

[EventKit](#) / [EKRecurrenceRule](#)

Class

EKRecurrenceRule

A class that describes the pattern for a recurring event.

iOS 4.0+ | iPadOS 4.0+ | Mac Catalyst 13.1+ | macOS 10.8+ | visionOS 1.0+ | watchOS 2.0+

```
class EKRecurrenceRule
```

Mentioned in

 Creating a recurring event

Overview

After you create a recurrence rule, assign it to an event with the method of [EKEvent](#).

Recurrence rules can have an end, represented by an [EKRecurrenceEnd](#) object. The end can be based on a specific date or a maximum number of occurrences.

Note

It is currently not possible to directly modify an `EKRecurrenceRule` or any of its properties. This functionality is achieved by creating a new `EKRecurrenceRule` and setting an event or reminder to use the newly created rule.

Topics

Creating a Basic Recurrence Rule

enum EKSpan

An object that indicates whether modifications should apply to a single event or all future events of a recurring event.

init(recurrenceWith: EKRecurrenceFrequency, interval: Int, end: EKRecurrenceEnd?)

Initializes and returns a simple recurrence rule with a given frequency, interval, and end.

Creating a Complex Recurrence Rule

init(recurrenceWith: EKRecurrenceFrequency, interval: Int, daysOfTheWeek: [EKRecurrenceDayOfWeek]?, daysOfTheMonth: [NSNumber]?, monthsOfTheYear: [NSNumber]?, weeksOfTheYear: [NSNumber]?, daysOfTheYear: [NSNumber]?, setPositions: [NSNumber]?, end: EKRecurrenceEnd?)

Initializes and returns a recurrence rule with a given frequency and additional scheduling information.

Accessing Recurrence Rule Properties

enum EKRecurrenceFrequency

The frequency for recurrence rules.

var calendarIdentifier: String

The identifier for the recurrence rule's calendar.

var recurrenceEnd: EKRecurrenceEnd?

Indicates when the recurrence rule ends.

var frequency: EKRecurrenceFrequency

The frequency of the recurrence rule.

var interval: Int

Specifies how often the recurrence rule repeats over the unit of time indicated by its frequency.

var firstDayOfTheWeek: Int

Indicates which day of the week the recurrence rule treats as the first day of the week.

```
var daysOfTheWeek: [EKRecurrenceDayOfWeek]?
```

The days of the week associated with the recurrence rule, as an array of `EKRecurrenceDayOfWeek` objects.

```
var daysOfTheMonth: [NSNumber]?
```

The days of the month associated with the recurrence rule, as an array of `NSNumber` objects.

```
var daysOfTheYear: [NSNumber]?
```

The days of the year associated with the recurrence rule, as an array of `NSNumber` objects.

```
var weeksOfTheYear: [NSNumber]?
```

The weeks of the year associated with the recurrence rule, as an array of `NSNumber` objects.

```
var monthsOfTheYear: [NSNumber]?
```

The months of the year associated with the recurrence rule, as an array of `NSNumber` objects.

```
var setPositions: [NSNumber]?
```

An array of ordinal numbers that filters which recurrences to include in the recurrence rule's frequency.

```
func EK_LOSE_FRACTIONAL_SECONDS_DO_NOT_USE()
```

A deprecated function.

Deprecated

Relationships

Inherits From

`EKObject`

Conforms To

`CVarArg`

`CustomDebugStringConvertible`

`CustomStringConvertible`

`Equatable`

`Hashable`

`NSCopying`

See Also

Recurrence

📄 [Creating a recurring event](#)

Set up an event or reminder that repeats.

`class EKRecurrenceDayOfWeek`

A class that represents the day of the week.

`class EKRecurrenceEnd`

A class that defines the end of a recurrence rule.