

```
import Foundation
import Symbols.NSSymbolEffect
import _Concurrency
import _StringProcessing
import _SwiftConcurrencyShims

/// A symbol effect that applies the
/// Appear animation to symbol images.
///
/// The Appear animation makes the symbol
/// visible either as a whole, or
/// one motion group at a time.
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
public struct AppearSymbolEffect :
SymbolEffect {

    /// Returns a copy of the effect
    requesting an animation that
    /// appears upwards
    public var up: AppearSymbolEffect {
get }

    /// Returns a copy of the effect
    requesting an animation that
    /// appears downwards.
    public var down: AppearSymbolEffect {
get }

    /// Returns a copy of the effect
    requesting an animation that
    /// applies separately to each motion
    group.
```

```
    public var byLayer:
AppearSymbolEffect { get }

    /// Returns a copy of the effect
    requesting an animation that
    /// applies to all motion groups
    simultaneously.
    public var wholeSymbol:
AppearSymbolEffect { get }

    /// The configuration for the effect.
    public var configuration:
SymbolEffectConfiguration { get }

    /// Hashes the essential components
    of this value by feeding them into the
    /// given hasher.
    ///
    /// Implement this method to conform
    to the `Hashable` protocol. The
    /// components used for hashing must
    be the same as the components compared
    /// in your type's `==` operator
    implementation. Call `hasher.combine(_)`
    /// with each of these components.
    ///
    /// - Important: In your
    implementation of `hash(into:)`,
    ///    don't call `finalize()` on the
    `hasher` instance provided,
    ///    or replace it with a different
    instance.
    ///    Doing so may become a compile-
```

```

time error in the future.
    ///
    /// - Parameter hasher: The hasher to
    use when combining the components
    /// of this instance.
    public func hash(into hasher: inout
    Hasher)

    /// Returns a Boolean value
    indicating whether two values are equal.
    ///
    /// Equality is the inverse of
    inequality. For any values `a` and `b`,
    /// `a == b` implies that `a != b` is
    `false`.
    ///
    /// - Parameters:
    ///     - lhs: A value to compare.
    ///     - rhs: Another value to
    compare.
    public static func == (a:
    AppearSymbolEffect, b:
    AppearSymbolEffect) -> Bool

    /// The hash value.
    ///
    /// Hash values are not guaranteed to
    be equal across different executions of
    /// your program. Do not save hash
    values to use during a future execution.
    ///
    /// - Important: `hashValue` is
    deprecated as a `Hashable` requirement.

```

To

```
    /// conform to `Hashable`,  
    implement the `hash(into:)` requirement  
    instead.
```

```
    /// The compiler provides an  
    implementation for `hashValue` for you.
```

```
    public var hashValue: Int { get }  
}
```

```
@available(macOS 14.0, iOS 17.0, tvOS  
17.0, watchOS 10.0, visionOS 1.0, *)  
extension AppearSymbolEffect :  
TransitionSymbolEffect {  
}
```

```
@available(macOS 14.0, iOS 17.0, tvOS  
17.0, watchOS 10.0, visionOS 1.0, *)  
extension AppearSymbolEffect :  
IndefiniteSymbolEffect {  
}
```

```
/// The default symbol effect, resolves  
to a particular effect in a  
/// context-sensitive manner.
```

```
@available(macOS 14.0, iOS 17.0, tvOS  
17.0, watchOS 10.0, visionOS 1.0, *)  
public struct AutomaticSymbolEffect :  
SymbolEffect {
```

```
    /// The configuration for the effect.  
    public var configuration:  
SymbolEffectConfiguration { get }
```

```

    /// Hashes the essential components
of this value by feeding them into the
    /// given hasher.
    ///
    /// Implement this method to conform
to the `Hashable` protocol. The
    /// components used for hashing must
be the same as the components compared
    /// in your type's `==` operator
implementation. Call `hasher.combine(_)`
    /// with each of these components.
    ///
    /// - Important: In your
implementation of `hash(into:)`,
    /// don't call `finalize()` on the
`hasher` instance provided,
    /// or replace it with a different
instance.
    /// Doing so may become a compile-
time error in the future.
    ///
    /// - Parameter hasher: The hasher to
use when combining the components
    /// of this instance.
    public func hash(into hasher: inout
Hasher)

    /// Returns a Boolean value
indicating whether two values are equal.
    ///
    /// Equality is the inverse of
inequality. For any values `a` and `b`,
    /// `a == b` implies that `a != b` is

```

```

`false`.
    ///
    /// - Parameters:
    ///   - lhs: A value to compare.
    ///   - rhs: Another value to
compare.
    public static func == (a:
AutomaticSymbolEffect, b:
AutomaticSymbolEffect) -> Bool

    /// The hash value.
    ///
    /// Hash values are not guaranteed to
be equal across different executions of
    /// your program. Do not save hash
values to use during a future execution.
    ///
    /// - Important: `hashValue` is
deprecated as a `Hashable` requirement.
To
    /// conform to `Hashable`,
implement the `hash(into:)` requirement
instead.
    /// The compiler provides an
implementation for `hashValue` for you.
    public var hashValue: Int { get }
}

@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
extension AutomaticSymbolEffect :
TransitionSymbolEffect {
}

```

```

@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
extension AutomaticSymbolEffect :
ContentTransitionSymbolEffect {
}

/// A symbol effect that applies the
Bounce animation to
/// symbol images.
///
/// The Bounce animation applies a
transitory scaling effect to the symbol.
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
public struct BounceSymbolEffect :
SymbolEffect {

    /// Returns a copy of the effect
requesting an animation that
    /// bounces upwards.
    public var up: BounceSymbolEffect {
get }

    /// Returns a copy of the effect
requesting an animation that
    /// bounces downwards.
    public var down: BounceSymbolEffect {
get }

    /// Returns a copy of the effect
requesting an animation that
    /// applies separately to each motion

```

group.

```
    public var byLayer:  
BounceSymbolEffect { get }
```

```
    /// Returns a copy of the effect  
    requesting an animation that  
    /// applies to all motion groups  
    simultaneously.
```

```
    public var wholeSymbol:  
BounceSymbolEffect { get }
```

```
    /// The configuration for the effect.  
    public var configuration:  
SymbolEffectConfiguration { get }
```

```
    /// Hashes the essential components  
    of this value by feeding them into the  
    /// given hasher.  
    ///  
    /// Implement this method to conform  
    to the `Hashable` protocol. The  
    /// components used for hashing must  
    be the same as the components compared  
    /// in your type's `==` operator  
    implementation. Call `hasher.combine(_)`  
    /// with each of these components.  
    ///  
    /// – Important: In your  
    implementation of `hash(into:)`,  
    ///     don't call `finalize()` on the  
    `hasher` instance provided,  
    ///     or replace it with a different  
    instance.
```



```

    /// Doing so may become a compile-
time error in the future.
    ///
    /// - Parameter hasher: The hasher to
use when combining the components
    /// of this instance.
    public func hash(into hasher: inout
Hasher)

    /// Returns a Boolean value
indicating whether two values are equal.
    ///
    /// Equality is the inverse of
inequality. For any values `a` and `b`,
    /// `a == b` implies that `a != b` is
`false`.
    ///
    /// - Parameters:
    ///   - lhs: A value to compare.
    ///   - rhs: Another value to
compare.
    public static func == (a:
BounceSymbolEffect, b:
BounceSymbolEffect) -> Bool

    /// The hash value.
    ///
    /// Hash values are not guaranteed to
be equal across different executions of
    /// your program. Do not save hash
values to use during a future execution.
    ///
    /// - Important: `hashValue` is

