# **LayoutAnimation**

Automatically animates views to their new positions when the next layout happens.

A common way to use this API is to call it before updating the state hook in functional components and calling setState in class components.

Note that in order to get this to work on **Android** you need to set the following flags via UIManager:

```
if (Platform.OS === 'android') {
   if (UIManager.setLayoutAnimationEnabledExperimental) {
     UIManager.setLayoutAnimationEnabledExperimental(true);
   }
}
```

## **Example**

#### LayoutAnimation **∧** Expo import React, {useState} from 'react'; Download Expo Go and scan import { LayoutAnimation, the QR code to get started. Platform, StyleSheet, Text, TouchableOpacity, UIManager, View, } from 'react-native'; if ( Platform.OS === 'android' && UIManager.setLayoutAnimationEnabledExperimental UIManager.setLayoutAnimationEnabledExperimental(true); const App = () => { const [expanded, setExpanded] = useState(false); **Connected devices** <View style={style.container}> <TouchableOpacity onPress={() => { <u>Log in</u> or set a <u>Device ID</u> to open this Snack from Expo Go on your device or simulator. LayoutAnimation.configureNext(LayoutAnimation.Presets.sprin Preview My Device iOS Android

# Reference

### **Methods**

#### configureNext()

```
static configureNext(
  config: LayoutAnimationConfig,
  onAnimationDidEnd?: () => void,
  onAnimationDidFail?: () => void,
);
```

Schedules an animation to happen on the next layout.

#### **Parameters:**

NAME	TYPE	REQUIRED	DESCRIPTION
config	object	Yes	See config description below.
onAnimationDidEnd	function	No	Called when the animation finished.
onAnimationDidFail	function	No	Called when the animation failed.

The config parameter is an object with the keys below. <u>create</u> returns a valid object for config, and the Presets objects can also all be passed as the config.

- duration in milliseconds
- create, optional config for animating in new views
- update, optional config for animating views that have been updated
- delete, optional config for animating views as they are removed

The config that's passed to create, update, or delete has the following keys:

- type, the animation type to use
- property, the <u>layout property</u> to animate (optional, but recommended for create and delete)
- springDamping (number, optional and only for use with type: Type.spring)
- initialVelocity (number, optional)
- delay (number, optional)
- duration (number, optional)

### create()

```
static create(duration, type, creationProp)
```

Helper that creates an object (with create, update, and delete fields) to pass into configureNext. The type parameter is an animation type, and the creationProp parameter is a layout property.

#### **Example:**

```
LayoutAnimation
                                                                 ∧ Expo
import React, {useState} from 'react';
import {
 View,
  Platform,
 UIManager,
  LayoutAnimation,
  StyleSheet,
  Button,
} from 'react-native';
if (
  Platform.OS === 'android' &&
  UIManager.setLayoutAnimationEnabledExperimental
  UIManager.setLayoutAnimationEnabledExperimental(true);
const App = () => {
  const [boxPosition, setBoxPosition] = useState('left');
  const toggleBox = () => {
    LayoutAnimation.configureNext({
      duration: 500,
      create: {type: 'linear', property: 'opacity'},
      update: {type: 'spring', springDamping: 0.4},
      delete: {type: 'linear', property: 'opacity'},
                                                              iOS
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                                                                   Android
```

## **Properties**

## **Types**

An enumeration of animation types to be used in the <u>create</u> method, or in the create/update/delete configs for <u>configureNext</u>. (example usage: LayoutAnimation.Types.easeIn)

TYPES			
spring			
linear			

TYPES
easeInEaseOut
easeIn
easeOut
keyboard

## **Properties**

An enumeration of layout properties to be animated to be used in the <a href="mailto:create">create</a> method, or in the <a href="mailto:create">create</a> delete configs for <a href="mailto:configureNext">configureNext</a>. (example usage: LayoutAnimation.Properties.opacity)

PROPERTIES	
opacity	
scaleX	
scaleY	
scaleXY	

#### **Presets**

A set of predefined animation configs to pass into configureNext.

PRESETS	VALUE
easeInEaseOut	<pre>create(300, 'easeInEaseOut', 'opacity')</pre>
linear	create(500, 'linear', 'opacity')
spring	<pre>{duration: 700, create: {type: 'linear', property: 'opacity'}, update: {type: 'spring', springDamping: 0.4}, delete: {type: 'linear', property: 'opacity'} }</pre>

#### easeInEaseOut

Calls configureNext() with Presets.easeInEaseOut.

#### linear

Calls configureNext() with Presets.linear.

### spring

Calls configureNext() with Presets.spring.

### **Example:**

#### **∧** Expo LayoutAnimation

```
import React, {useState} from 'react';
import {
 View,
  Platform,
 UIManager,
  LayoutAnimation,
  StyleSheet,
  Button,
} from 'react-native';
if (
  Platform.OS === 'android' &&
  UIManager.setLayoutAnimationEnabledExperimental
  UIManager.setLayoutAnimationEnabledExperimental(true);
const App = () => {
  const [firstBoxPosition, setFirstBoxPosition] =
useState('left');
  const [secondBoxPosition, setSecondBoxPosition] =
useState('left');
  const [thirdBoxPosition, setThirdBoxPosition] =
useState('left');
  const toggleFirstBox = () => {
```

Download Expo Go and scan the QR code to get started.



#### **Connected devices**

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