Core Data Constants Reference

Cocoa > Objective-C Language

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Core Data Constants Reference

Framework:	CoreData/CoreData.h
Declared in	CoreDataDefines.h CoreDataErrors.h

Overview

This document describes the constants defined in the Core Data framework and not described in a document for an individual class.

Constants

Error User Info Keys

Keys in the user info dictionary in errors Core Data creates.

```
const NSString *NSDetailedErrorsKey;
const NSString *NSValidationObjectErrorKey;
const NSString *NSValidationKeyErrorKey;
const NSString *NSValidationPredicateErrorKey;
const NSString *NSValidationValueErrorKey;
const NSString *NSAffectedStoresErrorKey;
const NSString *NSAffectedObjectsErrorKey;
```

Constants

`NSDetailedErrorsKey`

If multiple validation errors occur in one operation, they are collected in an array and added with this key to the “top-level error” of the operation.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSValidationObjectErrorKey`

Key for the object that failed to validate for a validation error.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSValidationKeyErrorKey`

Key for the key that failed to validate for a validation error.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

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`NSValidationPredicateErrorKey`
: For predicate-based validation, key for the predicate for the condition that failed to validate.

  Available in Mac OS X v10.4 and later.

  Declared in `CoreDataErrors.h`.

`NSValidationValueErrorKey`
: If non-nil, the key for the value for the key that failed to validate for a validation error.

  Available in Mac OS X v10.4 and later.

  Declared in `CoreDataErrors.h`.

`NSAffectedStoresErrorKey`
: The key for stores prompting an error.

  Available in Mac OS X v10.4 and later.

  Declared in `CoreDataErrors.h`.

`NSAffectedObjectsErrorKey`
: The key for objects prompting an error.

  Available in Mac OS X v10.4 and later.

  Declared in `CoreDataErrors.h`.

Declared In
`CoreDataErrors.h`

Error Domain

Constant to identify the SQLite error domain.

```
const NSString *NSSQLiteErrorDomain;
```

Constants
`NSSQLiteErrorDomain`
: Domain for SQLite errors.

  The value of "code" corresponds to preexisting values in SQLite.

  Available in Mac OS X v10.5 and later.

  Declared in `CoreDataErrors.h`.

Declared In
`CoreDataErrors.h`

Validation Error Codes

Error codes related to validation.

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```
NSManagedObjectValidationError                  = 1550,
NSValidationMultipleErrorsError                 = 1560,
NSValidationMissingMandatoryPropertyError       = 1570,
NSValidationRelationshipLacksMinimumCountError  = 1580,
NSValidationRelationshipExceedsMaximumCountError = 1590,
NSValidationRelationshipDeniedDeleteError       = 1600,
NSValidationNumberTooLargeError                 = 1610,
NSValidationNumberTooSmallError                 = 1620,
NSValidationDateTooLateError                    = 1630,
NSValidationDateTooSoonError                    = 1640,
NSValidationInvalidDateError                    = 1650,
NSValidationStringTooLongError                  = 1660,
NSValidationStringTooShortError                 = 1670,
NSValidationStringPatternMatchingError          = 1680,
```

Constants

`NSManagedObjectValidationError`

Error code to denote a generic validation error.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSValidationMultipleErrorsError`

Error code to denote an error containing multiple validation errors.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSValidationMissingMandatoryPropertyError`

Error code for a non-optional property with a nil value.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSValidationRelationshipLacksMinimumCountError`

Error code to denote a to-many relationship with too few destination objects.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSValidationRelationshipExceedsMaximumCountError`

Error code to denote a bounded to-many relationship with too many destination objects.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSValidationRelationshipDeniedDeleteError`

Error code to denote some relationship with delete rule `NSDeleteRuleDeny` is non-empty.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSValidationNumberTooLargeError`

Error code to denote some numerical value is too large.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

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`NSValidationNumberTooSmallError`
Error code to denote some numerical value is too small.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSValidationDateTooLateError`
Error code to denote some date value is too late.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSValidationDateTooSoonError`
Error code to denote some date value is too soon.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSValidationInvalidDateError`
Error code to denote some date value fails to match date pattern.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSValidationStringTooLongError`
Error code to denote some string value is too long.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSValidationStringTooShortError`
Error code to denote some string value is too short.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSValidationStringPatternMatchingError`
Error code to denote some string value fails to match some pattern.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

Discussion
For additional error codes, including `NSValidationErrorMinimum` and `NSValidationErrorMaximum`, see `NSError`.

Declared In
`CoreDataErrors.h`

Object Graph Management Error Codes

These error codes specify Core Data errors related to object graph management.

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```
NSManagedObjectContextLockingError              = 132000,
NSPersistentStoreCoordinatorLockingError        = 132010,
NSManagedObjectReferentialIntegrityError        = 133000,
NSManagedObjectExternalRelationshipError        = 133010,
NSManagedObjectMergeError                       = 133020,
```

Constants

`NSManagedObjectContextLockingError`

Error code to denote an inability to acquire a lock in a managed object context.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSPersistentStoreCoordinatorLockingError`

Error code to denote an inability to acquire a lock in a persistent store.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSManagedObjectReferentialIntegrityError`

Error code to denote an attempt to fire a fault pointing to an object that does not exist.

The store is accessible, but the object corresponding to the fault cannot be found.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSManagedObjectExternalRelationshipError`

Error code to denote that an object being saved has a relationship containing an object from another store.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSManagedObjectMergeError`

Error code to denote that a merge policy failed—Core Data is unable to complete merging.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

Declared In

`CoreDataErrors.h`

Persistent Store Error Codes

Error codes related to persistent stores.