```

deprecated as a `Hashable` requirement.  
To

```
    /// conform to `Hashable`,  
    implement the `hash(into:)` requirement  
    instead.
```

```
    /// The compiler provides an  
    implementation for `hashValue` for you.
```

```
    public var hashValue: Int { get }  
}
```

```
@available(macOS 15.0, iOS 18.0, tvOS  
18.0, watchOS 11.0, visionOS 2.0, *)  
extension BounceSymbolEffect :  
IndefiniteSymbolEffect {  
}
```

```
@available(macOS 14.0, iOS 17.0, tvOS  
17.0, watchOS 10.0, visionOS 1.0, *)  
extension BounceSymbolEffect :  
DiscreteSymbolEffect {  
}
```

```
/// A symbol effect that applies the  
Breathe animation to
```

```
/// symbol images.
```

```
///
```

```
/// The Breathe animation smoothly scales  
a symbol up and down.
```

```
@available(macOS 15.0, iOS 18.0, tvOS  
18.0, watchOS 11.0, visionOS 2.0, *)  
public struct BreatheSymbolEffect :  
SymbolEffect {
```

```
    /// Returns a copy of the effect
    requesting an animation that
    /// pulses layers as they breathe.
    public var pulse: BreatheSymbolEffect
{ get }
```

```
    /// Returns a copy of the effect
    requesting an animation that
    /// makes the symbol breathe with no
    additional styling.
    public var plain: BreatheSymbolEffect
{ get }
```

```
    /// Returns a copy of the effect
    requesting an animation that
    /// applies separately to each motion
    group.
    public var byLayer:
    BreatheSymbolEffect { get }
```

```
    /// Returns a copy of the effect
    requesting an animation that
    /// applies to all motion groups
    simultaneously.
    public var wholeSymbol:
    BreatheSymbolEffect { get }
```

```
    /// The configuration for the effect.
    public var configuration:
    SymbolEffectConfiguration { get }
```

```
    /// Hashes the essential components
    of this value by feeding them into the
```

```

    /// given hasher.
    ///
    /// Implement this method to conform
to the `Hashable` protocol. The
    /// components used for hashing must
be the same as the components compared
    /// in your type's `==` operator
implementation. Call `hasher.combine(_)`
    /// with each of these components.
    ///
    /// - Important: In your
implementation of `hash(into:)`,
    /// don't call `finalize()` on the
`hasher` instance provided,
    /// or replace it with a different
instance.
    /// Doing so may become a compile-
time error in the future.
    ///
    /// - Parameter hasher: The hasher to
use when combining the components
    /// of this instance.
    public func hash(into hasher: inout
Hasher)

    /// Returns a Boolean value
indicating whether two values are equal.
    ///
    /// Equality is the inverse of
inequality. For any values `a` and `b`,
    /// `a == b` implies that `a != b` is
`false`.
    ///

```

```

    /// - Parameters:
    ///     - lhs: A value to compare.
    ///     - rhs: Another value to
compare.
    public static func == (a:
BreatheSymbolEffect, b:
BreatheSymbolEffect) -> Bool

    /// The hash value.
    ///
    /// Hash values are not guaranteed to
be equal across different executions of
    /// your program. Do not save hash
values to use during a future execution.
    ///
    /// - Important: `hashValue` is
deprecated as a `Hashable` requirement.
To
    /// conform to `Hashable`,
implement the `hash(into:)` requirement
instead.
    /// The compiler provides an
implementation for `hashValue` for you.
    public var hashValue: Int { get }
}

@available(macOS 15.0, iOS 18.0, tvOS
18.0, watchOS 11.0, visionOS 2.0, *)
extension BreatheSymbolEffect :
IndefiniteSymbolEffect {
}

@available(macOS 15.0, iOS 18.0, tvOS

```

```
18.0, watchOS 11.0, visionOS 2.0, *)  
extension BreatheSymbolEffect :  
DiscreteSymbolEffect {  
}
```

```
/// A symbol effect that animates between  
symbols or between different  
/// configurations of the same symbol.  
@available(macOS 14.0, iOS 17.0, tvOS  
17.0, watchOS 10.0, visionOS 1.0, *)  
public protocol  
ContentTransitionSymbolEffect {  
}
```

```
/// A symbol effect that applies the  
Disappear animation to symbol  
/// images.  
///  
/// The Disappear animation makes the  
symbol hidden either as a whole,  
/// or one motion group at a time.  
@available(macOS 14.0, iOS 17.0, tvOS  
17.0, watchOS 10.0, visionOS 1.0, *)  
public struct DisappearSymbolEffect :  
SymbolEffect {
```

```
    /// Returns a copy of the effect  
    requesting an animation that  
    /// disappears upwards.  
    public var up: DisappearSymbolEffect  
{ get }
```

```
    /// Returns a copy of the effect
```

```

requesting an animation that
    /// disappears downwards.
    public var down:
DisappearSymbolEffect { get }

    /// Returns a copy of the effect
requesting an animation that
    /// applies separately to each motion
group.
    public var byLayer:
DisappearSymbolEffect { get }

    /// Returns a copy of the effect
requesting an animation that
    /// applies to all motion groups
simultaneously.
    public var wholeSymbol:
DisappearSymbolEffect { get }

    /// The configuration for the effect.
    public var configuration:
SymbolEffectConfiguration { get }

    /// Hashes the essential components
of this value by feeding them into the
    /// given hasher.
    ///
    /// Implement this method to conform
to the `Hashable` protocol. The
    /// components used for hashing must
be the same as the components compared
    /// in your type's `==` operator
implementation. Call `hasher.combine(_)`

```

```

    /// with each of these components.
    ///
    /// - Important: In your
implementation of `hash(into:)`,
    /// don't call `finalize()` on the
`hasher` instance provided,
    /// or replace it with a different
instance.
    /// Doing so may become a compile-
time error in the future.
    ///
    /// - Parameter hasher: The hasher to
use when combining the components
    /// of this instance.
    public func hash(into hasher: inout
Hasher)

    /// Returns a Boolean value
indicating whether two values are equal.
    ///
    /// Equality is the inverse of
inequality. For any values `a` and `b`,
    /// `a == b` implies that `a != b` is
`false`.
    ///
    /// - Parameters:
    ///   - lhs: A value to compare.
    ///   - rhs: Another value to
compare.
    public static func == (a:
DisappearSymbolEffect, b:
DisappearSymbolEffect) -> Bool

