

# Defined Types

## IXComparator

DECLARED IN     btree/protocols.h

SYNOPSIS

typedef int **IXComparator**  
  
(const void \**data1*,  
unsigned short *length1*,  
const void \**data2*,  
unsigned short *length2*,  
const void \**context*);

**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

typedef struct IXPosting {  
    unsigned **handle**;  
    unsigned **weight**;  
} **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

typedef enum IXStoreErrorType {  
  
    **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**,

```

    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
    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

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

<b>DESCRIPTION</b>	Used as base values for the defined type IXStoreErrorType.
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# Global Variables

## IXStore Pasteboard Type

DECLARED IN `store/protocols.h`

## SYNOPSIS

<b>DESCRIPTION</b>	IXStorePboardType is the Pasteboard type for the entire contents of an IXStore, as used by IXStore's <b>getContents:andLength:</b> and <b>setContents:andLength:</b> methods.
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## Indexing Pasteboard Types

**DECLARED IN** `indexing/IXAttributeParser.h`

**SYNOPSIS** `NXAtom IXAttributeReaderPboardType;`  
`NXAtom IXFileDescriptionPboardType;`

<b>DESCRIPTION</b>	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.
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