

Documentation

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SwiftUI

WidgetConfiguration

Implementing a widget

var body: Self.Body

Body

Setting a name

func configurationDisplayName(_:)

Setting a description

func description(_:)

Setting the appearance

func supportedFamilies([WidgetFamily])

func contentMarginsDisabled() -> Bool

func disfavoredLocations([WidgetLocation], for: [WidgetFamily])

func containerBackgroundRemovable(Bool)

Managing background tasks

func backgroundTask<D, R>(BackgroundTask<D, R>, action: (D) -> R) -> some WidgetConfiguration

func onBackground URLSessionEvents(matching: URLSessionEvents) -> some WidgetConfiguration

Instance Methods

func associatedKind(String?) -> some WidgetConfiguration

Filter

/

SwiftUI / WidgetConfiguration

Protocol

WidgetConfiguration

A type that describes a widget's content.

iOS 14.0+ | iPadOS 14.0+ | Mac Catalyst 14.0+ | macOS 11.0+ | visionOS 1.0+ | watchOS 9.0+

```
@MainActor @preconcurrency
protocol WidgetConfiguration
```

Overview

A type conforming to this protocol inherits `@MainActor` isolation from the protocol if the conformance is included in the type's base declaration:

```
struct MyCustomType: Transition {
    // `@preconcurrency @MainActor` isolation by default
}
```

Isolation to the main actor is the default, but it's not required. Declare the conformance in an extension to opt out of main actor isolation:

```
extension MyCustomType: Transition {
    // `nonisolated` by default
}
```

Topics

Implementing a widget

var body: Self.Body

The content and behavior of this widget.

Required

associatedtype Body : WidgetConfiguration

The type of widget configuration representing the body of this configuration.

Required

Setting a name

func configurationDisplayName(_:)

Sets the localized name shown for a widget when a user adds or edits the widget.

Setting a description

func description(_:)

Sets the description shown for a widget when a user adds or edits it using the contents of a text view.

Setting the appearance

func supportedFamilies([WidgetFamily]) -> some WidgetConfiguration

Sets the sizes that a widget supports.

func contentMarginsDisabled() -> some WidgetConfiguration

Disable default content margins.

func disfavoredLocations([WidgetLocation], for: [WidgetFamily]) -> some WidgetConfiguration

Sets the disfavored locations for a widget.

func containerBackgroundRemovable(Bool) -> some WidgetConfiguration

A modifier that marks the background of a widget as removable.

Managing background tasks

func backgroundTask<D, R>(BackgroundTask<D, R>, action: (D) -> R) -> some WidgetConfiguration

Runs the given action when the system provides a background task.

func onBackground URLSessionEvents(matching: URLSessionEvents) -> some WidgetConfiguration

Adds an action to perform when events related to a URL session identified by a closure are waiting to be processed.

Instance Methods

func associatedKind(String?) -> some WidgetConfiguration

Tells the system that a relevance-based widget can replace a timeline-based widget.

func promptsForUserConfiguration() -> some WidgetConfiguration

Specifies that a widget's configuration UI should be automatically presented after the widget is added.

func pushHandler(any WidgetPushHandler.Type) -> some WidgetConfiguration

Register a type that can handle push tokens changing for widgets.

func supplementalActivityFamilies([ActivityFamily]) -> some WidgetConfiguration

Sets the sizes that a Live Activity supports.

func supportedMountingStyles([WidgetMountingStyle]) -> some WidgetConfiguration

Specifies the mounting style for this widget.

func widgetTexture(WidgetTexture) -> some WidgetConfiguration

Specifies the widget texture for this widget.

Relationships

Conforming Types

EmptyWidgetConfiguration, LimitedAvailabilityConfiguration

See Also

Creating widgets

↳ [Building Widgets Using WidgetKit and SwiftUI](#)

Create widgets to show your app's content on the Home screen, with custom intents for user-customizable settings.

↳ [Creating a widget extension](#)

Display your app's content in a convenient, informative widget on various devices.

↳ [Keeping a widget up to date](#)

Plan your widget's timeline to show timely, relevant information using dynamic views, and update the timeline when things change.

↳ [Making a configurable widget](#)

Give users the option to customize their widgets by adding a custom app intent to your project.

protocol Widget

The configuration and content of a widget to display on the Home screen or in Notification Center.

protocol WidgetBundle

A container used to expose multiple widgets from a single widget extension.

struct LimitedAvailabilityConfiguration

A type-erased widget configuration.

struct EmptyWidgetConfiguration

An empty widget configuration.