```



```
    /// The hash value.
    ///
    /// Hash values are not guaranteed to
    be equal across different executions of
    /// your program. Do not save hash
    values to use during a future execution.
    ///
    /// - Important: `hashCode` is
    deprecated as a `Hashable` requirement.
    To
    /// conform to `Hashable`,
    implement the `hash(into)` requirement
    instead.
    /// The compiler provides an
    implementation for `hashCode` for you.
    public var hashCode: Int { get }
}
```

```
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
extension DisappearSymbolEffect :
TransitionSymbolEffect {
}
```

```
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
extension DisappearSymbolEffect :
IndefiniteSymbolEffect {
}
```

```
/// A symbol effect that can perform a
transient animation.
@available(macOS 14.0, iOS 17.0, tvOS
```

```
17.0, watchOS 10.0, visionOS 1.0, *)
public protocol DiscreteSymbolEffect {
}
```

```
/// A symbol effect that continually
affects how a symbol is drawn
/// until it is disabled or removed.
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
public protocol IndefiniteSymbolEffect {
}
```

```
/// A symbol effect that applies the
Pulse animation to
/// symbol images.
///
/// The Pulse animation fades the opacity
of either all layers in
/// the symbol, or of a subset of the
layers in the symbol.
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
public struct PulseSymbolEffect :
SymbolEffect {
```

```
    /// Returns a copy of the effect
    requesting an animation that only
    /// applies to the layers in each
    symbol that have been marked to
    /// always pulse.
    public var byLayer: PulseSymbolEffect
{ get }
```

```
    /// Returns a copy of the effect
    requesting an animation where all
    /// layers of the symbol pulse.
    public var wholeSymbol:
PulseSymbolEffect { get }

    /// The configuration for the effect.
    public var configuration:
SymbolEffectConfiguration { get }

    /// Hashes the essential components
    of this value by feeding them into the
    /// given hasher.
    ///
    /// Implement this method to conform
    to the `Hashable` protocol. The
    /// components used for hashing must
    be the same as the components compared
    /// in your type's `==` operator
    implementation. Call `hasher.combine(_)`
    /// with each of these components.
    ///
    /// - Important: In your
    implementation of `hash(into:)`,
    ///    don't call `finalize()` on the
    `hasher` instance provided,
    ///    or replace it with a different
    instance.
    ///    Doing so may become a compile-
    time error in the future.
    ///
    /// - Parameter hasher: The hasher to
    use when combining the components
```

```

    /// of this instance.
    public func hash(into hasher: inout
Hasher)

    /// Returns a Boolean value
indicating whether two values are equal.
    ///
    /// Equality is the inverse of
inequality. For any values `a` and `b`,
    /// `a == b` implies that `a != b` is
`false`.
    ///
    /// - Parameters:
    ///     - lhs: A value to compare.
    ///     - rhs: Another value to
compare.
    public static func == (a:
PulseSymbolEffect, b: PulseSymbolEffect)
-> Bool

    /// The hash value.
    ///
    /// Hash values are not guaranteed to
be equal across different executions of
    /// your program. Do not save hash
values to use during a future execution.
    ///
    /// - Important: `hashValue` is
deprecated as a `Hashable` requirement.
To
    /// conform to `Hashable`,
implement the `hash(into:)` requirement
instead.

```

```
    /// The compiler provides an
    implementation for `hashCode` for you.
    public var hashCode: Int { get }
}
```

```
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
extension PulseSymbolEffect :
IndefiniteSymbolEffect {
}
```

```
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
extension PulseSymbolEffect :
DiscreteSymbolEffect {
}
```

```
/// A symbol effect that animates the
replacement of one symbol image
/// with another.
```

```
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
public struct ReplaceSymbolEffect :
SymbolEffect {
```

```
    /// Returns a copy of the effect
    requesting the Down-Up variant of
    /// the Replace animation.
    ///
    /// The initial symbol scales down as
    it is removed, and the new
    /// symbol scales up as it is added.
    public var downUp:
```

```

ReplaceSymbolEffect { get }

    /// Returns a copy of the effect
    requesting the Up-Up variant of
    /// the Replace animation.
    ///
    /// The initial symbol scales up as
    it is removed, and the new
    /// symbol scales up as it is added.
    public var upUp: ReplaceSymbolEffect
{ get }

    /// Returns a copy of the effect
    requesting the Off-Up variant of
    /// the Replace animation.
    ///
    /// The initial symbol is removed
    with no animation, and the new
    /// symbol scales up as it is added.
    public var offUp: ReplaceSymbolEffect
{ get }

    /// Returns a copy of the effect
    requesting an animation that
    /// applies separately to each motion
    group.
    public var byLayer:
ReplaceSymbolEffect { get }

    /// Returns a copy of the effect
    requesting an animation that
    /// applies to all motion groups
    simultaneously.

```

```

    public var wholeSymbol:
ReplaceSymbolEffect { get }

    /// The configuration for the effect.
    public var configuration:
SymbolEffectConfiguration { get }

    /// Hashes the essential components
of this value by feeding them into the
    /// given hasher.
    ///
    /// Implement this method to conform
to the `Hashable` protocol. The
    /// components used for hashing must
be the same as the components compared
    /// in your type's `==` operator
implementation. Call `hasher.combine(_)`
    /// with each of these components.
    ///
    /// - Important: In your
implementation of `hash(into:)`,
    ///    don't call `finalize()` on the
`hasher` instance provided,
    ///    or replace it with a different
instance.
    ///    Doing so may become a compile-
time error in the future.
    ///
    /// - Parameter hasher: The hasher to
use when combining the components
    ///    of this instance.
    public func hash(into hasher: inout
Hasher)

