

# Screensaver tutorial for total beginners

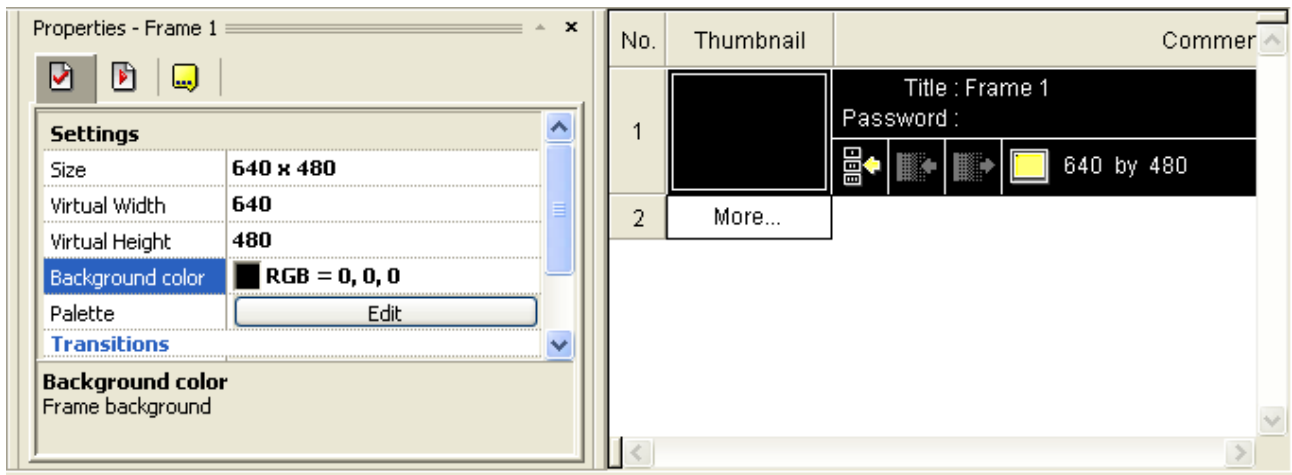
## Part 1: Make a screensaver in 10 steps

Follow the steps 10 below, and you will make a fully working screensaver with an apple bouncing around in the screen! Remember that you can always press F7 to test your screensaver within TGF2 / MMF2.

**Step 1:** Start The Games Factory 2 or Multimedia Fusion 2.

**Step 2:** Create a new application  
Select New from the File menu

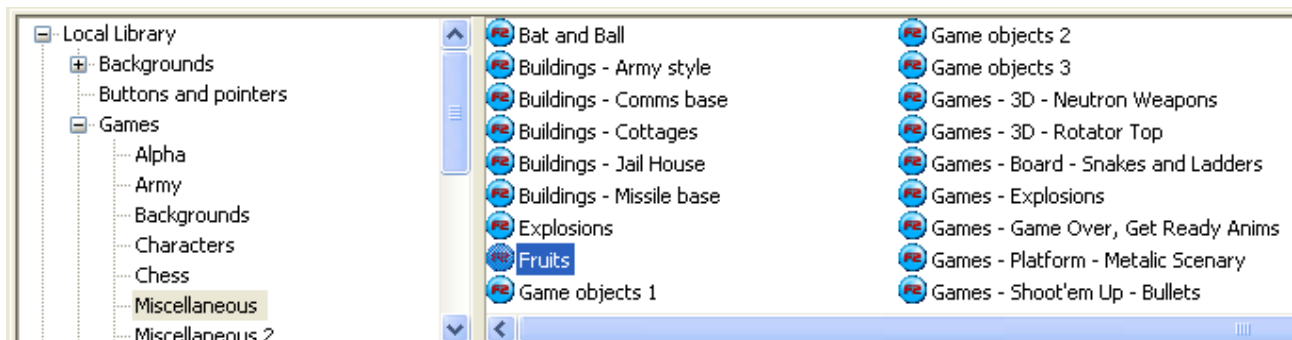
**Step 3:** Choose a background-color for your screensaver  
Click the box at the right that represents frame 1 in your application.



