

[SwiftData](#) / HistoryDescriptor

Structure

HistoryDescriptor

A type that describes the criteria, and, optionally, sort order, to use when fetching history data

iOS 18.0+ | iPadOS 18.0+ | Mac Catalyst 18.0+ | macOS 15.0+ | tvOS 18.0+ | visionOS 2.0+ | watchOS 11.0+ |

Swift 5.9+

```
struct HistoryDescriptor<TransactionType> where TransactionType : History  
Transaction
```

Topics

Creating a descriptor

`init(predicate: Predicate<TransactionType>?)`

Initializes a new history descriptor with the provided predicate.

`init(predicate: Predicate<TransactionType>?, sortBy: [SortDescriptor<
TransactionType>])`

Initializes a new history descriptor with the provided predicate and sort descriptor.

Getting the descriptor configuration

`var fetchLimit: UInt64`

The maximum number of transactions to retrieve from the model store's history.

`var predicate: Predicate<TransactionType>?`

The predicate used to initialize the history descriptor.

```
var sortBy: [SortDescriptor<TransactionType>]
```

The sort descriptor to use to sort the returned history data.

See Also

Model life cycle

```
class ModelContainer
```

An object that manages an app's schema and model storage configuration.

```
class ModelContext
```

An object that enables you to fetch, insert, and delete models, and save any changes to disk.

 [Fetching and filtering time-based model changes](#)

Track all inserts, updates, and deletes that occur in a data store and process them as a series of chronological transactions.

 [Deleting persistent data from your app](#)

Explore different ways to use SwiftData to delete persistent data.

 [Reverting data changes using the undo manager](#)

Automatically record data change operations that people perform in your SwiftUI app, and let them undo and redo those changes.

 [Syncing model data across a person's devices](#)

Add the required capabilities and define a compatible schema to enable SwiftData to automatically sync your app's model data using iCloud.

 [Concurrency support](#)

Types you use to access model attributes and perform storage-related tasks in a safe and isolated way.