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```
NSPersistentStoreInvalidTypeError               = 134000,
NSPersistentStoreTypeMismatchError              = 134010,
NSPersistentStoreIncompatibleSchemaError        = 134020,
NSPersistentStoreSaveError                      = 134030,
NSPersistentStoreIncompleteSaveError            = 134040,
NSPersistentStoreOperationError                 = 134070,
NSPersistentStoreOpenError                      = 134080,
NSPersistentStoreTimeoutError                   = 134090,
NSPersistentStoreIncompatibleVersionHashError   = 134100,
```

Constants

`NSPersistentStoreInvalidTypeError`

Error code to denote an unknown persistent store type/format/version.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSPersistentStoreTypeMismatchError`

Error code returned by a persistent store coordinator if a store is accessed that does not match the specified type.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSPersistentStoreIncompatibleSchemaError`

Error code to denote that a persistent store returned an error for a save operation.

This code pertains to database level errors such as a missing table.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSPersistentStoreSaveError`

Error code to denote that a persistent store returned an error for a save operation.

This code pertains to errors such as permissions problems.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSPersistentStoreIncompleteSaveError`

Error code to denote that one or more of the stores returned an error during a save operations.

The stores or objects that failed are in the corresponding user info dictionary of the `NSError` object.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataErrors.h`.

`NSPersistentStoreOperationError`

Error code to denote that a persistent store operation failed.

Available in Mac OS X v10.5 and later.

Declared in `CoreDataErrors.h`.

`NSPersistentStoreOpenError`

Error code to denote an error occurred while attempting to open a persistent store.

Available in Mac OS X v10.5 and later.

Declared in `CoreDataErrors.h`.

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`NSPersistentStoreTimeoutError`
: Error code to denote that Core Data failed to connect to a persistent store within the time specified by `NSPersistentStoreTimeoutOption`.

  Available in Mac OS X v10.5 and later.

  Declared in `CoreDataErrors.h`.

`NSPersistentStoreIncompatibleVersionHashError`
: Error code to denote that entity version hashes in the store are incompatible with the current managed object model.

  Available in Mac OS X v10.5 and later.

  Declared in `CoreDataErrors.h`.

Declared In
`CoreDataErrors.h`

Migration Error Codes

Error codes related to store migration.

```
NSMigrationError                                = 134110,
NSMigrationCancelledError                       = 134120,
NSMigrationMissingSourceModelError              = 134130,
NSMigrationMissingMappingModelError             = 134140,
NSMigrationManagerSourceStoreError              = 134150,
NSMigrationManagerDestinationStoreError         = 134160,
NSEntityMigrationPolicyError                    = 134170,
```

Constants
`NSMigrationError`
: Error code to denote a general migration error.

  Available in Mac OS X v10.5 and later.

  Declared in `CoreDataErrors.h`.

`NSMigrationCancelledError`
: Error code to denote that migration failed due to manual cancellation.

  Available in Mac OS X v10.5 and later.

  Declared in `CoreDataErrors.h`.

`NSMigrationMissingSourceModelError`
: Error code to denote that migration failed due to a missing source data model.

  Available in Mac OS X v10.5 and later.

  Declared in `CoreDataErrors.h`.

`NSMigrationMissingMappingModelError`
: Error code to denote that migration failed due to a missing mapping model.

  Available in Mac OS X v10.5 and later.

  Declared in `CoreDataErrors.h`.

`NSMigrationManagerSourceStoreError`
: Error code to denote that migration failed due to a problem with the source data store.

  Available in Mac OS X v10.5 and later.

  Declared in `CoreDataErrors.h`.

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`NSMigrationManagerDestinationStoreError`
Error code to denote that migration failed due to a problem with the destination data store.

Available in Mac OS X v10.5 and later.

Declared in `CoreDataErrors.h`.

`NSEntityMigrationPolicyError`
Error code to denote that migration failed during processing of an entity migration policy.

Available in Mac OS X v10.5 and later.

Declared in `CoreDataErrors.h`.

Declared In
`CoreDataErrors.h`

General Error Codes

Error codes that denote a general error.

```
NSCoreDataError                                 = 134060,
NSSQLiteError                                   = 134180,
```

Constants
`NSCoreDataError`
Error code to denote a general Core Data error.

Available in Mac OS X v10.5 and later.

Declared in `CoreDataErrors.h`.

`NSSQLiteError`
Error code to denote a general SQLite error.

Available in Mac OS X v10.5 and later.

Declared in `CoreDataErrors.h`.

Declared In
`CoreDataErrors.h`

Core Data Version Number

Specifies the current Core Data version number.

```
COREDATA_EXTERN double NSCoreDataVersionNumber;
```

Constants
`NSCoreDataVersionNumber`
Specifies the version of Core Data available in the current process.

Available in Mac OS X v10.4 and later.

Declared in `CoreDataDefines.h`.

Discussion
See "Core Data Version Numbers" (page 13) for defined versions.

Declared In
`CoreDataDefines.h`

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Core Data Version Numbers

Specify Core Data version numbers.

```
#define NSCoreDataVersionNumber10_4       46.0
#define NSCoreDataVersionNumber10_4_3     77.0
```

Constants

`NSCoreDataVersionNumber10_4`

Specifies the Core Data version number released with Mac OS X v10.4.0.

Available in Mac OS X v10.5 and later.

Declared in `CoreDataDefines.h`.

`NSCoreDataVersionNumber10_4_3`

Specifies the Core Data version number released with Mac OS X v10.4.3.

Available in Mac OS X v10.5 and later.

Declared in `CoreDataDefines.h`.

Discussion

See "Core Data Version Number" (page 12) for the current version.

Declared In

`CoreDataDefines.h`

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Document Revision History

This table describes the changes to *Core Data Constants Reference*.

Date	Notes
2007-01-18	Updated for Mac OS X v10.5.
2006-05-23	First publication of this content as a separate document.

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