# 一、控件动画

## 1.1 移动控件位置的动画

```
animator = widget_animator_move_create(image, 1000, delay, EASING_SIN_INOUT);
widget_animator_move_set_params(animator, image->x, image->y, image->x + 100, image->y
+ 100);
widget_animator_set_repeat(animator, times);
```

# 1.2 改变控件透明度的动画

```
animator = widget_animator_opacity_create(opacity, 1000, delay, EASING_SIN_OUT);
widget_animator_opacity_set_params(animator, 50, 255);
widget_animator_set_yoyo(animator, times);
```

### 1.3 改变控件旋转角度的动画

```
animator = widget_animator_rotation_create(image2, 1000, delay, EASING_SIN_INOUT);
widget_animator_rotation_set_params(animator, 0, 3.14 * 2);
widget_animator_set_yoyo(animator, 0/*forever*/);
```

### 1.4 控件缩放动画

```
animator = widget_animator_scale_create(image3, 1000, delay, EASING_SIN_INOUT);
widget_animator_scale_set_params(animator, 0.5f, 0.5f, 2.0f, 2.0f);
widget_animator_set_yoyo(animator, times);
```

### 1.5 改变控件值的动画

```
animator = widget_animator_value_create(progress_bar, 1000, delay, EASING_SIN_INOUT);
widget_animator_value_set_params(animator, 50, 100);
widget_animator_set_yoyo(animator, times);
```

#### 1.6示例

具体示例请看AWTK目录下的:awtk\demos\demo\_animator\_app.c