```

```
    /// Returns a Boolean value
    indicating whether two values are equal.
    ///
    /// Equality is the inverse of
    inequality. For any values `a` and `b`,
    /// `a == b` implies that `a != b` is
    `false`.
    ///
    /// - Parameters:
    ///   - lhs: A value to compare.
    ///   - rhs: Another value to
    compare.
```

```
    public static func == (a:
    ReplaceSymbolEffect, b:
    ReplaceSymbolEffect) -> Bool
```

```
    /// The hash value.
    ///
    /// Hash values are not guaranteed to
    be equal across different executions of
    /// your program. Do not save hash
    values to use during a future execution.
```

```
    ///
    /// - Important: `hashValue` is
    deprecated as a `Hashable` requirement.
    To
```

```
    /// conform to `Hashable`,
    implement the `hash(into:)` requirement
    instead.
```

```
    /// The compiler provides an
    implementation for `hashValue` for you.
```

```
    public var hashValue: Int { get }
```



```
}
```

```
extension ReplaceSymbolEffect {  
  
    /// A symbol effect applies the  
    MagicReplace animation to  
    /// symbol images.  
    ///  
    /// The MagicReplace effect animates  
    common elements across  
    /// symbol images.  
    @available(macOS 15.0, iOS 18.0, tvOS  
18.0, watchOS 11.0, visionOS 2.0, *)  
    public struct MagicReplace :  
    SymbolEffect {  
  
        /// The configuration for the  
        effect.  
        public var configuration:  
        SymbolEffectConfiguration { get }  
  
        /// Hashes the essential  
        components of this value by feeding them  
        into the  
        /// given hasher.  
        ///  
        /// Implement this method to  
        conform to the `Hashable` protocol. The  
        /// components used for hashing  
        must be the same as the components  
        compared  
        /// in your type's `==` operator  
        implementation. Call `hasher.combine(_:)`
```

```

        /// with each of these
components.
        ///
        /// - Important: In your
implementation of `hash(into:)` ,
        /// don't call `finalize()` on
the `hasher` instance provided,
        /// or replace it with a
different instance.
        /// Doing so may become a
compile-time error in the future.
        ///
        /// - Parameter hasher: The
hasher to use when combining the
components
        /// of this instance.
        public func hash(into hasher:
inout Hasher)

        /// Returns a Boolean value
indicating whether two values are equal.
        ///
        /// Equality is the inverse of
inequality. For any values `a` and `b`,
        /// `a == b` implies that `a !=
b` is `false`.
        ///
        /// - Parameters:
        /// - lhs: A value to compare.
        /// - rhs: Another value to
compare.
        public static func == (a:
ReplaceSymbolEffect.MagicReplace, b:

```

ReplaceSymbolEffect.MagicReplace) -> Bool

```
    /// The hash value.
    ///
    /// Hash values are not
guaranteed to be equal across different
executions of
    /// your program. Do not save
hash values to use during a future
execution.
    ///
    /// - Important: `hashValue` is
deprecated as a `Hashable` requirement.
To
    /// conform to `Hashable`,
implement the `hash(into:)` requirement
instead.
    /// The compiler provides an
implementation for `hashValue` for you.
    public var hashValue: Int { get }
}

    /// Returns an effect preferring
MagicReplace and a configured
    /// ReplaceEffect if MagicReplace is
not possible.
    @available(macOS 15.0, iOS 18.0, tvOS
18.0, watchOS 11.0, visionOS 2.0, *)
    public func magic(fallback:
ReplaceSymbolEffect) ->
ReplaceSymbolEffect.MagicReplace

    /// Returns an effect requesting the
```

```

Down-Up variant of
    /// the Replace animation.
    ///
    /// The initial symbol scales down as
it is removed, and the new
    /// symbol scales up as it is added.
    @available(macOS 15.0, iOS 18.0, tvOS
18.0, watchOS 11.0, visionOS 2.0, *)
    public static var downUp:
ReplaceSymbolEffect { get }

    /// Returns an effect requesting the
Up-Up variant of
    /// the Replace animation.
    ///
    /// The initial symbol scales up as
it is removed, and the new
    /// symbol scales up as it is added.
    @available(macOS 15.0, iOS 18.0, tvOS
18.0, watchOS 11.0, visionOS 2.0, *)
    public static var upUp:
ReplaceSymbolEffect { get }

    /// Returns an effect requesting the
Off-Up variant of
    /// the Replace animation.
    ///
    /// The initial symbol is removed
with no animation, and the new
    /// symbol scales up as it is added.
    @available(macOS 15.0, iOS 18.0, tvOS
18.0, watchOS 11.0, visionOS 2.0, *)
    public static var offUp:

```

```
ReplaceSymbolEffect { get }  
}
```

```
@available(macOS 14.0, iOS 17.0, tvOS  
17.0, watchOS 10.0, visionOS 1.0, *)  
extension ReplaceSymbolEffect :  
ContentTransitionSymbolEffect {  
}
```

```
@available(macOS 15.0, iOS 18.0, tvOS  
18.0, watchOS 11.0, visionOS 2.0, *)  
extension  
ReplaceSymbolEffect.MagicReplace :  
ContentTransitionSymbolEffect {  
}
```

```
/// A symbol effect that applies the  
Rotate animation to  
/// symbol images.  
///  
/// The Rotate animation rotates parts of  
a symbol around a  
/// symbol-provided anchor point.  
@available(macOS 15.0, iOS 18.0, tvOS  
18.0, watchOS 11.0, visionOS 2.0, *)  
public struct RotateSymbolEffect :  
SymbolEffect {
```

```
    /// Returns a copy of the effect  
    requesting an animation that  
    /// rotates clockwise.  
    public var clockwise:  
RotateSymbolEffect { get }
```

```
    /// Returns a copy of the effect  
    requesting an animation that
```

```
    /// rotates counter-clockwise.
```

```
    public var counterClockwise:  
    RotateSymbolEffect { get }
```

```
    /// Returns a copy of the effect  
    requesting an animation that
```

```
    /// applies separately to each motion  
    group.
```

```
    public var byLayer:  
    RotateSymbolEffect { get }
```

```
    /// Returns a copy of the effect  
    requesting an animation that
```

```
    /// applies to all motion groups  
    simultaneously.
```

```
    public var wholeSymbol:  
    RotateSymbolEffect { get }
```

```
    /// The configuration for the effect.
```

```
    public var configuration:  
    SymbolEffectConfiguration { get }
```

```
    /// Hashes the essential components  
    of this value by feeding them into the
```

```
    /// given hasher.
```

```
    ///
```

```
    /// Implement this method to conform  
    to the `Hashable` protocol. The
```

```
    /// components used for hashing must  
    be the same as the components compared
```

```

    /// in your type's `==` operator
implementation. Call `hasher.combine(_)`
    /// with each of these components.
    ///
    /// - Important: In your
implementation of `hash(into:)`,
    /// don't call `finalize()` on the
`hasher` instance provided,
    /// or replace it with a different
instance.
    /// Doing so may become a compile-
time error in the future.
    ///
    /// - Parameter hasher: The hasher to
use when combining the components
    /// of this instance.
    public func hash(into hasher: inout
Hasher)

    /// Returns a Boolean value
indicating whether two values are equal.
    ///
    /// Equality is the inverse of
inequality. For any values `a` and `b`,
    /// `a == b` implies that `a != b` is
`false`.
    ///
    /// - Parameters:
    ///   - lhs: A value to compare.
    ///   - rhs: Another value to
compare.
    public static func == (a:
RotateSymbolEffect, b:

```

RotateSymbolEffect) -> Bool

```
    /// The hash value.
    ///
    /// Hash values are not guaranteed to
    be equal across different executions of
    /// your program. Do not save hash
    values to use during a future execution.
    ///
    /// - Important: `hashValue` is
    deprecated as a `Hashable` requirement.
    To
    /// conform to `Hashable`,
    implement the `hash(into:)` requirement
    instead.
    /// The compiler provides an
    implementation for `hashValue` for you.
    public var hashValue: Int { get }
}
```

```
@available(macOS 15.0, iOS 18.0, tvOS
18.0, watchOS 11.0, visionOS 2.0, *)
extension RotateSymbolEffect :
IndefiniteSymbolEffect {
}
```

```
@available(macOS 15.0, iOS 18.0, tvOS
18.0, watchOS 11.0, visionOS 2.0, *)
extension RotateSymbolEffect :
DiscreteSymbolEffect {
}
```

```
/// A symbol effect that scales symbol
```



```

images.
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
public struct ScaleSymbolEffect :
SymbolEffect {

    /// Returns a copy of the effect
    requesting the scale state be set to the
    up position.
    public var up: ScaleSymbolEffect {
get }

    /// Returns a copy of the effect
    requesting the scale state be set to the
    down position.
    public var down: ScaleSymbolEffect {
get }

    /// Returns a copy of the effect
    requesting an animation that
    /// applies separately to each motion
    group.
    public var byLayer: ScaleSymbolEffect
{ get }

    /// Returns a copy of the effect
    requesting an animation that
    /// applies to all motion groups
    simultaneously.
    public var wholeSymbol:
ScaleSymbolEffect { get }

    /// The configuration for the effect.

