

Instantly share code, notes, and snippets.

AdamKorinek / AdamsAddonsDecalRegistry.md

Secret

...

Last active last month

<> Code - Revisions 28

AdamsAddonsDecalRegistry.md

💡 Tip

If you aren't familiar with decal registry, please refer to the wiki page [here](#)

How to use

In order to use these decal registry attributes, you need to have [Adam's Add-ons](#) installed. Apart from that, they don't require anything to set up, and can be used like vanilla attributes. Map editors can't detect custom decal registry attributes, so remember to manually add this helper as a dependency.

Default values

Decal registry attributes can have variables that add further customization, and these variables have default values. It is good practice not to change a variable if the default works for you. For example, `bool` variables are `"false"` by default, so writing `exampleVariable="false"` anywhere is pointless. Some variables may override or ignore others.

Attribute stacking

Most attributes can be used with others, and can be applied to a decal multiple times with different variables.

If you find an interaction that doesn't work, contact me (*Adam Korinek*) on Discord.

Cyclical processes

Some of the following attributes create cyclical processes, these all have four common variables that can be changed:

- `speed` - how fast the process is, it's easiest to think of 1 as 100% (default: `"1.0"`).

- `offset` - can be used to define a starting offset, requires some experimentation (default: `"0.0"`).
- `randomize` - if true, the `offset` variable will be ignored and starting offset will instead be randomized (default: `"false"`).
- `updateFlag` - if defined, the process will only be active when the given flag is set (default: `""`).

Decal Registry Attributes

Rotate (`adamsaddons.rotate`)

Makes the decal rotate with a constant speed.

Variables:

- `speed` - how fast the decal spins. Negative speed means counter clockwise rotation. By default this uses radians per second, adding `"°"` after the number will translate to degrees per second instead. (default: `"0.0"`).
- `addX` and `addY` - how much the decal rotates as it is moving horizontally or vertically.
These two are designed to be used with static movers (default: `"0.0"`).
- `addWind` - adds further rotation based on the strength of the wind (default: `"0.0"`).
- `delay` - how many seconds to wait between each rotation, in case it needs to be less fluid (default: `"0.0"`).
- `flag` - if defined, the decal will only rotate when the given flag is set (default: `""`).

▼ Examples

```
<adamsaddons.rotate speed="-2.5"/>
<adamsaddons.rotate addX="1" addY="-1"/>
<adamsaddons.rotate speed="2" addWind="1"/>
<adamsaddons.rotate speed="30°" delay="1" flag="rotate_flag"/>
```



Oscillate (adamsaddons.oscillate)

Gives the illusion that the decal is rotating around the Y-axis.

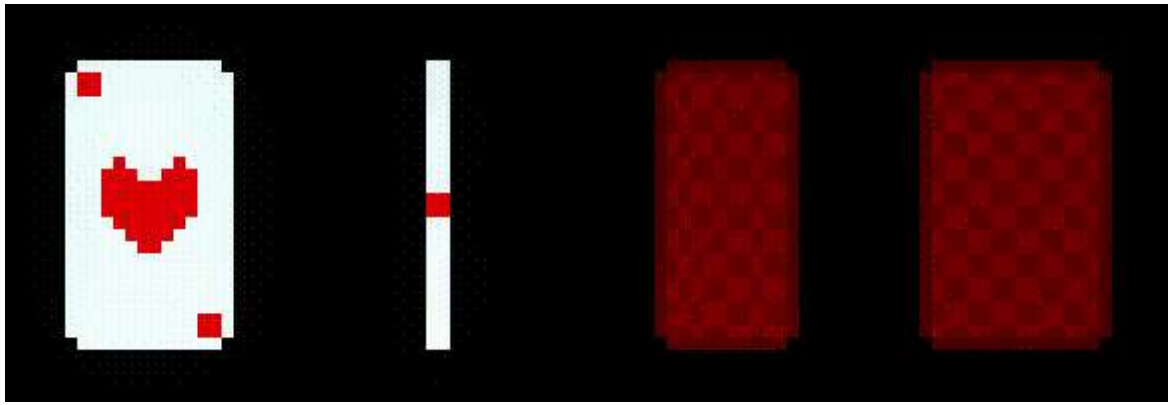
Variables:

- `backPath` - what image to use for the back of the decal relative to the `Gameplay` folder.
If unchanged, the back will be the same as the front, but mirrored (default: `""`).
- `noFlip` - if true, the decal texture won't be mirrored when it is facing backwards.
This is the default behavior if there is a custom `backPath` set (default: `"false"`).
- `minWidth` - the decal's width will never decrease below this value,
this is to avoid it being thin enough to turn invisible (default: `0.0`).