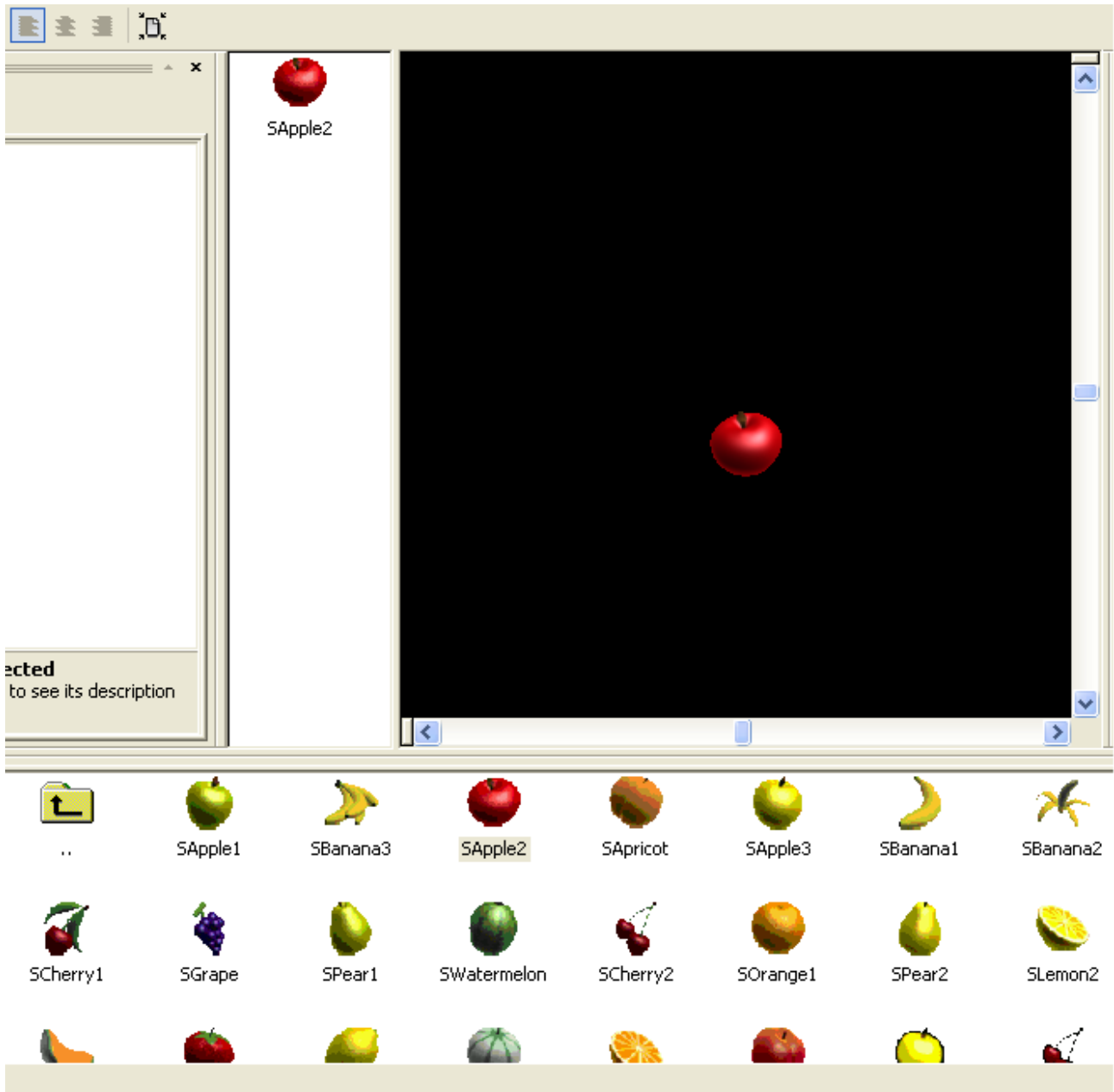
In the **Properties** window you can choose the background-color. Choose one.

**Step 4:** Enter the Frame Editor  
Double-click Frame 1 to enter the Frame Editor.

**Step 5:** Add an apple  
You see the library toolbar at the bottom of the screen. Browse through the library to find an apple. You can find one in Games / Miscellaneous / Fruits.



Drag it into the Frame Editor.



**Step 6: Add a movement to the apple**

Click on the fruit you just created. In the properties window, click the Movement Tab. As **Type**, select **Bouncing Ball**.