```

```

    public var configuration:
SymbolEffectConfiguration { get }

    /// Hashes the essential components
of this value by feeding them into the
    /// given hasher.
    ///
    /// Implement this method to conform
to the `Hashable` protocol. The
    /// components used for hashing must
be the same as the components compared
    /// in your type's `==` operator
implementation. Call `hasher.combine(_)`
    /// with each of these components.
    ///
    /// - Important: In your
implementation of `hash(into:)`,
    /// don't call `finalize()` on the
`hasher` instance provided,
    /// or replace it with a different
instance.
    /// Doing so may become a compile-
time error in the future.
    ///
    /// - Parameter hasher: The hasher to
use when combining the components
    /// of this instance.
    public func hash(into hasher: inout
Hasher)

    /// Returns a Boolean value
indicating whether two values are equal.
    ///

```

```
    /// Equality is the inverse of
inequality. For any values `a` and `b`,
    /// `a == b` implies that `a != b` is
`false`.
```

```
    ///
    /// - Parameters:
    ///   - lhs: A value to compare.
    ///   - rhs: Another value to
compare.
```

```
    public static func == (a:
ScaleSymbolEffect, b: ScaleSymbolEffect)
-> Bool
```

```
    /// The hash value.
    ///
    /// Hash values are not guaranteed to
be equal across different executions of
    /// your program. Do not save hash
values to use during a future execution.
```

```
    ///
    /// - Important: `hashValue` is
deprecated as a `Hashable` requirement.
To
```

```
    /// conform to `Hashable`,
implement the `hash(into:)` requirement
instead.
```

```
    /// The compiler provides an
implementation for `hashValue` for you.
```

```
    public var hashValue: Int { get }
}
```

```
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
```

```

extension ScaleSymbolEffect :
IndefiniteSymbolEffect {
}

/// A presentation effect that can be
applied to an SFSymbol.
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
public protocol SymbolEffect : Hashable,
Sendable {

    /// The configuration for the effect.
    var configuration:
SymbolEffectConfiguration { get }
}

@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
extension SymbolEffect where Self ==
PulseSymbolEffect {

    /// A symbol effect that applies the
Pulse animation to
    /// symbol images.
    ///
    /// The Pulse animation fades the
opacity of either all layers in
    /// the symbol, or of a subset of the
layers in the symbol.
    public static var pulse:
PulseSymbolEffect { get }
}

```

```

@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
extension SymbolEffect where Self ==
BounceSymbolEffect {

    /// A symbol effect that applies the
    Bounce animation to
    /// symbol images.
    ///
    /// The Bounce animation applies a
    transitory scaling effect to the
    /// symbol.
    public static var bounce:
BounceSymbolEffect { get }
}

```

```

@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
extension SymbolEffect where Self ==
VariableColorSymbolEffect {

    /// A symbol effect that applies the
    Variable Color animation to
    /// symbol images.
    ///
    /// The Variable Color animation
    replaces the opacity of variable
    /// layers in the symbol by a
    possibly repeating pattern that moves
    /// up and possibly back down the
    variable layers. It has no effect
    /// for non-variable color symbol
    images.
}

```

```
    public static var variableColor:
VariableColorSymbolEffect { get }
}
```

```
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
extension SymbolEffect where Self ==
ScaleSymbolEffect {
```

```
    /// A symbol effect that scales
symbol images.
```

```
    public static var scale:
ScaleSymbolEffect { get }
}
```

```
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
extension SymbolEffect where Self ==
AppearSymbolEffect {
```

```
    /// A symbol effect that applies the
Appear animation to symbol
```

```
    /// images.
```

```
    ///
```

```
    /// The Appear animation makes the
symbol visible either as a
```

```
    /// whole, or one motion group at a
time.
```

```
    public static var appear:
AppearSymbolEffect { get }
}
```

```
@available(macOS 14.0, iOS 17.0, tvOS
```

```
17.0, watchOS 10.0, visionOS 1.0, *)
extension SymbolEffect where Self ==
DisappearSymbolEffect {
```

```
    /// A symbol effect that applies the
    Disappear animation to symbol
    /// images.
    ///
    /// The Disappear animation makes the
    symbol hidden either as a
    /// whole, or one motion group at a
    time.
    public static var disappear:
DisappearSymbolEffect { get }
}
```

```
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
extension SymbolEffect where Self ==
ReplaceSymbolEffect {
```

```
    /// A symbol effect that animates the
    replacement of one symbol
    /// image with another.
    public static var replace:
ReplaceSymbolEffect { get }
}
```

```
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
extension SymbolEffect where Self ==
AutomaticSymbolEffect {
```

```
    /// The default symbol effect,  
    resolves to a particular effect in a  
    /// context-sensitive manner.
```

```
    public static var automatic:  
AutomaticSymbolEffect { get }  
}
```

```
@available(macOS 15.0, iOS 18.0, tvOS  
18.0, watchOS 11.0, visionOS 2.0, *)  
extension SymbolEffect where Self ==  
WiggleSymbolEffect {
```

```
    /// A symbol effect that applies the  
    Wiggle animation to
```

```
    /// symbol images.
```

```
    ///
```

```
    /// The Wiggle animation applies a  
    transitory translation or rotation
```

```
    /// effect to the symbol.
```

```
    public static var wiggle:  
WiggleSymbolEffect { get }  
}
```

```
@available(macOS 15.0, iOS 18.0, tvOS  
18.0, watchOS 11.0, visionOS 2.0, *)  
extension SymbolEffect where Self ==  
RotateSymbolEffect {
```

```
    /// A symbol effect that applies the  
    Rotate animation to
```

```
    /// symbol images.
```

```
    ///
```

```
    /// The Rotate animation rotates
```



```

parts of a symbol around a
    /// symbol-provided anchor point.
    public static var rotate:
RotateSymbolEffect { get }
}

@available(macOS 15.0, iOS 18.0, tvOS
18.0, watchOS 11.0, visionOS 2.0, *)
extension SymbolEffect where Self ==
BreatheSymbolEffect {

    /// A symbol effect that applies the
Breathe animation to
    /// symbol images.
    ///
    /// The Breathe animation smoothly
scales a symbol up and down.
    public static var breathe:
BreatheSymbolEffect { get }
}

/// A configuration for an SFSymbol
effect.
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
public struct SymbolEffectConfiguration :
Hashable, Sendable {

    /// Hashes the essential components
of this value by feeding them into the
    /// given hasher.
    ///
    /// Implement this method to conform