This attribute creates a [cyclical process](#), `speed` , `offset` , `randomize` , and `updateFlag` can be modified.

▼ Examples

```
<adamsaddons.oscillate/>
<adamsaddons.oscillate backPath="decals/..."/>
<adamsaddons.oscillate speed="0.5" offset="1"/>
<adamsaddons.oscillate randomized="true" noFlip="true"/>
<adamsaddons.oscillate speed="2" updateFlag="oscillate_flag" minWidth="0.2"/>
```



Aim (adamsaddons.aim)

Makes the decal face towards the player at all times. This attribute respects the decal's initial direction, so a decal rotated 180° will face away from the player.

Variables:

- `theo` - if true, the decal will target a Theo crystal instead of the player (default: "false").
- `flag` - if defined, the decal will only aim when the given flag is set (default: "").
- `flipX` and `flipY` - if either is true, the decal won't rotate, but will instead flip to face towards the target.
`flipX` flips horizontally if the target is left of it, `flipY` flips vertically if the target is above it. (default: "false").

▼ Examples

```
<adamsaddons.aim/>
<adamsaddons.aim theo="true"/>
<adamsaddons.aim flag="aim_flag"/>
<adamsaddons.aim flipX="true"/>
```

Pendulum (adamsaddons.pendulum)

Makes the decal swing back and forth like a pendulum.

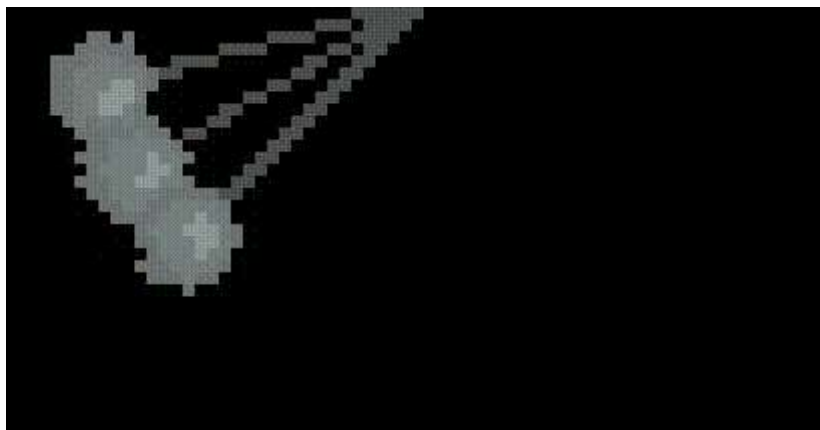
Variables:

- `angle` - the angle the swing should cover in degrees (default: "90").

This attribute creates a [cyclical process](#), `speed`, `offset`, `randomize`, and `updateFlag` can be modified.

▼ Examples

```
<adamsaddons.pendulum/>  
<adamsaddons.pendulum speed="2" offset="1" updateFlag="pendulum_flag"/>  
<adamsaddons.pendulum angle="180" randomize="true"/>
```



Shake (adamsaddons.shake)

Makes the decal shake constantly.

Variables:

- `delay` - makes the shake less frequent, by slightly waiting between each movement (default: `"0.0"`).
- `width` and `height` - they change the intensity of the shake on a given axis, the default shake area is a circle, which these two can resize (default: `"1.0"`).
- `flag` - if defined, the decal will only shake when the given flag is set (default: `""`).

► Examples

Move (adamsaddons.move)

Converts texture rotation into motion by offsetting the decal in the direction it is facing. Intended to be used with other attributes that change decal rotation.

