Class

NSPersistentCloudKitContainer

A container that encapsulates the Core Data stack in your app, and mirrors select persistent stores to a CloudKit private database.

iOS 13.0+ | iPadOS 13.0+ | Mac Catalyst 13.1+ | macOS 10.15+ | tvOS 13.0+ | visionOS 1.0+ | watchOS 6.0+

```
class NSPersistentCloudKitContainer
```

Mentioned in

- Setting Up Core Data with CloudKit
- Mirroring a Core Data store with CloudKit
- Reading CloudKit Records for Core Data

Overview

`NSPersistentCloudKitContainer` is a subclass of `NSPersistentContainer` capable of managing both CloudKit-backed and noncloud stores.

By default, `NSPersistentCloudKitContainer` contains a single store description, which Core Data assigns to the first CloudKit container identifier in an app's entitlements. Use `NSPersistentCloudKitContainerOptions` to customize this behavior or create additional store descriptions with backing by different containers.

For more information about setting up multiple stores, see Setting Up Core Data with CloudKit.

Topics

Checking Permissions

`func canUpdateRecord(forManagedObjectWith: NSManagedObjectID) -> Bool`

Returns a Boolean value that indicates whether the user can modify the managed object's underlying CloudKit record.

`func canDeleteRecord(forManagedObjectWith: NSManagedObjectID) -> Bool`

Returns a Boolean value that indicates whether the user can delete the managed object's underlying CloudKit record.

`func canModifyManagedObjects(in: NSPersistentStore) -> Bool`

Returns a Boolean value that indicates whether the user can modify the specified persistent store.

Sharing Objects

Accepting Share Invitations in a SwiftUI App

Adapt your app to use UIKit's application and scene delegates so it can process CloudKit share invitations.

Promoting Your Schema

`func initializeCloudKitSchema(options: NSPersistentCloudKitContainerSchemaInitializationOptions) throws`

Creates the CloudKit schema for all stores in the container that manage a CloudKit database.

`struct NSPersistentCloudKitContainerSchemaInitializationOptions`

Options that control the behavior when promoting the container's schema to CloudKit.

Monitoring Container Events

`class Event`

An object that represents activity in a persistent CloudKit container.

`enum EventType`

The type of event in a persistent CloudKit container, either setup, import, or export.

`class NSPersistentCloudKitContainerEventRequest`

A request to fetch setup, import, or export events in a persistent CloudKit container.

`class` NSPersistentCloudKitContainerEventResult

The result of a request to fetch persistent CloudKit container events.

`class let` eventChangedNotification: NSNotification.Name

A notification that contains details about an event in a persistent CloudKit container.

`class let` eventNotificationUserInfoKey: String

The user info dictionary key for the persistent CloudKit container event.

Relationships

Inherits From

NSPersistentContainer

Conforms To

CVarArg
CustomDebugStringConvertible
CustomStringConvertible
Equatable
Hashable
NSObjectProtocol
Sendable
SendableMetatype

See Also

CloudKit mirroring

Mirroring a Core Data store with CloudKit

Back user interfaces with a local replica of a CloudKit private database.

{} Synchronizing a local store to the cloud

Share data between a user's devices and other iCloud users.

`class` `NSPersistentCloudKitContainerOptions`

An object that customizes how a store description aligns with a CloudKit database.

{} Sharing Core Data objects between iCloud users

Use Core Data and CloudKit to synchronize data between devices of an iCloud user and share data between different iCloud users.