```

```

to the `Hashable` protocol. The
    /// components used for hashing must
be the same as the components compared
    /// in your type's `==` operator
implementation. Call `hasher.combine(_)`
    /// with each of these components.
    ///
    /// - Important: In your
implementation of `hash(into:)`,
    /// don't call `finalize()` on the
`hasher` instance provided,
    /// or replace it with a different
instance.
    /// Doing so may become a compile-
time error in the future.
    ///
    /// - Parameter hasher: The hasher to
use when combining the components
    /// of this instance.
    public func hash(into hasher: inout
Hasher)

    /// Returns a Boolean value
indicating whether two values are equal.
    ///
    /// Equality is the inverse of
inequality. For any values `a` and `b`,
    /// `a == b` implies that `a != b` is
`false`.
    ///
    /// - Parameters:
    ///     - lhs: A value to compare.
    ///     - rhs: Another value to

```

compare.

```
    public static func == (a:
SymbolEffectConfiguration, b:
SymbolEffectConfiguration) -> Bool

    /// The hash value.
    ///
    /// Hash values are not guaranteed to
be equal across different executions of
    /// your program. Do not save hash
values to use during a future execution.
    ///
    /// - Important: `hashValue` is
deprecated as a `Hashable` requirement.
To
    /// conform to `Hashable`,
implement the `hash(into:)` requirement
instead.
    /// The compiler provides an
implementation for `hashValue` for you.
    public var hashValue: Int { get }
}

/// Options configuring how symbol
effects apply to symbol views.
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
public struct SymbolEffectOptions :
Hashable, Sendable {

    /// The default set of symbol effect
options.
    public static var `default`:
```

```
SymbolEffectOptions { get }
```

```
    /// Creates a set of symbol effect
options with a preferred speed
    /// multiplier.
    ///
    /// - Parameter speed: The preferred
speed multiplier to play the effect with.
    /// The default multiplier is `1.0`.
Very large or small values may
    /// be clamped.
    ///
    /// - Returns: A new set of symbol
effect options with the preferred speed
    /// multiplier.
    public static func speed(_ speed:
Double) -> SymbolEffectOptions
```

```
    /// Sets the preferred speed
multiplier of a set of symbol effect
    /// options.
    ///
    /// - Parameter speed: The preferred
speed multiplier to play the effect with.
    /// The default multiplier is `1.0`.
Very large or small values may
    /// be clamped.
    ///
    /// - Returns: A new set of symbol
effect options with the preferred speed
    /// multiplier.
    public func speed(_ speed: Double) ->
SymbolEffectOptions
```

```
    /// Creates a set of symbol effect
options with a preferred repeat
    /// count.
    ///
    /// - Parameter count: The preferred
number of times to play the
    /// effect, or nil to request the
default number of repeats. Very
    /// large or small values may be
clamped.
    ///
    /// - Returns: A new set of symbol
effect options with the preferred
    /// repeat count.
    @available(macOS, introduced: 14.0,
deprecated: 100000.0, renamed:
"SymbolEffectOptions.RepeatBehavior.perio
dic(_:delay:)")
    @available(iOS, introduced: 17.0,
deprecated: 100000.0, renamed:
"SymbolEffectOptions.RepeatBehavior.perio
dic(_:delay:)")
    @available(tvOS, introduced: 17.0,
deprecated: 100000.0, renamed:
"SymbolEffectOptions.RepeatBehavior.perio
dic(_:delay:)")
    @available(watchOS, introduced: 10.0,
deprecated: 100000.0, renamed:
"SymbolEffectOptions.RepeatBehavior.perio
dic(_:delay:)")
    @available(visionOS, introduced: 1.0,
deprecated: 100000.0, renamed:
```

```

"SymbolEffectOptions.RepeatBehavior.periodic(_ delay:)"
    public static func `repeat`(_ count:
Int?) -> SymbolEffectOptions

    /// Sets the preferred number of
times to play the effect.
    ///
    /// - Parameter count: The preferred
number of times to play the
    ///     effect, or nil to request the
default number of repeats. Very
    ///     large or small values may be
clamped.
    ///
    /// - Returns: A new set of symbol
effect options with the preferred
    /// repeat count.
    @available(macOS, introduced: 14.0,
deprecated: 100000.0, renamed:
"SymbolEffectOptions.RepeatBehavior.periodic(_ delay:)"
    @available(iOS, introduced: 17.0,
deprecated: 100000.0, renamed:
"SymbolEffectOptions.RepeatBehavior.periodic(_ delay:)"
    @available(tvOS, introduced: 17.0,
deprecated: 100000.0, renamed:
"SymbolEffectOptions.RepeatBehavior.periodic(_ delay:)"
    @available(watchOS, introduced: 10.0,
deprecated: 100000.0, renamed:
"SymbolEffectOptions.RepeatBehavior.periodic(_ delay:)"

```

```

dic(_:delay:))
    @available(visionOS, introduced: 1.0,
deprecated: 100000.0, renamed:
"SymbolEffectOptions.RepeatBehavior.periodic(_:delay:))"
    public func `repeat`(_ count: Int?)
-> SymbolEffectOptions

    /// A set of symbol effect options
    that prefers to repeat indefinitely.
    @available(macOS, introduced: 14.0,
deprecated: 100000.0, renamed:
"SymbolEffectOptions.RepeatBehavior.periodic")
    @available(iOS, introduced: 17.0,
deprecated: 100000.0, renamed:
"SymbolEffectOptions.RepeatBehavior.periodic")
    @available(tvOS, introduced: 17.0,
deprecated: 100000.0, renamed:
"SymbolEffectOptions.RepeatBehavior.periodic")
    @available(watchOS, introduced: 10.0,
deprecated: 100000.0, renamed:
"SymbolEffectOptions.RepeatBehavior.periodic")
    @available(visionOS, introduced: 1.0,
deprecated: 100000.0, renamed:
"SymbolEffectOptions.RepeatBehavior.periodic")
    public static var repeating:
SymbolEffectOptions { get }

```

```

    /// Returns a copy of the options
    that prefers to repeat indefinitely.
    @available(macOS, introduced: 14.0,
deprecated: 100000.0, renamed:
"SymbolEffectOptions.RepeatBehavior.periodic")
    @available(iOS, introduced: 17.0,
deprecated: 100000.0, renamed:
"SymbolEffectOptions.RepeatBehavior.periodic")
    @available(tvOS, introduced: 17.0,
deprecated: 100000.0, renamed:
"SymbolEffectOptions.RepeatBehavior.periodic")
    @available(watchOS, introduced: 10.0,
deprecated: 100000.0, renamed:
"SymbolEffectOptions.RepeatBehavior.periodic")
    @available(visionOS, introduced: 1.0,
deprecated: 100000.0, renamed:
"SymbolEffectOptions.RepeatBehavior.periodic")
    public var repeating:
SymbolEffectOptions { get }

    /// A set of symbol effect options
    that prefers not to repeat.
    public static var nonRepeating:
SymbolEffectOptions { get }

    /// Returns a copy of the options
    that prefers not to repeat.
    public var nonRepeating:

```



```
SymbolEffectOptions { get }
```

```
    /// Hashes the essential components
of this value by feeding them into the
    /// given hasher.
    ///
    /// Implement this method to conform
to the `Hashable` protocol. The
    /// components used for hashing must
be the same as the components compared
    /// in your type's `==` operator
implementation. Call `hasher.combine(_)`
    /// with each of these components.
    ///
    /// - Important: In your
implementation of `hash(into:)`,
    /// don't call `finalize()` on the
`hasher` instance provided,
    /// or replace it with a different
instance.
    /// Doing so may become a compile-
time error in the future.
    ///
    /// - Parameter hasher: The hasher to
use when combining the components
    /// of this instance.
    public func hash(into hasher: inout
Hasher)
```

```
    /// Returns a Boolean value
indicating whether two values are equal.
    ///
    /// Equality is the inverse of
```

inequality. For any values `a` and `b`,  
 /// `a == b` implies that `a != b` is  
 `false`.

///  
 /// - Parameters:  
 /// - lhs: A value to compare.  
 /// - rhs: Another value to  
compare.

public static func == (a:  
SymbolEffectOptions, b:  
SymbolEffectOptions) -> Bool

/// The hash value.  
 ///  
 /// Hash values are not guaranteed to  
be equal across different executions of  
 /// your program. Do not save hash  
values to use during a future execution.

///  
 /// - Important: `hashValue` is  
deprecated as a `Hashable` requirement.  
To

/// conform to `Hashable`,  
implement the `hash(into:)` requirement  
instead.

/// The compiler provides an  
implementation for `hashValue` for you.

public var hashValue: Int { get }  
}

extension SymbolEffectOptions {

/// The behavior to use when

requesting any repetition on a  
`SymbolEffect`.

```
@available(macOS 15.0, iOS 18.0, tvOS  
18.0, watchOS 11.0, visionOS 2.0, *)
```

```
public struct RepeatBehavior {
```

```
    /// A repeat behavior that  
    prefers to repeat indefinitely using  
    periodic animations.
```

```
    /// Periodic animations play the  
    effect at regular intervals starting and  
    stopping each time.
```

```
    ///
```

```
    /// – Returns: A new behavior  
    that prefers to repeat indefinitely using  
    periodic animation.
```

```
    public static var periodic:  
    SymbolEffectOptions.RepeatBehavior {  
    get }
```

```
    /// A repeat behavior with a  
    preferred play count and delay using  
    periodic animations.
```

```
    /// Periodic animations play the  
    effect at regular intervals starting and  
    stopping each time.
```

```
    ///
```

```
    /// – Parameter count: The  
    preferred number of times to play the  
    /// effect, or nil to request  
    it play indefinitely. Very
```

```
    /// large or small values may  
    be clamped.
```

```

        ///
        /// - Parameter delay: The
preferred delay between repetitions,
        /// in seconds, or nil to
request the default delay.
        ///
        /// - Returns: A new behavior
with the preferred
        /// play count and delay using
periodic animations.
        public static func periodic(_
count: Int? = nil, delay: Double? = nil)
-> SymbolEffectOptions.RepeatBehavior

        /// A repeat behavior that
prefers to repeat indefinitely, using
continuous animations if available.
        /// Continuous animations have an
intro, a body that runs as long as the
effect is enabled, and an outro.
        /// If available these animations
provide a smoother animation when an
effect repeats indefinitely.
        ///
        /// - Returns: A new behavior
that prefers to repeat indefinitely with
continuous animations.
        public static var continuous:
SymbolEffectOptions.RepeatBehavior {
get }
    }

    /// Creates a set of symbol effect

```

options that repeats with a preferred behavior.

```
    ///
    /// - Parameter behavior: The
    preferred behavior when the effect is
    repeated.
    ///
    /// - Returns: A new set of symbol
    effect options with the preferred
    /// repeat behavior.
    @available(macOS 15.0, iOS 18.0, tvOS
    18.0, watchOS 11.0, visionOS 2.0, *)
    public func `repeat`(_ behavior:
    SymbolEffectOptions.RepeatBehavior) ->
    SymbolEffectOptions
```

/// Sets the preferred repeat behavior.

```
    ///
    /// - Parameter behavior: The
    preferred behavior when the effect is
    repeated.
    ///
    /// - Returns: A new set of symbol
    effect options with the preferred
    /// repeat behavior.
    @available(macOS 15.0, iOS 18.0, tvOS
    18.0, watchOS 11.0, visionOS 2.0, *)
    public static func `repeat`(_
    behavior:
    SymbolEffectOptions.RepeatBehavior) ->
    SymbolEffectOptions
}
```

```
/// A symbol effect that animates a
symbol in or out.
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
public protocol TransitionSymbolEffect {
}
```

```
/// A symbol effect that applies the
Variable Color
/// animation to symbol images.
///
/// The Variable Color animation replaces
the opacity of variable
/// layers in the symbol by a possibly
repeating pattern that moves
/// up and possibly back down the
variable layers. It has no effect
/// for non-variable color symbol images.
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
public struct VariableColorSymbolEffect :
SymbolEffect {
```

```
    /// Returns a copy of the effect
    requesting that the Variable Color
    /// animation play in reverse each
    time it repeats.
```

```
    public var reversing:
VariableColorSymbolEffect { get }
```

```
    /// Returns a copy of the effect
    requesting that the Variable Color
```

```

    /// animation not play in reverse
    each time it repeats.
    public var nonReversing:
VariableColorSymbolEffect { get }

    /// Returns a copy of the effect
    requesting that the Variable Color
    /// animation applies its Cumulative
    variant, where each successive
    /// variable layer is enabled and
    stays enabled until the end of
    /// the animation cycle. This cancels
    the `iterative` variant.
    public var cumulative:
VariableColorSymbolEffect { get }

    /// Returns a copy of the effect
    requesting that the Variable Color
    /// animation applies its Iterative
    variant, where each successive
    /// variable layer is active for a
    short period of time and then
    /// inactive until the animation
    cycle repeats. This cancels the
    /// `cumulative` variant.
    public var iterative:
VariableColorSymbolEffect { get }

    /// Returns a copy of the effect
    requesting that the Variable
    /// Color animation hide inactive
    layers completely, rather than
    /// drawing with reduced (but non-