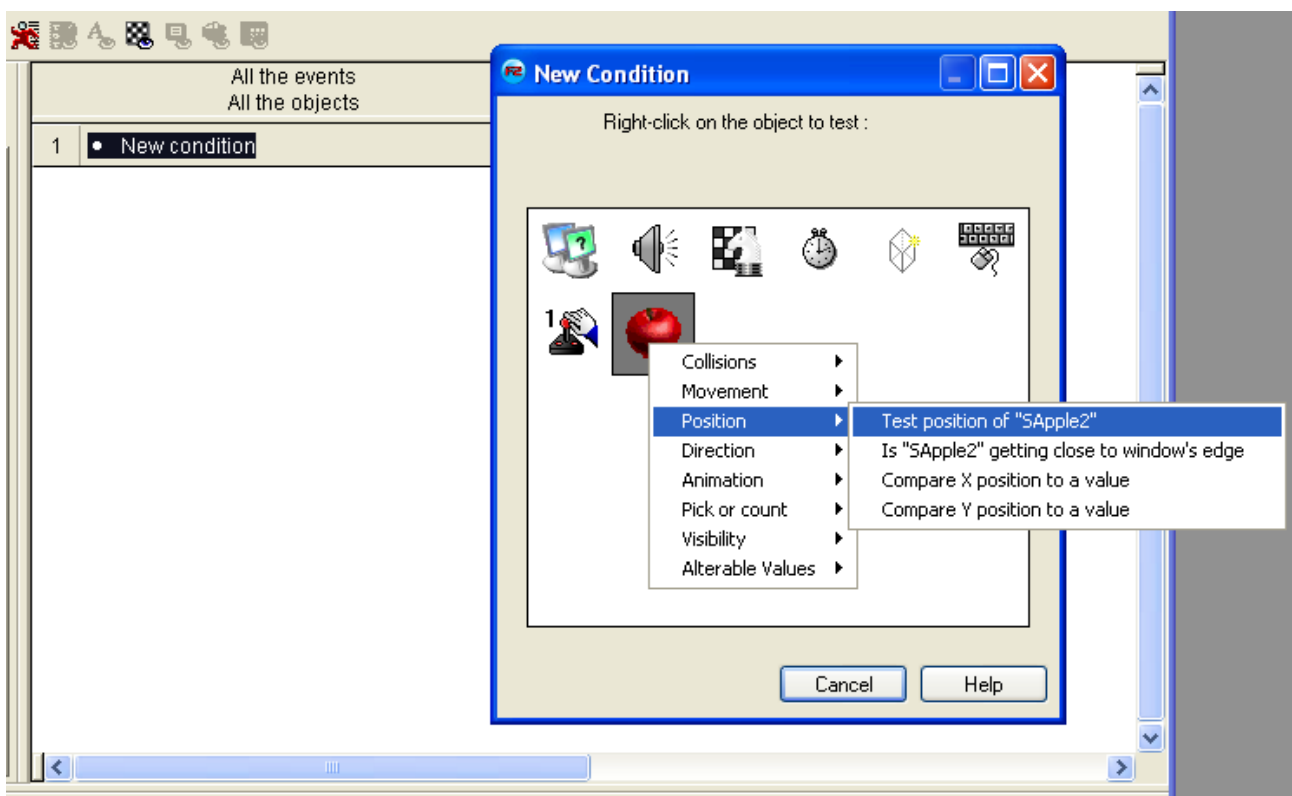


**Step 7: Enter the Event Editor**

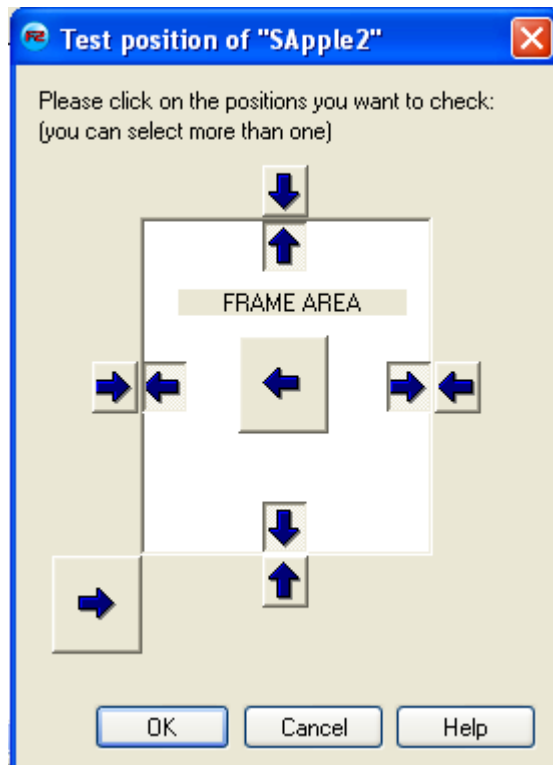
You will now make the apple bounce when it attempts to leave the playarea. So you will need to enter the event editor. Do that by either clicking the **Event Editor** icon at the top left of the screen, or select **Event Editor** from the **View** menu.

**Step 8: Add a condition**

Click on **New condition**. Right-click on the apple and select **Position / Test**

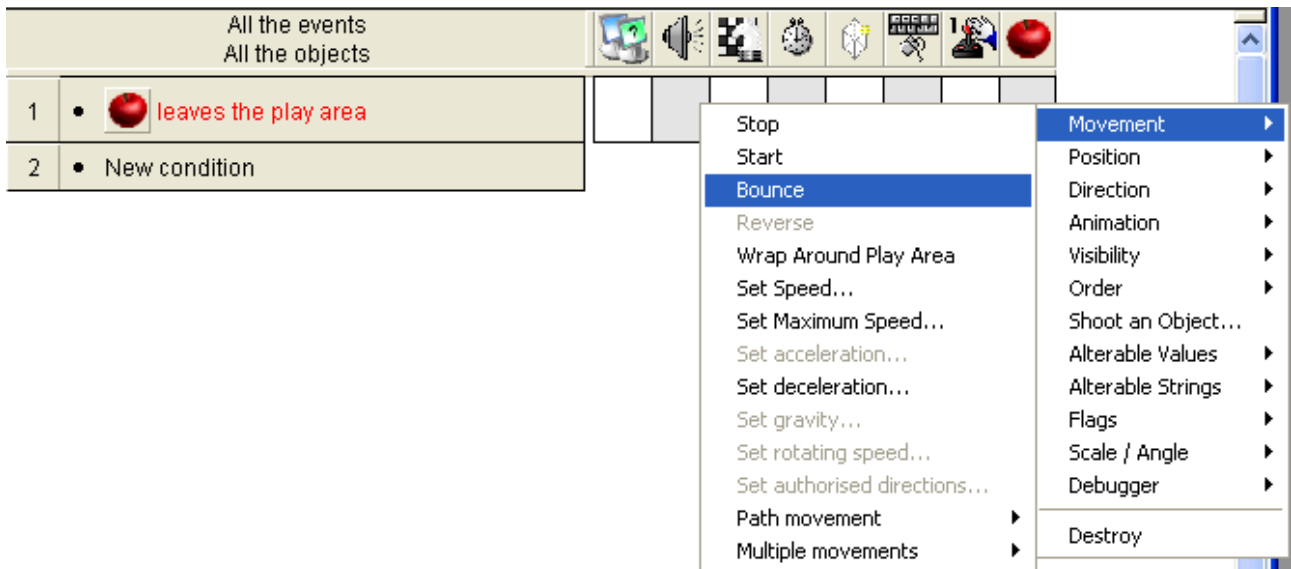


*Position of Apple.* Then select all four arrows pointing out of the frame area.



