Documentation Language: Swift

AppKit / NSArrayController

Class

NSArrayController

A bindings-compatible controller that manages a collection of objects.

macOS

```
class NSArrayController
```

Overview

Typically the collection that an `NSArrayController` manages is an array, however, if the controller manages a relationship of a managed object (see `NSManagedObject`) the collection may be a set. `NSArrayController` provides selection management and sorting capabilities.

Topics

Managing Sort Descriptors

`var sortDescriptors: [NSSortDescriptor]`

An array of sort descriptor objects, used by the receiver to arrange its content.

Arranging Objects

`func arrange([Any]) -> [Any]`

Returns a given array, appropriately sorted and filtered.

`var arrangedObjects: Any`

An array containing the receiver’s content objects arranged using `arrange(_:)`.

```
func rearrangeObjects()
```

Triggers filtering of the receiver’s content.

Managing Content

```
func add(Any?)
```

Creates and adds a new object to the receiver’s content and arranged objects.

Selection Attributes

```
var avoidsEmptySelection: Bool
```

A Boolean value that indicates whether the receiver requires that the content array attempt to maintain a selection

```
var preservesSelection: Bool
```

A Boolean value that indicates whether the receiver will attempt to preserve the current selection when the content changes

```
var alwaysUsesMultipleValuesMarker: Bool
```

A Boolean value that indicates whether the receiver always returns the multiple values marker when multiple objects are selected

Managing selections

```
var selectionIndex: Int
```

The index of the first object in the receiver’s selection

```
func setSelectionIndex(Int) -> Bool
```

Sets the receiver’s selection to the given index, and returns a Boolean value that indicates whether the selection was changed.

```
var selectsInsertedObjects: Bool
```

A Boolean value that indicates whether the receiver automatically selects inserted objects

```
func setSelectionIndexes(IndexSet) -> Bool
```

Sets the receiver’s selection indexes and returns a Boolean value that indicates whether the selection changed.

```
var selectionIndexes: IndexSet
```

An index set containing the indexes of the receiver’s currently selected objects in the content array

`func addSelectionIndexes(IndexSet) -> Bool`

Adds the objects at the specified indexes in the receiver’s content array to the current selection.

`func removeSelectionIndexes(IndexSet) -> Bool`

Removes the object as the specified indexes from the receiver’s current selection.

`func setSelectedObjects([Any]) -> Bool`

Sets the specified objects as the receiver’s current selection.

`var selectedObjects: [Any]!`

An array containing the receiver’s selected objects

`func addSelectedObjects([Any]) -> Bool`

Adds the specified objects from the receiver’s content array to the current selection.

`func removeSelectedObjects([Any]) -> Bool`

Removes the specified objects from the receiver’s current selection.

`func selectNext(Any?)`

Selects the next object, relative to the current selection, in the receiver’s arranged content.

`var canSelectNext: Bool`

A Boolean value indicating whether the next object, relative to the current selection, in the receiver’s content array can be selected

`func selectPrevious(Any?)`

Selects the previous object, relative to the current selection, in the receiver’s arranged content.

`var canSelectPrevious: Bool`

A Boolean value indicating whether the previous object, relative to the current selection, in the receiver’s content array can be selected

Inserting

`var canInsert: Bool`

Returns a Boolean value that indicates whether an object can be inserted into the receiver’s content collection.

```
func insert(Any?)
```

Creates a new object and inserts it into the receiver’s content array.

Adding and Removing Objects

```
func addObject(Any)
```

Adds `object` to the receiver’s content collection and the arranged objects array.

```
func add(contentsOf: [Any])
```

Adds `objects` to the receiver’s content collection.

```
func insert(Any, atArrangedObjectIndex: Int)
```

Inserts `object` into the receiver’s arranged objects array at the location specified by `index`, and adds it to the receiver’s content collection.

```
func insert(contentsOf: [Any], atArrangedObjectIndexes: IndexSet)
```

Inserts `objects` into the receiver’s arranged objects array at the locations specified in `indexes`, and adds it to the receiver’s content collection.

```
func remove(atArrangedObjectIndex: Int)
```

Removes the object at the specified `index` in the receiver’s arranged objects from the receiver’s content array.

```
func remove(atArrangedObjectIndexes: IndexSet)
```

Removes the objects at the specified `indexes` in the receiver’s arranged objects from the content array.

```
func remove(Any?)
```

Removes the receiver’s selected objects from the content collection.

```
func removeObject(Any)
```

Removes `object` from the receiver’s content collection.

```
func remove(contentsOf: [Any])
```

Removes `objects` from the receiver’s content collection.

Filtering Content

```
var clearsFilterPredicateOnInsertion: Bool
```

A Boolean value that indicates whether the receiver automatically clears an existing filter predicate when new items are inserted or added to the content

```
var filterPredicate: NSPredicate?
```

A predicate used by the receiver to filter the array controller contents

Automatic Content Rearranging

```
var automaticallyRearrangesObjects: Bool
```

A Boolean that indicates if the receiver automatically rearranges its content to correspond to the current sort descriptors and filter predicates

```
var automaticRearrangementKeyPaths: [String]?
```

An array of key paths that trigger automatic content sorting or filtering

```
func didChangeArrangementCriteria()
```

Invoked when any criteria for arranging objects change.

Relationships

Inherits From

NSObjectController

Inherited By

NSDictionaryController

Conforms To

CVarArg
CustomDebugStringConvertible
CustomStringConvertible
Equatable
Hashable
NSCoding
NSEditor
NSEditorRegistration
NSObjectProtocol
Sendable

```
SendableMetatype
```