```

```
zero) opacity.  
    public var hideInactiveLayers:  
VariableColorSymbolEffect { get }  
  
    /// Returns a copy of the effect  
    requesting that the Variable Color  
    /// animation draw inactive layers  
    with reduced (but non-zero)  
    /// opacity.  
    public var dimInactiveLayers:  
VariableColorSymbolEffect { get }  
  
    /// The configuration for the effect.  
    public var configuration:  
SymbolEffectConfiguration { get }  
  
    /// Hashes the essential components  
    of this value by feeding them into the  
    /// given hasher.  
    ///  
    /// Implement this method to conform  
    to the `Hashable` protocol. The  
    /// components used for hashing must  
    be the same as the components compared  
    /// in your type's `==` operator  
    implementation. Call `hasher.combine(_)`  
    /// with each of these components.  
    ///  
    /// - Important: In your  
    implementation of `hash(into:)`  
    ///    don't call `finalize()` on the  
    `hasher` instance provided,  
    ///    or replace it with a different
```



instance.

```
/// Doing so may become a compile-  
time error in the future.
```

```
///  
/// - Parameter hasher: The hasher to  
use when combining the components  
/// of this instance.
```

```
public func hash(into hasher: inout  
Hasher)
```

```
/// Returns a Boolean value  
indicating whether two values are equal.
```

```
///  
/// Equality is the inverse of  
inequality. For any values `a` and `b`,  
/// `a == b` implies that `a != b` is  
`false`.
```

```
///  
/// - Parameters:  
/// - lhs: A value to compare.  
/// - rhs: Another value to  
compare.
```

```
public static func == (a:  
VariableColorSymbolEffect, b:  
VariableColorSymbolEffect) -> Bool
```

```
/// The hash value.  
///  
/// Hash values are not guaranteed to  
be equal across different executions of  
/// your program. Do not save hash  
values to use during a future execution.  
///
```

```
    /// - Important: `hashValue` is
deprecatd as a `Hashable` requirement.
To
```

```
    /// conform to `Hashable`,
implement the `hash(into:)` requirement
instead.
```

```
    /// The compiler provides an
implementation for `hashValue` for you.
```

```
    public var hashValue: Int { get }
}
```

```
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
extension VariableColorSymbolEffect :
IndefiniteSymbolEffect {
}
```

```
@available(macOS 14.0, iOS 17.0, tvOS
17.0, watchOS 10.0, visionOS 1.0, *)
extension VariableColorSymbolEffect :
DiscreteSymbolEffect {
}
```

```
/// A symbol effect that applies the
Wiggle animation to symbol images.
```

```
///
```

```
/// The Wiggle animation applies a
transitory translation or rotation effect
/// to the symbol.
```

```
@available(macOS 15.0, iOS 18.0, tvOS
18.0, watchOS 11.0, visionOS 2.0, *)
public struct WiggleSymbolEffect :
SymbolEffect {
```

```
    /// Returns a copy of the effect  
    requesting an animation that  
    /// rotates back and forth, starting  
    by rotating clockwise.  
    public var clockwise:  
WiggleSymbolEffect { get }
```

```
    /// Returns a copy of the effect  
    requesting an animation that  
    /// rotates back and forth, starting  
    by rotating counter-clockwise.  
    public var counterClockwise:  
WiggleSymbolEffect { get }
```

```
    /// Returns a copy of the effect  
    requesting an animation that  
    /// moves back and forth  
    horizontally, starting by moving left.  
    public var left: WiggleSymbolEffect {  
get }
```

```
    /// Returns a copy of the effect  
    requesting an animation that  
    /// moves back and forth  
    horizontally, starting by moving right.  
    public var right: WiggleSymbolEffect  
{ get }
```

```
    /// Returns a copy of the effect  
    requesting an animation that  
    /// moves back and forth vertically,  
    starting by moving up.
```

```
    public var up: WiggleSymbolEffect {
get }

    /// Returns a copy of the effect
    requesting an animation that
    /// moves back and forth vertically,
    starting by moving down.
    public var down: WiggleSymbolEffect {
get }

    /// Returns a copy of the effect
    requesting an animation that moves back
    and forth
    /// horizontally based on the current
    locale, starting by moving forward.
    public var forward:
WiggleSymbolEffect { get }

    /// Returns a copy of the effect
    requesting an animation that moves back
    and forth
    /// horizontally based on the current
    locale, starting by moving backward.
    public var backward:
WiggleSymbolEffect { get }

    /// Returns a copy of the effect
    requesting an animation that moves back
    and forth
    /// along an axis with the passed in
    angle.
    ///
    /// The angle is in degrees moving
```

```

clockwise from the positive x-axis.
    public func custom(angle: Double) ->
WiggleSymbolEffect

    /// Returns a copy of the effect
    requesting an animation that
    /// applies separately to each motion
    group.
    public var byLayer:
WiggleSymbolEffect { get }

    /// Returns a copy of the effect
    requesting an animation that
    /// applies to all motion groups
    simultaneously.
    public var wholeSymbol:
WiggleSymbolEffect { get }

    /// The configuration for the effect.
    public var configuration:
SymbolEffectConfiguration { get }

    /// Hashes the essential components
    of this value by feeding them into the
    /// given hasher.
    ///
    /// Implement this method to conform
    to the `Hashable` protocol. The
    /// components used for hashing must
    be the same as the components compared
    /// in your type's `==` operator
    implementation. Call `hasher.combine(_)`
    /// with each of these components.

```

```

    ///
    /// - Important: In your
implementation of `hash(into:)`,
    /// don't call `finalize()` on the
`hasher` instance provided,
    /// or replace it with a different
instance.
    /// Doing so may become a compile-
time error in the future.
    ///
    /// - Parameter hasher: The hasher to
use when combining the components
    /// of this instance.
    public func hash(into hasher: inout
Hasher)

```

```

    /// Returns a Boolean value
indicating whether two values are equal.
    ///
    /// Equality is the inverse of
inequality. For any values `a` and `b`,
    /// `a == b` implies that `a != b` is
`false`.

```

```

    ///
    /// - Parameters:
    /// - lhs: A value to compare.
    /// - rhs: Another value to
compare.

```

```

    public static func == (a:
WiggleSymbolEffect, b:
WiggleSymbolEffect) -> Bool

```

```

    /// The hash value.

```

```
    ///
    /// Hash values are not guaranteed to
    be equal across different executions of
    /// your program. Do not save hash
    values to use during a future execution.
    ///
    /// - Important: `hashCode` is
    deprecated as a `Hashable` requirement.
    To
        /// conform to `Hashable`,
    implement the `hash(into)` requirement
    instead.
        /// The compiler provides an
    implementation for `hashCode` for you.
    public var hashCode: Int { get }
}
```

```
@available(macOS 15.0, iOS 18.0, tvOS
18.0, watchOS 11.0, visionOS 2.0, *)
extension WiggleSymbolEffect :
IndefiniteSymbolEffect {
}
```

```
@available(macOS 15.0, iOS 18.0, tvOS
18.0, watchOS 11.0, visionOS 2.0, *)
extension WiggleSymbolEffect :
DiscreteSymbolEffect {
}
```