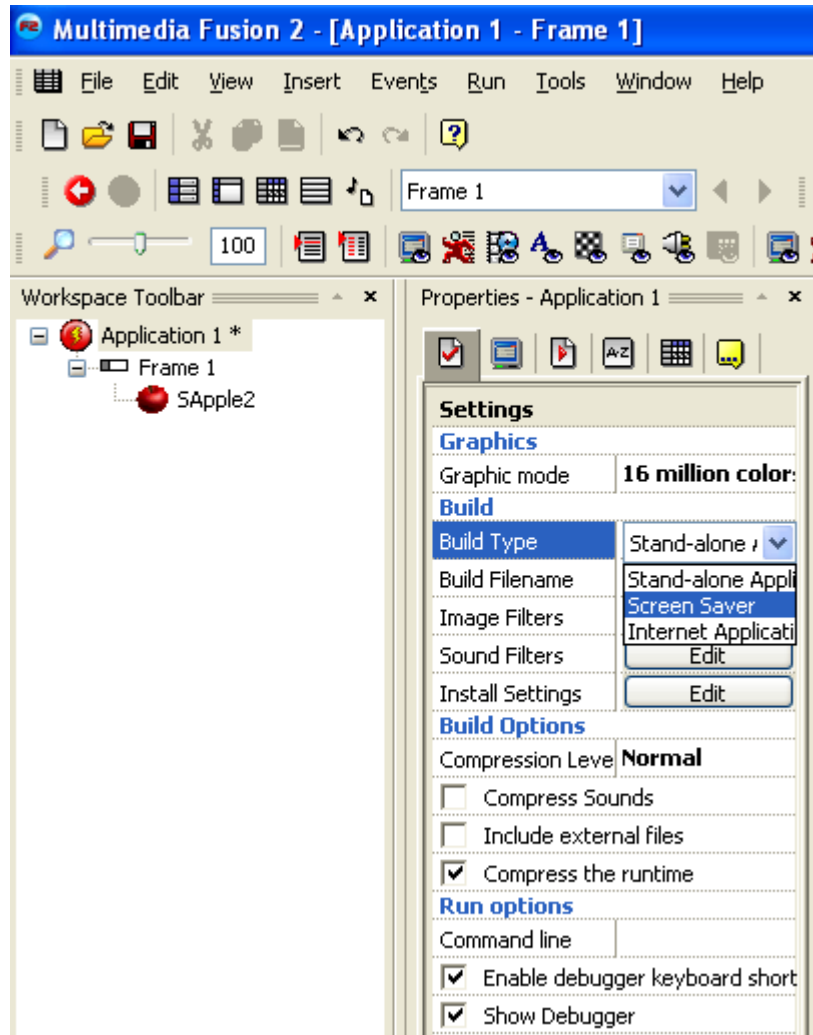
**Step 9: Add an action**

The square below the Apple indicates the actions for the Apple object in the condition you just created. Right-click in that square and select **Movement / Bounce**.



**Step 10: Save as screensaver**

In the **Workspace Toolbar**, click the **Application** icon. From the **Settings** Tab in the properties window, select **Build Type** and choose **Screensaver**. Select **Build / Application** from the File menu. Save the file in the Windows directory (<c:\windows>).



**Congratulations!**

Congratulations! You have completed part 1 of the screensaver tutorial, and have made your first screensaver! You can now access it from the Screensaver options in Windows.

