Documentation   Language: Swift

Foundation / PropertyListSerialization

Class

PropertyListSerialization

An object that converts between a property list and one of several serialized representations.

iOS 2.0+ | iPadOS 2.0+ | Mac Catalyst 13.0+ | macOS 10.0+ | tvOS 9.0+ | visionOS 1.0+ | watchOS 2.0+

```
class PropertyListSerialization
```

Overview

The `PropertyListSerialization` class provides methods that convert a property list to and from several serialized formats. A property list is itself an array or dictionary that contains only `NSData`, `NSString`, `NSArray`, `NSDictionary`, `NSDate`, and `NSNumber` objects.

Property list objects are toll-free bridged with their respective Core Foundation types (`CFData`, `CFString`, and so on). See Toll-Free Bridging for more information on toll-free bridging.

Topics

Serializing a Property List

```
class func data(fromPropertyList: Any, format: PropertyList
Serialization.PropertyListFormat, options: PropertyListSerialization.
WriteOptions) throws -> Data
```

Returns an `NSData` object containing a given property list in a specified format.

```
class func writePropertyList(Any, to: OutputStream, format: PropertyListSerialization.PropertyListFormat, options: PropertyListSerialization.WriteOptions, error: NSErrorPointer) -> Int
```

Writes a property list to the specified stream.

```
typealias WriteOptions
```

Deserializing a Property List

```
class func propertyList(from: Data, options: PropertyListSerialization.ReadOptions, format: UnsafeMutablePointer<PropertyListSerialization.PropertyListFormat>?) throws -> Any
```

Creates and returns a property list from the specified data.

```
class func propertyList(with: InputStream, options: PropertyListSerialization.ReadOptions, format: UnsafeMutablePointer<PropertyListSerialization.PropertyListFormat>?) throws -> Any
```

Creates and returns a property list by reading from the specified stream.

Validating a Property List

```
class func propertyList(Any, isValidFor: PropertyListSerialization.PropertyListFormat) -> Bool
```

Returns a Boolean value that indicates whether a given property list is valid for a given format.

Obsolete Methods

~~class func dataFromPropertyList(Any, format: PropertyListSerialization.PropertyListFormat, errorDescription: UnsafeMutablePointer<NSString?>?) -> Data?~~

This method is obsolete and will be deprecated soon.

Deprecated

~~class func propertyListFromData(Data, mutabilityOption: PropertyListSerialization.MutabilityOptions, format: UnsafeMutablePointer<PropertyListSerialization.PropertyListFormat>?, errorDescription: UnsafeMutablePointer<NSString?>?) -> Any?~~

This method is deprecated. Use `data(fromPropertyList:format:options:)` instead.

Deprecated

Constants

`struct MutabilityOptions`

These constants specify mutability options in property lists.

`enum PropertyListFormat`

These constants are used to specify a property list serialization format.

`typealias ReadOptions`

The only read options supported are described in `PropertyListSerialization.MutabilityOptions`.

Error Codes

`var NSPropertyListReadCorruptError: Int`

Parsing of the property list failed.

`var NSPropertyListReadUnknownVersionError: Int`

The version number of the property list cannot be determined.

`var NSPropertyListReadStreamError: Int`

Reading of the property list failed.

`var NSPropertyListWriteStreamError: Int`

Writing to the property list failed.

`var NSPropertyListWriteInvalidError: Int`

Writing failed because of an invalid property list object, or an invalid property list type was specified.

`var NSPropertyListErrorMinimum: Int`

The start of the range of error codes reserved for property list errors.

`var NSPropertyListErrorMaximum: Int`

The end of the range of error codes reserved for property list errors.

Relationships

Inherits From

`NSObject`

Conforms To

`CVarArg`
`CustomDebugStringConvertible`
`CustomStringConvertible`
`Equatable`
`Hashable`
`NSObjectProtocol`

See Also

Property Lists

`class PropertyListEncoder`

An object that encodes instances of data types to a property list.

`class PropertyListDecoder`

An object that decodes instances of data types from a property list.