

system.gui.transform

This function is used in **Python Scripting**.

Description

Sets a component's position and size at runtime. Additional arguments for the duration, framesPerSecond, and acceleration of the operation exist for animation. An optional callback argument will be executed when the transformation is complete. Note: The transformation is performed in Designer coordinate space on components which are centered or have more than 2 anchors.

Client Permission Restrictions

This scripting function has no [Client Permission](#) restrictions.

Syntax

system.gui.transform(component [, newX, newY, newWidth, newHeight, duration, callback, framesPerSecond, acceleration, coordSpace])

- Parameters

[JComponent](#) component - The component to move or resize.

[int](#) newX - An optional x-coordinate to move to, relative to the upper-left corner of the component's parent container.

[int](#) newY - An optional y-coordinate to move to, relative to the upper-left corner of the component's parent container.

[int](#) newWidth - An optional width for the component.

[int](#) newHeight - An optional height for the component.

[int](#) duration - An optional duration over which the transformation will take place. If omitted or 0, the transform will take place immediately.

[PyObject](#) callback- An optional function to be called when the transformation is complete.

[int](#) framesPerSecond - An optional frame rate argument which dictates how often the transformation updates over the given duration. The default is 60 frames per second.

[int](#) acceleration - An optional modifier to the acceleration of the transformation over the given duration. See [system.gui constants](#) for valid arguments.

[int](#) coordSpace- The coordinate space to use. When the default Screen Coordinates are used, the given size and position are absolute, as they appear in the client at runtime. When Designer Coordinates are used, the given size and position are pre-runtime adjusted values, as they would appear in the Designer. See [system.gui constants](#) for valid arguments.

- Returns

[PyObject](#) animation - An animation object that the script can use to [pause\(\)](#), [resume\(\)](#), or [cancel\(\)](#) the transformation.

- Scope

Client

Code Examples

```
# This example changes the size the a component to 100x100
# This script should be run from the component that will be changed (ie: on the mouseEntered
event)
```

```
system.gui.transform(component=event.source, newWidth=100, newHeight=100)
```

```
# This example moves a component to coordinates 0,0 over the course of 1 second.
# When the animation is complete, the component is moved back to its original position
# over the course of 2 seconds, slowing in speed as it approaches the end.
```

```
component = event.source.parent.getComponent('Text Field')
origX = component.x
origY = component.y
```

```
system.gui.transform(
    component,
    0, 0,
    duration=1000,
    callback=lambda: system.gui.transform(
        component,
        origX, origY,
        duration=2000,
        acceleration=system.gui.ACCL_FAST_TO_SLOW
    )
)
```