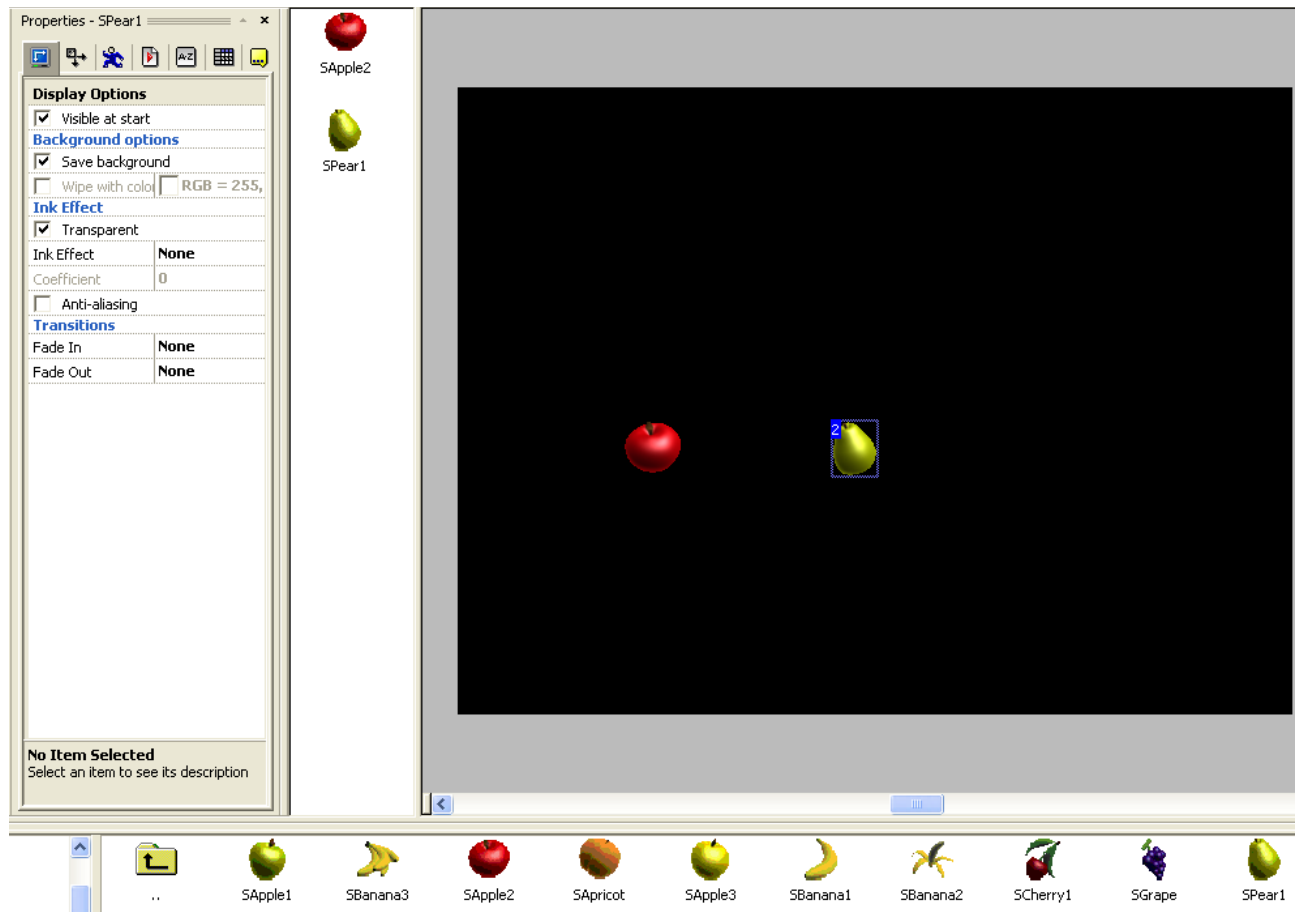
Part 2 will teach you how to add more fruits, how to group them in qualifiers and how to make them collide with each other.