Variables:

- `amount` - how much the decal should be offset (default: `"0.0"`).
- `locked` - if true, the decal texture itself won't rotate visually (default: `"false"`).
- `width` and `height` - they multiply the decal's horizontal or vertical movement (default: `"1.0"`).

▼ Examples

```
<adamsaddons.move amount="30"/>
<adamsaddons.move amount="-10" locked="true"/>
<adamsaddons.move width="0" height="2"/>
```

In the gif below, `move` is used with `rotate` to create an orbiting motion. The decal textures themselves don't rotate, which is because of `locked="true"`.



Randomize (adamsaddons.randomize)

Offers many ways of granting the decal random properties, all of which are optional.

Variables:

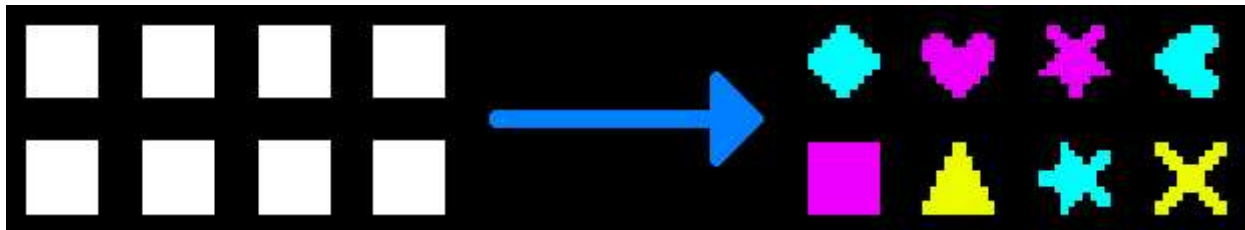
- `frame` - if true, the decal will use a random frame of its animation forever, instead of animating (default: `"false"`).
- `flipX` and `flipY` - whether the decal should randomly flip horizontally or vertically (default: `"false"`).
- `rotations` - a number that determines how many possible rotations the decal has. 4 would make it face in either of the cardinal directions (default: `"1"`).
- `colors` - a list of comma-separated hex color codes, out of which one will be chosen as the decal's tint (default: `""`).
- `shrink` - decreases the decal's size with a random amount. This variable defines the smallest it can be,

a value of "0.5" means it can be anywhere between its full size, and half of it (default: "1.0").

- chance - percentage that determines how likely the decal spawns. If the chance fails, it will be invisible (default: "1.0").

▼ Examples

```
<adamsaddons.randomize frame="true"/>
<adamsaddons.randomize flipX="true" flipY="true"/>
<adamsaddons.randomize rotations="8"/>
<adamsaddons.randomize colors="00ffff,ff00ff,ffff00"/>
<adamsaddons.randomize shrink="0.25" chance="0.75"/>
```



Fade (adamsaddons.fade)

Makes a decal transparent, or fade in and out between two alpha values. This can be done cyclically, or based on a flag.

Variables:

- alphaFrom - used as the decal's transparency, or one of the values to change between.
"0" means invisible, "1" means solid (default: "1.0").
- alphaTo - if set, the decal will fade between alphaFrom and alphaTo (default: "").
- fadeFlag - if defined, the decal fades towards alphaFrom if the flag is set, and alphaTo if it isn't (default: "").

This attribute can create a [cyclical process](#), speed , offset , randomize , and updateFlag can be modified.

▼ Examples

```
<adamsaddons.fade alphaFrom="0.5"/>
<adamsaddons.fade alphaFrom="0" alphaTo="1"/>
<adamsaddons.fade alphaTo="0" speed="0.5"/>
<adamsaddons.fade alphaFrom="1" alphaTo="0" fadeFlag="fade_flag"/>
```


Wobble (adamsaddons.wobble)

The decal will cyclically shrink and grow. Can change width and height with different intensity.

