

# Defined Types

## IXComparator

DECLARED IN btree/protocols.h

### SYNOPSIS

```
(const void *data1,
unsigned short length1,
const void *data2,
unsigned short length2,
const void *context);
```

typedef int **IXComparator**

**DESCRIPTION** The standard comparator function type. Used by IXBTree and other classes to check the functions they use to perform key comparisons.

## IXPosting

DECLARED IN btree/protocols.h

### SYNOPSIS

```
unsigned handle;
unsigned weight;
} IXPosting;
```

typedef struct IXPosting {

**DESCRIPTION** Used by classes such as IXPostingCursor to store a weighted reference. **handle** is the identifier, and **weight** is a value associated with the posting; though it's usually a rank of weight or importance, it can also be used to store other information, such as a hint.

## IXStoreErrorType

### SYNOPSIS

```
IX_NoError = IX_STOREUSERERRORBASE,
IX_InternalError,
IX_ArgumentError,
IX_QueryEvalError,
IX_QueryTypeError,
IX_QueryAttrError,
IX_QueryImplError,
IX_QueryYaccError,
IX_MemoryError,
IX_LockedError,
IX_MachineError,
IX_VersionError,
IX_DamagedError,
```

typedef enum IXStoreErrorType {

```

    IX_DuplicateError,
    IX_NotFoundError,
    IX_TooLargeError,
    IX_UnixErrorBase = IX_STOREUNIXERRBASE,
    IX_MachErrorBase = IX_STOREMACHERRBASE,
} IXStoreErrorType;

```

**DESCRIPTION** Used to specify exception codes in the Indexing Kit. Where an exception can occur in a method, the method description details the meaning of the exception codes as they relate to that method. Here are their general meanings:

IX_NoError	No error
IX_InternalError	An error in the Indexing Kit's implementation
IX_ArgumentError	An invalid argument was passed to a routine
IX_QueryEvalError	A query was ill-formed or couldn't be evaluated
IX_QueryTypeError	A query contained an invalid type binding
IX_QueryAttrError	A query contained an invalid attribute reference
IX_QueryImplError	An error or missing feature in query evaluation
IX_QueryYaccError	A query was grammatically incorrect
IX_MemoryError	Insufficient memory available
IX_LockedError	The requested file or block handle is locked
IX_MachineError	The target store has an incompatible format
IX_VersionError	The target store is of an incompatible version
IX_DamagedError	The target store is damaged
IX_DuplicateError	An entry with the same identifier already exists
IX_NotFoundError	The entry couldn't be found
IX_TooLargeError	A value was too large, usually an IXBTree key
IX_UnixErrorBase	Unix <b>errno</b> added to this base value
IX_MachErrorBase	Mach <b>kern_return</b> added to this base value

## IXWeightingType

**DECLARED IN** indexing/IXAttributeParser.h

**SYNOPSIS** typedef enum {

```

    IX_NoWeighting = 0,
    IX_AbsoluteWeighting,
    IX_FrequencyWeighting,
    IX_PeculiarityWeighting
} IXWeightingType;

```

**DESCRIPTION** Used to define weighting strategies for IXAttributeParser. IX\_NoWeighting means all tokens have a weight of 0. IX\_AbsoluteWeighting means the weight of each token is its count in the sample. IX\_FrequencyWeighting gives the weight of a token by dividing its count in the sample by the total number of tokens in the sample. IX\_PeculiarityWeighting is frequency weighting with regard to some reference domain; a token's weight is the square root of its frequency within its sample divided by its frequency within the larger domain. IX\_PeculiarityWeighting is used to filter out domain specific noise; for example, the word "computer" in a set of documentation about computers isn't very relevant to a search, because it's assumed to occur quite often, but the word "grill" would probably be very unusual for such a topic.

# Symbolic Constants

## IXStore Constants

**DECLARED IN** store/protocols.h

**SYNOPSIS** IX\_ALLBLOCKS

**DESCRIPTION** Used as a convenience value for freeing or closing all blocks in an IXStore or IXStoreFile; for example, sending **closeBlock:** with IX\_ALLBLOCKS as the argument will result in all blocks opened by the receiving IXStore being closed.

**Note:** This is currently unimplemented; using IX\_ALLBLOCKS does nothing at this time.

## Indexing Kit Error Base Constants

**SYNOPSIS** IX\_STOREUSERERRBASE

IX\_STOREMACHERRBASE

IX\_STOREUNIXERRBASE

**DESCRIPTION** Used as base values for the defined type IXStoreErrorType.

# Global Variables

## IXStore Pasteboard Type

**DECLARED IN** store/protocols.h

**SYNOPSIS** NXAtom IXStorePboardType;

**DESCRIPTION** IXStorePboardType is the Pasteboard type for the entire contents of an IXStore, as used by IXStore's **getContents:andLength:** and **setContents:andLength:** methods.

## Indexing Pasteboard Types

**DECLARED IN** indexing/IXAttributeParser.h

**SYNOPSIS** NXAtom IXAttributeReaderPboardType;  
NXAtom IXFileDescriptionPboardType;

**DESCRIPTION** IXAttributeReaderPboardType indicates text in Attribute Reader Format. IXFileDescriptionPboardType indicates a file's description as generated by an IXFileFinder; a file description is usually generated by a filter service.