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## Part 2: Add more fruits

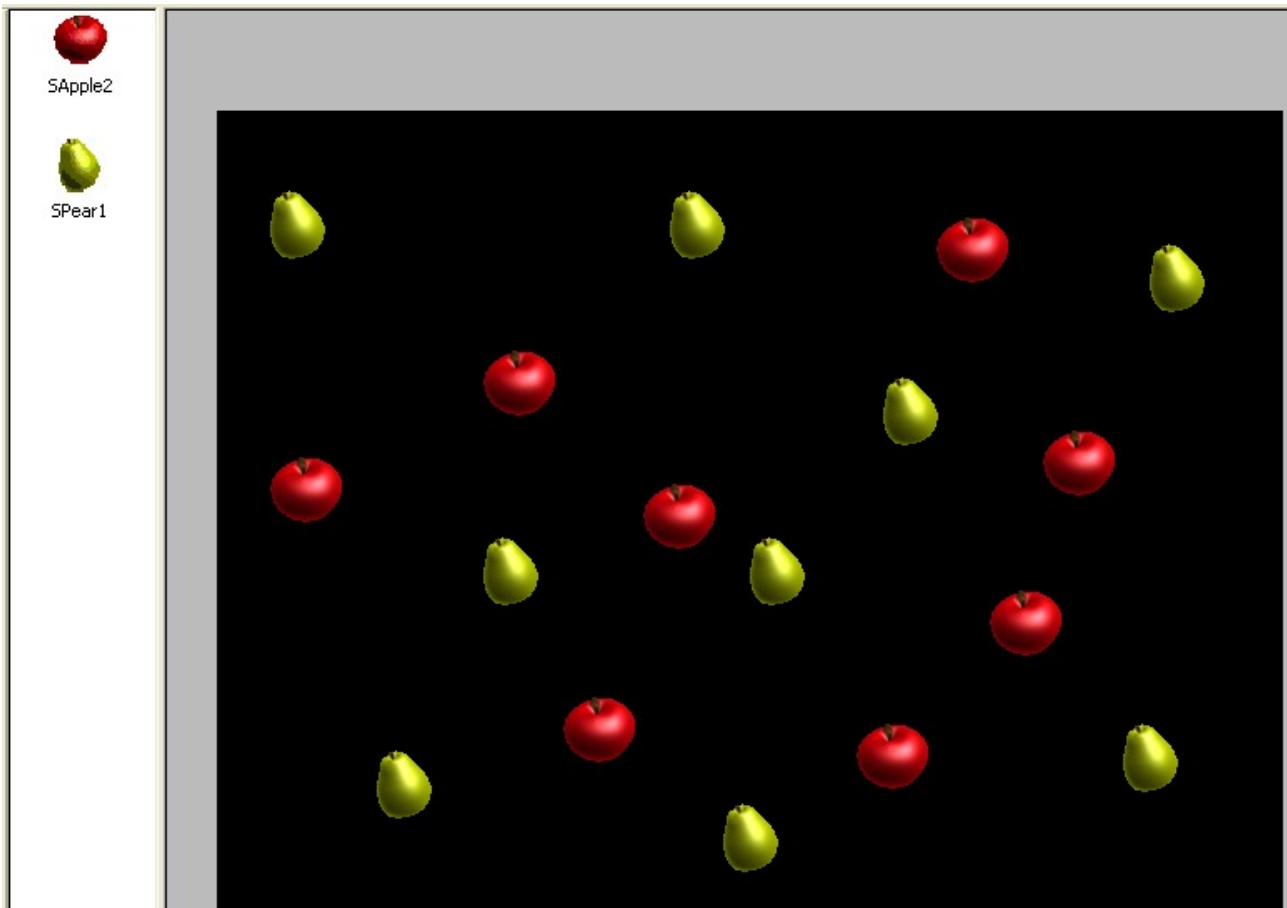
### Add a pear

You know where to find it, so drag a pear into the **Frame Editor** like you did with the apple in Part 1 step 5. And then assign the bouncing ball movement to it, like you did in Part 1 step 6.



### Duplicate the fruit!

You want more than one apple and one pear, right? Therefore you will need to duplicate them. To do that, just drag them around in the **Frame Editor** while holding the **CTRL** key. You'll soon have lot's of apples and pears. You'll see that there are still only one apple and one pear displayed in your frame's object library. That's because they are all instances of the same object. That means if you do changes to one apple, it will affect all the other ones. The same goes for the pear.



**Add actions to your pears.**

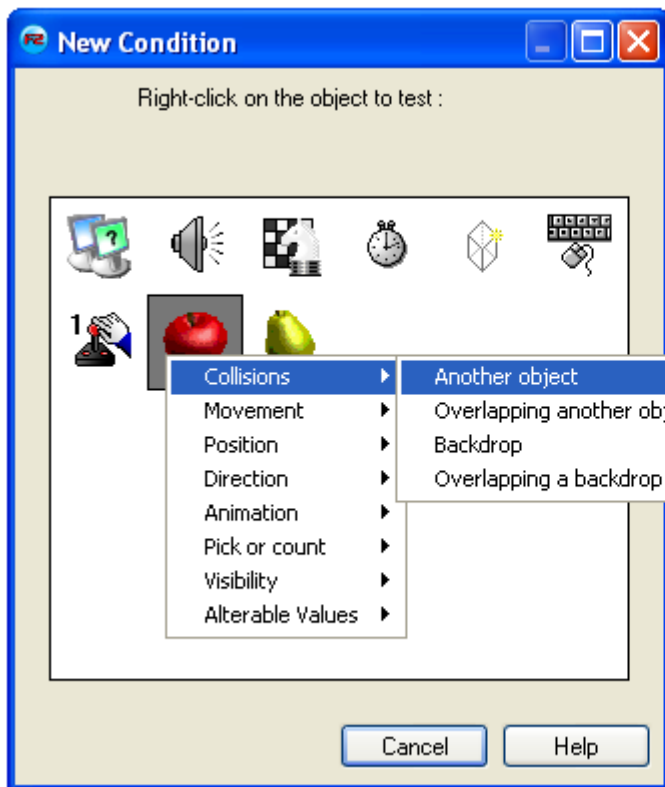
We want the pears to bounce around in the screen like the apple does, so enter the event editor and repeat Part 1 step 8 and 9, but this time for the pear.

All the events All the objects										
1	•  leaves the play area								✓	
2	•  leaves the play area									✓
3	• New condition									

**Pears and apples collide.**

You have to tell the pears and apples to bounce when they hit something. Since it is possible for the apple to collide with 2 different objects (another apple or a pear), and the pear can collide with another pear, we need to make 3 more events.

Click on **New condition**. Right-click the apple and select **Collisions / Another Object** and choose the pear. Click OK.



Now you have to tell the apple and the pear to bounce. So in the apple's Action Square for this condition, tell it to bounce. Then do the same for the pear.

