This is a quick guide to help you get started with effects. It will walk you through creating a new effect, adding an existing effect and effect playback.

## How to make an effect

- 1. In the FX dropdown in Radiant, select New Effect.
- 2. Open the FX Outline (View > Toggle > FX Outline). This is a list of all the Effects in your level, listing all the emitters contained within that effect.
- 3. By default, the effect is created with a single emitter of type 'Billboard Sprite'. If you click on the emitter in the FX Outline, it's properties will show up in FX Properties (View > Toggle > FX Properties).
- 4. FX Properties is broken up into five tabs:
  - a. *Generation* determines how many particles are spawned, when and where they're spawned and how long they live for.
  - b. *Movement* determines the particles' velocity, rotation and scale.
  - c. *Visuals* determines the type of particle and which material to use. Also controls frame animation.
  - d. *Child Effects* determines the conditions in which a child effect might be spawned from this emitter and which effects would be spawned.
  - e. Global you're already familiar with this one, but it holds all the properties that aren't specific to any particular emitter.
- 5. When you create a new effect, all you have to do to get it to show up is to add a visual. To do that, in the Visuals tab, click on the Add button. This will bring up the FX Material Browser. Pick any material for now.
- 6. If you're not seeing anything, yet, make sure FX playback is enabled:
  - a. Fx > FX Rendering Enabled should be enabled.
  - b. View > Render Flags > Render Always should be enabled.
  - c. The FX Playback toolbar should be displaying a Pause symbol (which strangely means it's playing back).
  - d. Enable Real Lighting mode in the Camera window.
  - e. Fx > FX Outline Pane > Render Only Selected Elements should be disabled.

## How to add an existing effect

- 1. Open FX Browser (View > Toggle > FX Browser).
- 2. Type in the name of an effect. Replace all underscores with spaces. You can also type in any number of substrings and it will filter the results to only include all of those substrings. In your case, type in elec sparks to find the effect to test.
- 3. Drag the effect you want to preview into the 3D window. It'll spawn at the nearest collision point behind the mouse cursor on mouseUp. (Make sure you do not have anything selected when you drag the effect over by pressing ESC in the camera window)

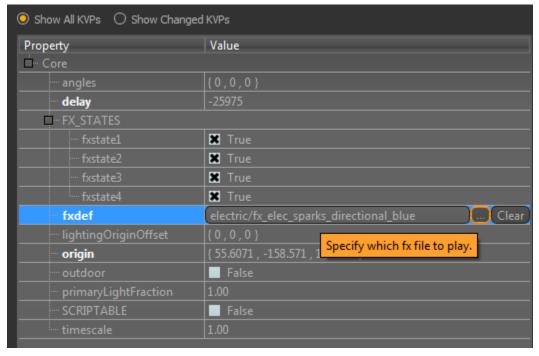
## **Effect playback**

You should see this toolbar under your menu bar:



If you don't, enable it by enabling View > View Toolbar > FX Playback.

- 1. If the far left button looks like a pause button, then effects should be playing. If it looks like a play button, then click it to play effects.
- 2. The second button from the left will stop effect playback.
- 3. The third button from the left will trigger effects every n seconds, where n is set by the FX looped playback parameter (set for every 0.10 seconds in the above pic).
- 4. The fourth button from the left will re-trigger effects.
- 5. If you don't see effects playing, go through items a through e in step 5 of How to make an effect.
- 6. To quickly preview effects:
  - a. Select an effect entity.
  - b. Open Entity Info (View > Toggle > Entity Info).



- 7. Click the ellipsis next to the fxdef KVP.
- 8. Navigate to the effect you want to preview and press ALT + A (or click the Apply button in the upper-right) to preview it. You can continue doing this while in this file dialog.