

## Defined Types

## NXAtom

**DECLARED IN**      objc/hashtable.h

## SYNOPSIS

```
typedef const char *NXAtom;
```

**DESCRIPTION** NXAtom is the type for a unique string. A unique string is a string that is allocated once and for all (that is, never deallocated) and that has only one representation. Unique strings can therefore be compared using the equality operator (==) rather than using **strcmp()**. A unique string should never be modified (and in fact some memory protection is done to ensure that it won't be modified). To more explicitly declare that the string has been made unique, this synonym of **const char \*** has been added.

**SEE ALSO** `NXUniqueString()`

## NXDefaultsVector

**DECLARED IN** defaults/defaults.h

## SYNOPSIS

```
typedef struct  NXDefault {
```

```
char *name;  
char *value;  
} NXDefaultsVector[1];
```

**DESCRIPTION** This structure is used by the functions **NXRegisterDefaults()** and **NXWriteDefaults()**. It provides a way to specify an open-ended list of default name/value pairs as an argument to these functions.

## NXExceptionRaiser

DECLARED IN objc/error.h

## SYNOPSIS

typedef void

```
NXExceptionRaiser(int code,
                  const void *data1,
                  const void *data2);
```

**DESCRIPTION** This type is used for the function that handles exceptions raised within an exception-handling domain. In NEXTSTEP, this function is by default **NXDefaultExceptionRaiser()**.

**SEE ALSO** `NXDefaultExceptionRaiser()`



SEE ALSO **NXCreateHashTable()**

**NXHashTablePrototype**

DECLARED IN      objc/hashtable.h

SYNOPSIS typedef struct {  
    unsigned (\***hash**)(const void \*info, const void \*data);  
    int (\***isEqual**)(const void \*info, const void \*data1, const void \*data2);  
    void (\***free**)(const void \*info, void \*data);  
    int **style**;  
} **NXHashTablePrototype**;

DESCRIPTION      This type is used as one of the arguments to **NXCreateHashTable()**. Its fields specify the functions to be used for hashing, comparing, and freeing data elements:

hash	Identifies the hashing function
isEqual	Identifies the comparison function
free	Identifies the function that frees a data element
style	Reserved for future use

SEE ALSO **NXCreateHashTable()**

**NXUncaughtExceptionHandler**

DECLARED IN      objc/error.h

SYNOPSIS typedef void  
**NXUncaughtExceptionHandler**(int *code*,  
    const void \**data1*,  
    const void \**data2*);

DESCRIPTION      This type is used for the function that handles exceptions raised outside of an exception-handling domain. In NEXTSTEP, this function can be set using **NXSetUncaughtExceptionHandler()**.

SEE ALSO **NXSetUncaughtExceptionHandler()**

**NXZone**

DECLARED IN      objc/zone.h

SYNOPSIS typedef struct \_NXZone {  
    void \*(\*realloc)(struct \_NXZone \*zonep, void \*ptr, size\_t size);  
    void \*(\*malloc)(struct \_NXZone \*zonep, size\_t size);  
    void (\*free)(struct \_NXZone \*zonep, void \*ptr);  
    void (\*destroy)(struct \_NXZone \*zonep);  
} **NXZone**;

DESCRIPTION      This structure is used to identify and manage memory zones. The fields of the structure are private and subject to change in future releases; they should not be directly accessed or

altered. Use **NXCreateZone()** or a similar function to establish a new zone.

SEE ALSO **NXCreateZone()** and **NXZoneMalloc()**

# Symbolic Constants

## List Constants

DECLARED IN objc/List.h

SYNOPSIS NX\_NOT\_IN\_LIST

DESCRIPTION This constant is returned by List's **indexOf:** method when it can't find the object it's passed anywhere in the List.

## NXStringTable Constants

DECLARED IN objc/NXStringTable.h

SYNOPSIS  
MAX\_NXSTRINGTABLE\_LENGTH 1024

DESCRIPTION This constant defines the maximum length for keys or values within an NXStringTable object.

## Zone Constants

DECLARED IN objc/zone.h

SYNOPSIS NX\_NOZONE (NXZone \*)0

DESCRIPTION This constant is used as a return value by **NXCreateChildZone()**, **NXZoneFromPtr()**, and other functions to indicate the absence of a zone.

# Global Variables

## Command Line Arguments

DECLARED IN defaults/defaults.h

SYNOPSIS extern int NXArgc;  
extern char \*\*NXArgv;

**DESCRIPTION** These global variables pass command-line arguments to a program when it begins executing. **NXArgc** is the number of command-line arguments the program was invoked with. **NXArgv** is a pointer to an array of character strings that contain the arguments, one per string.

## HashTable Prototypes

**DECLARED IN** objc/hashtable.h

**SYNOPSIS** const NXHashTablePrototype **NXPtrPrototype**;  
const NXHashTablePrototype **NXStrPrototype**;  
const NXHashTablePrototype **NXPtrStructKeyPrototype**;  
const NXHashTablePrototype **NXStrStructKeyPrototype**;

**DESCRIPTION** These global variables identify hash table prototypes suitable for use with **NXCreateHashTable()**. The first two are used for hash tables of pointers and strings, respectively. They use **NXNoEffectFree()** as the freeing function (see **NXHashTablePrototype**).

**NXPtrStructKeyPrototype** and **NXStrStructKeyPrototype** identify prototypes that are useful for hash tables where the key is the first element of a structure and is either a pointer or a string.

For example, **NXStrStructKeyPrototype** can be used to hash pointers to Example, where Example is:

```
typedef struct {
    char *key;
    int data1;
    ...
} Example
```

For **NXPtrStructKeyPrototype** and **NXStrStructKeyPrototype**, **NXReallyFree()** is used as the freeing function.

**SEE ALSO** **NXHashTablePrototype** and **NXCreateHashTable()**