All the events		All the objects								
1	•  leaves the play area								✓	
2	•  leaves the play area									✓
3	• Collision between  and							✓	✓	
4	• New condition									

You can get a better overview of the events by looking in the Event List Editor. You find it from the View menubar. It should look like this:

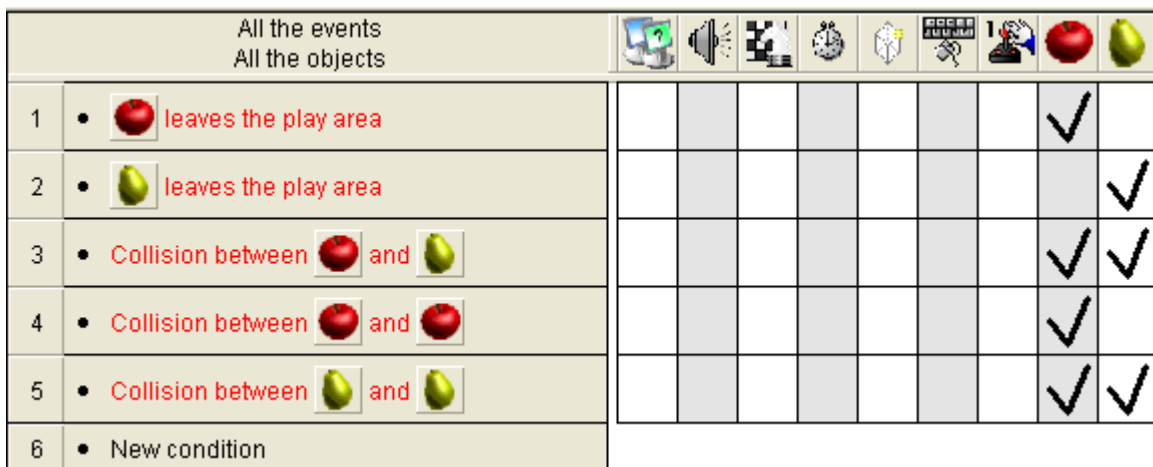
1	•  leaves the play area	: Bounce
2	•  leaves the play area	: Bounce
3	• Collision between  and	: Bounce : Bounce
4	• New Condition	



You will now have a full event telling the apples and pears to bounce when they hit each other. But you also need to tell them to bounce while they hit other objects of the same kind. So go back to the event editor and drag the entire event you just made down to **New condition**. It should copy. In the condition, just drag the apple onto the pear. Now it should say: *Collision between apple and apple*. Of course, this condition should just make the apples bounce, so make sure only the apple have the **bounce**-action.



Do the same for the pears. Copy this event and change everything from apples to pears. The eventeditor should now look like this:



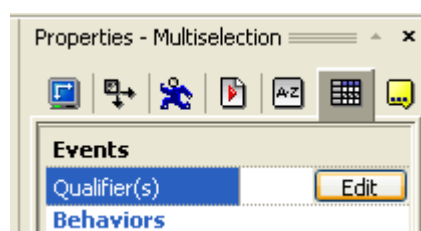
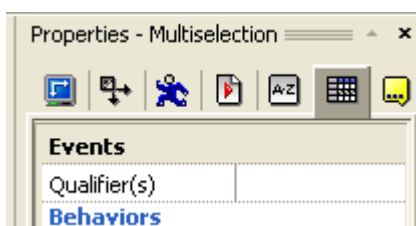
### Qualifiers

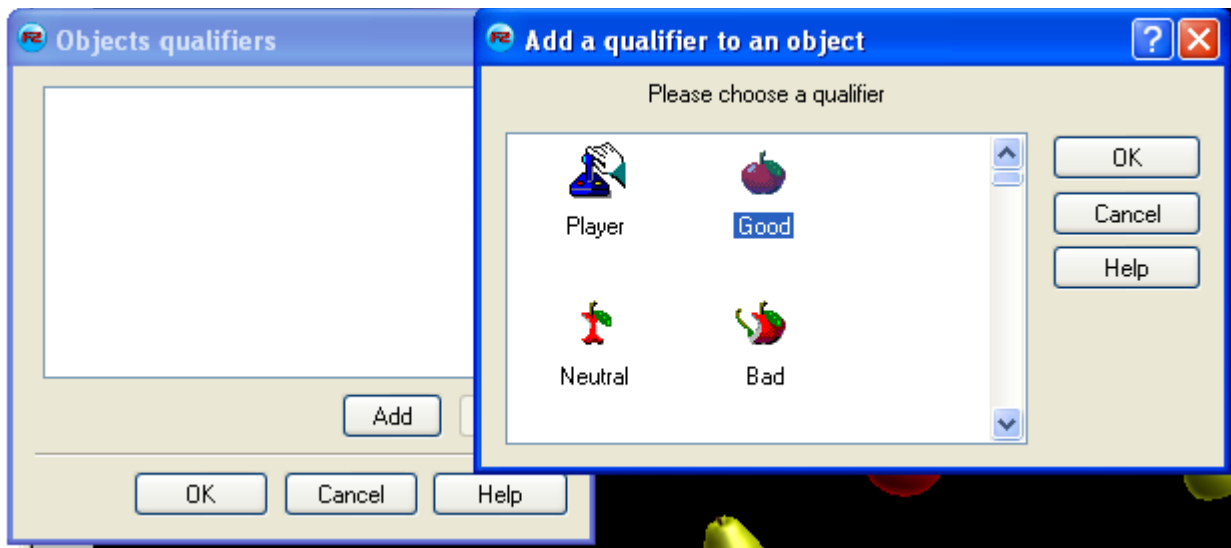
You might imagine that if you have 10 types of fruit, it would take a lot of time making events for each of them. TGF2 and MMF2 have a trick to do this in a very few events. The secret is Qualifiers.

