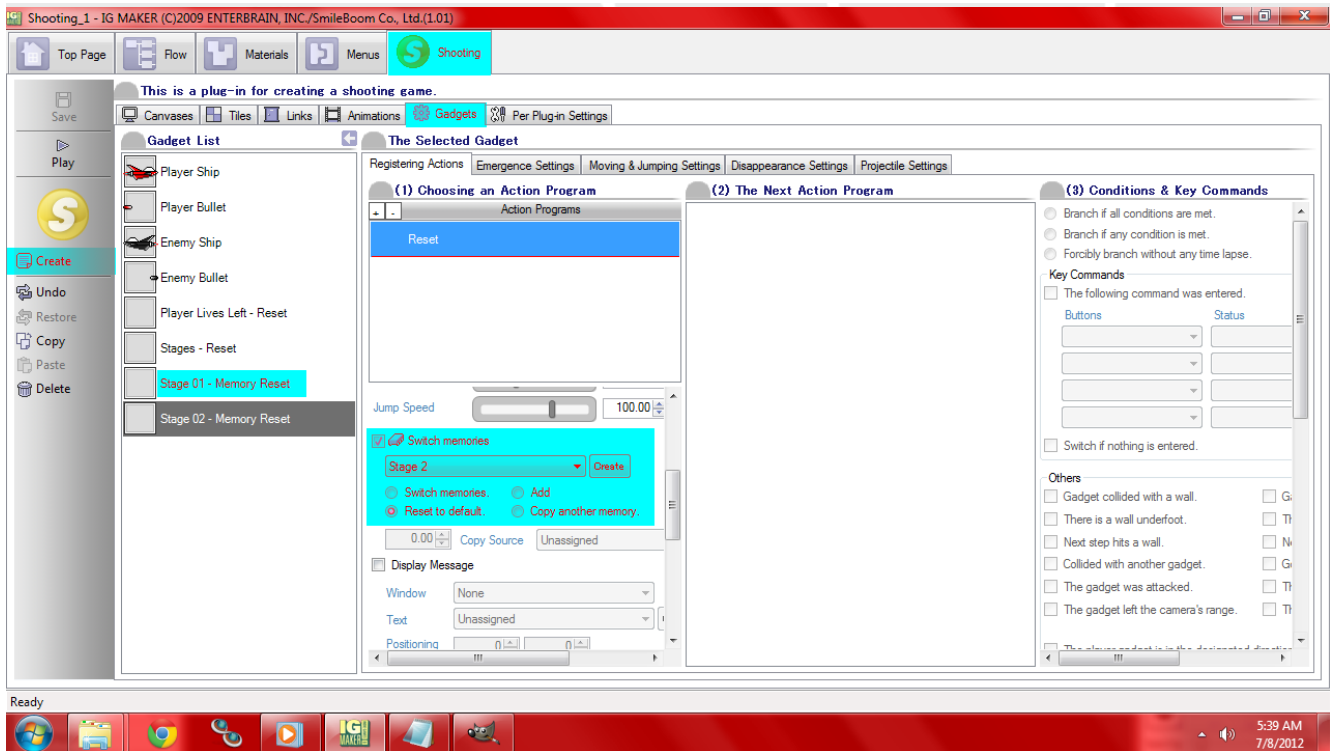


Head over to the “Shooting” tab and the “Gadgets” sub-tab. Create a new gadget and call it something like “Stage 01 – Memory Reset”. Make its assigned animation “Invisible”. Rename its “Action Program” to something like “Reset”. Check the box for “Don’t Designate A Direction Of Movement” and change the movement speed to “0”. Scroll down and check the box for “Switch Memories”, select “Stage 1” and select “Reset To Default”. Copy and paste this gadget, and change the name and memory to Stage 2.

Don’t forget to set “The First Action Program” under the “Emergence Settings” tab for both of these by the way.



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Jump over to the “Canvases” sub-tab so we can place the gadgets. Place the “Stage 02 – Memory Reset” gadget on “Level 01” somewhere near the beginning and vice versa for “Level 02”. The reason is you want the gadget to reset the numbers after it has jumped to the next stage, not while you are still on the stage with the reset gadget. So when you jump to Stage 02, you are resetting the memory for Stage 01, and vice versa. It doesn’t matter which layer the gadgets are on by the way. That’s it for now. Don’t be afraid to experiment with the flow. There are a ton of different things you can do and it is a little more reliable than setting up links between canvases.

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