# Hoot.Standard Reference

# **Table of Contents**

loot.St	andard Reference	. 6
Rapto	orDB Namespace	. 7
Glo	obal Class	. 7
	CompressBitmapBytes Field	. 7
	CompressDocumentOverKiloBytes Field	. 7
	DefaultStringKeySize Field	. 8
	FlushStorageFileImmediately Field	. 8
	FreeBitmapMemoryOnSave Field	. 8
	HighFrequencyKVDiskBlockSize Field	. 8
	PageItemCount Field	. 9
	SaveAsBinaryJSON Field	. 9
	SaveIndexToDiskTimerSeconds Field	. 9
	SplitStorageFilesMegaBytes Field	. 9
	UseLessMemoryStructures Field	10
Но	oot Class	10
	Hoot(String, String, Boolean) Constructor	10
	Hoot(String, String, Boolean, ITokenizer) Constructor	11
	Hoot(IHootConfig) Constructor	11
	Hoot(IHootConfig, ITokenizer) Constructor	12
	Hoot.DocumentCount Property	12
	Hoot.HootConfOptions Property	12
	Hoot.WordCount Property	13
	Hoot.Words Property	13
	Hoot.Fetch <t> Method</t>	13
	Hoot.FindDocumentFileNames Method	14
	Hoot.FindDocuments <t> Method</t>	14
	Hoot.FindRows Method	14
	Hoot.FreeMemory Method	15
	Hoot.Index (Int32, String, IHootFilter) Method	15
	Hoot.Index (Document, Boolean, IHootFilter) Method	15
	Hoot.Index (Int32, String) Method	16
	Hoot.Index (Document, Boolean) Method	16

	Hoot.IsIndexed Method	. 17
	Hoot.OptimizeIndex Method	. 17
	Hoot.Query Method	. 17
	Hoot.RemoveDocument (Int32) Method	. 18
	Hoot.RemoveDocument (String) Method	. 18
	Hoot.Save Method	. 18
	Hoot.Shutdown Method	. 19
F	HootConfig Class	. 19
	HootConfig Constructor	. 19
	HootConfig.DocMode Property	. 19
	HootConfig.FileName Property	. 20
	HootConfig.IgnoreNumerics Property	. 20
	HootConfig.IndexPath Property	. 20
	HootConfig.UseStopList Property	. 21
t	okenizer Class	. 21
	tokenizer.GenerateWordFreq Method	. 21
	tokenizer.InitializeStopList Method	. 22
I	HootConfig Interface	. 22
	IHootConfig.DocMode Property	. 22
	IHootConfig.FileName Property	. 23
	IHootConfig.IgnoreNumerics Property	. 23
	IHootConfig.IndexPath Property	. 23
	IHootConfig.UseStopList Property	. 23
I	HootFilter Interface	. 24
	IHootFilter.FilterText Method	. 24
	IHootFilter.InitializeFilter Method	. 24
ľ	Tokenizer Interface	. 25
	ITokenizer.GenerateWordFreq Method	. 25
	ITokenizer.InitializeStopList Method	. 25
Rap	otorDB.Common Namespace	. 27
F	astDateTime Class	. 27
	FastDateTime.Now Property	. 27
	LocalUtcOffset Field	. 27
H	Helper Class	. 28