You can assign qualifiers to your objects. When different objects have the same qualifier you can use their qualifier in the event editor instead of the actual objects. For instance, we can have all the fruits in a qualifier the same «fruit» qualifier. This means that you only need one event for fruit colliding with each other instead of all the events you just made for each kind of fruit. This will save you a lot of work in larger applications.

To assign a qualifier to our objects, go to the Frame Editor and SHIFT+left click an apple and a pear. This will select both the apple and the pear.

Click the Events tag in the properties window. The Edit button is slightly hidden... Click in the white box at the right of the text saying Qualifiers. An edit button should appear. Click it, and add a qualifier. It doesn't matter which one you choose, but since the Good qualifier looks like an apple, we can go for that one.



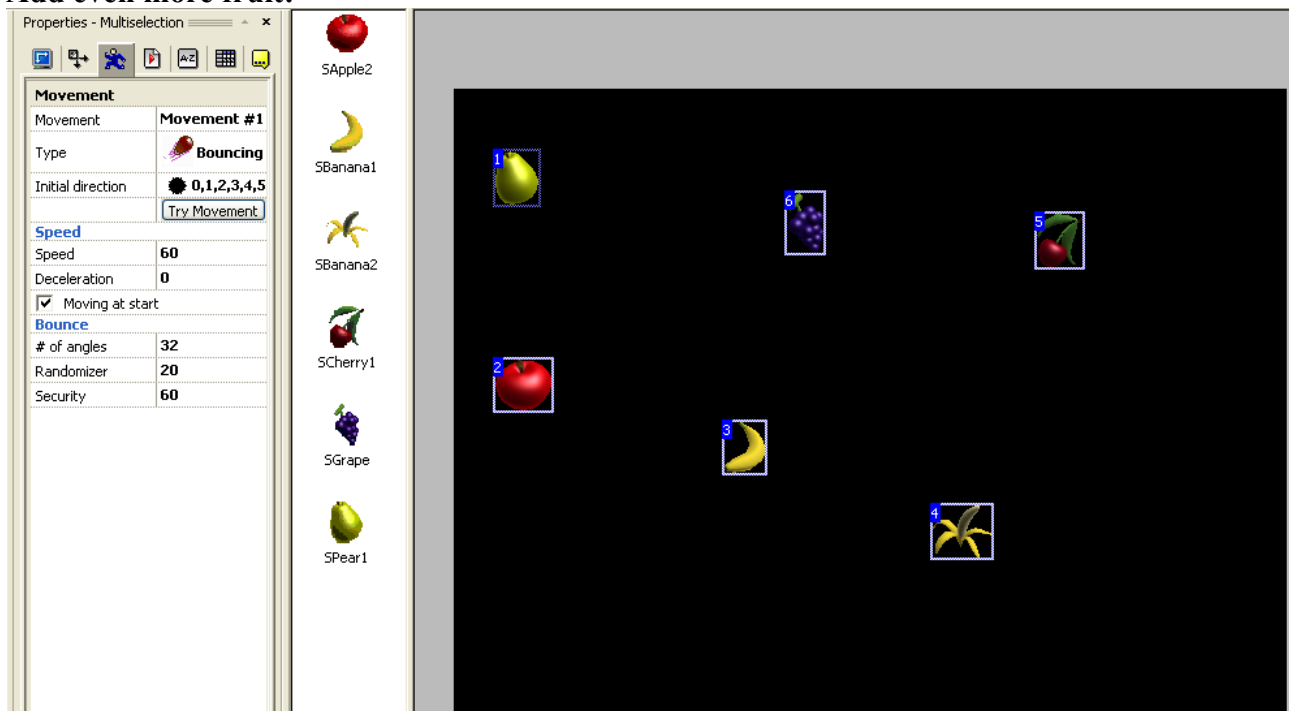


Now go back to the Event editor. Replace every fruit object with the new Qualifier icon and make all the actions happen with the Group.Good icon instead. Do you see that you only need two events? Because now several of the events you have looks exactly the same. Therefore delete the duplicated events. The eventeditor should now look like this:

Some events hidden All the objects												
1	•  leaves the play area											✓
2	• Collision between  and											✓
3	• New condition											

Test the screensaver by pressing F7, it should run exactly like before.

### Add even more fruit!



Now that you know how to use qualifiers, making more fruit shouldn't be hard at all. Drag as many different objects as you want into the **Frame Editor**. Then select all of them at once and assign the same qualifier to them. Also make sure to give them the **Bouncing Ball** movement.

This way you don't need to do changes in the eventeditor. Test the frame again see how all the objects bounces around. This is because all of the objects in the frame is a Group.Good object, and you allready have the events ready for them.

### **Congratulations!**

Now you should have a fully working screensaver with lots of different fruits. Please go experiment with replacing and adding other object. Try to use more qualifers and let them collide. When you are satisfied, save it as a screensaver as you did in part 1 step 10.

Please contact me at [ilikepopcorn@hotmail.com](mailto:ilikepopcorn@hotmail.com) for comments or help regarding this tutorial. Also do visit [www.clickteam.com](http://www.clickteam.com)'s great userforum for help with TGF2 / MMF2!

Regards,  
Kjetil Nossum (Popcorn)