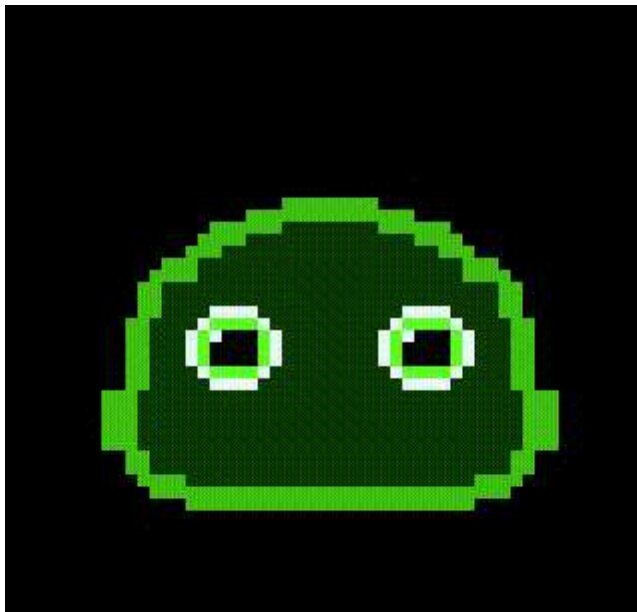
Variables:

- `width` and `height` - how much the decal's width or height should vary. `"0.25"` means a range between 75% and 125%.
By giving width and height opposite signs, the decal will instead behave like on the gif below (default: `"0.0"`).

This attribute creates a [cyclical process](#), `speed`, `offset`, `randomize`, and `updateFlag` can be modified.

▼ Examples

```
<adamsaddons.wobble width="0.5" height="0.5"/>
<adamsaddons.wobble width="0.25" height="-0.25" speed="2"/>
<adamsaddons.wobble width="0.5" randomize="true"/>
```



Depth Change (adamsaddons.depthChange)

Either changes the decal's depth between two values periodically, or sets it based on the decal's position relative to the player.

Variables:

- `depthFrom` and `depthTo` - the two depths to change between (default: `"0"`).

- `relativeX` and `relativeY` - instead of periodically, depth changes based on whether the player is right or left / above or below the decal. `relativeX` and `relativeY` shouldn't both be `"true"` (default: `"false"`).

This attribute can create a [cyclical process](#), `speed` , `offset` , `randomize` , and `updateFlag` can be modified.

▼ Examples

```
<adamsaddons.depthChange depthFrom="-100" depthTo="100"/>
<adamsaddons.depthChange depthFrom="250" depthTo="500" speed="0.5"/>
<adamsaddons.depthChange depthFrom="100" depthTo="-100" relativeX="true"/>
```

Player Attach (`adamsaddons.playerAttach`)

Attaches the decal to the player at all times.

Variables:

- `offsetX` and `offsetY` - custom offset from the player's position. Note, that player position is at the lower middle of the hitbox, so to be properly centered `offsetY` should be decreased (default: `"0.0"`).
- `facing` - if true, the decal will face in the same direction as the player (default: `"false"`).
- `hairOffset` - if true, the decal will be offset based on where the player's hair, and head, is located (default: `"false"`).
- `flag` - if defined, the decal will only follow the player when the given flag is set (default: `""`).
- `copyScale` - if true, the decal's scale will match the player's as it stretches, using default offsets is recommended with this option, try resizing the image instead (default: `"false"`).
- `preSpawn` - if true, the decal will appear at the player's spawn point before the spawn sequence ends (default: `"false"`).

▼ Examples

```
<adamsaddons.playerAttach/>
<adamsaddons.playerAttach offsetX="5" offsetY="-8" facing="true"/>
<adamsaddons.playerAttach hairOffset="true" copyScale="true"/>
<adamsaddons.playerAttach flag="attach_flag" preSpawn="true"/>
```

Camera Attach (adamsaddons.cameraAttach)

The decal will move with the camera, much like a styleground.

Variables:

- `offsetX` and `offsetY` - custom offset from the center of the screen (default: `"0.0"`).
- `flag` - if defined, the decal will only follow the camera when the given flag is set (default: `""`).

▼ Examples

```
<adamsaddons.cameraAttach/>
<adamsaddons.cameraAttach offsetX="-8" offsetY="-8"/>
<adamsaddons.playerAttach flag="attach_flag" preSpawn="true"/>
```