	Helper.CompareMemCmp Method	28
	Helper.GetBytes (String) Method	28
	Helper.GetBytes (Int16, Boolean) Method	29
	Helper.GetBytes (Int32, Boolean) Method	29
	Helper.GetBytes (Int64, Boolean) Method	29
	Helper.GetString Method	30
	Helper.ToInt16 (Byte(), Int32) Method	30
	Helper.ToInt16 (Byte(), Int32, Boolean) Method	31
	Helper.ToInt32 (Byte(), Int32, Boolean) Method	31
	Helper.ToInt32 (Byte(), Int32) Method	32
	Helper.ToInt64 (Byte(), Int32, Boolean) Method	32
	Helper.ToInt64 (Byte(), Int32) Method	32
	MurMur Field	33
Sa	afeDictionary <tkey, tvalue=""> Class</tkey,>	33
	SafeDictionary <tkey, tvalue=""> Constructor</tkey,>	34
	SafeDictionary <tkey, tvalue="">(Int32) Constructor</tkey,>	34
	SafeDictionary <tkey, tvalue="">.Item Property</tkey,>	34
	SafeDictionary <tkey, tvalue="">.Add Method</tkey,>	34
	SafeDictionary <tkey, tvalue="">.Clear Method</tkey,>	35
	SafeDictionary <tkey, tvalue="">.Count Method</tkey,>	35
	SafeDictionary <tkey, tvalue="">.GetEnumerator Method</tkey,>	35
	SafeDictionary <tkey, tvalue="">.GetValue Method</tkey,>	36
	SafeDictionary <tkey, tvalue="">.Keys Method</tkey,>	36
	SafeDictionary <tkey, tvalue="">.Remove Method</tkey,>	36
	SafeDictionary <tkey, tvalue="">.TryGetValue Method</tkey,>	37
Sa	afeSortedList <t, v=""> Class</t,>	37
	SafeSortedList <t, v="">.Item Property</t,>	38
	SafeSortedList <t, v="">.Add Method</t,>	38
	SafeSortedList <t, v="">.Clear Method</t,>	38
	SafeSortedList <t, v="">.Count Method</t,>	39
	SafeSortedList <t, v="">.GetEnumerator Method</t,>	39
	SafeSortedList <t, v="">.GetKey Method</t,>	39
	SafeSortedList <t, v="">.GetValue (Int32) Method</t,>	40
	SafeSortedList <t, v="">.GetValue (T) Method</t,>	40

	SafeSortedList <t, v="">.Keys Method</t,>	. 40
	SafeSortedList <t, v="">.Remove Method</t,>	. 41
	SafeSortedList <t, v="">.TryGetValue Method</t,>	. 41
Ik	V <t, v=""> Interface</t,>	. 41
	IKV <t, v="">.Add Method</t,>	. 42
	IKV <t, v="">.Clear Method</t,>	. 42
	IKV <t, v="">.Count Method</t,>	. 42
	IKV <t, v="">.GetEnumerator Method</t,>	. 43
	IKV <t, v="">.GetValue Method</t,>	. 43
	IKV <t, v="">.Keys Method</t,>	. 43
	IKV <t, v="">.Remove Method</t,>	. 43
	IKV <t, v="">.TryGetValue Method</t,>	. 44
Rap	torDB.Filters Namespace	. 45
Н	tml Filter Class	. 45
	HtmlFilter.FilterText Method	. 45
	HtmlFilter.InitializeFilter Method	. 45
N	oFilter Class	. 46
	NoFilter.FilterText Method	. 46
	NoFilter.InitializeFilter Method	. 47
hOC	t Namespace	. 48
D	ocument Class	. 48
	Document(FileInfo, String) Constructor	. 48
	Document Constructor	. 49
	Document.DocNumber Property	. 49
	Document.FileName Property	. 49
	Document.ModifiedDate Property	. 49
	Document.Text Property	. 49
	Document.ToString Method	. 50
	FileSize Field	. 50
dev		51

# **Hoot.Standard Reference**

# Namespaces

RaptorDB, RaptorDB.Common<sub>27</sub>, RaptorDB.Filters<sub>45</sub>, hOOt<sub>48</sub>

# **RaptorDB Namespace**

#### Classes

Global<sub>7</sub>, Hoot<sub>10</sub>, HootConfig<sub>19</sub>, tokenizer<sub>21</sub>

#### **Interfaces**

IHootConfig<sub>22</sub>, IHootFilter<sub>24</sub>, ITokenizer<sub>25</sub>

# **Global Class**

C#

public class Global

### Requirements

Namespace:RaptorDB7

Assembly: Hoot.Standard (in Hoot.Standard.dll)

#### **Fields**

CompressBitmapBytes<sub>7</sub>, CompressDocumentOverKiloBytes<sub>7</sub>, DefaultStringKeySize<sub>8</sub>, FlushStorageFileImmediately<sub>8</sub>, FreeBitmapMemoryOnSave<sub>8</sub>, HighFrequencyKVDiskBlockSize<sub>8</sub>, PageItemCount<sub>9</sub>, SaveAsBinaryJSON<sub>9</sub>, SaveIndexToDiskTimerSeconds<sub>9</sub>, SplitStorageFilesMegaBytes<sub>9</sub>, UseLessMemoryStructures<sub>10</sub>

# CompressBitmapBytes Field

C#

public static bool CompressBitmapBytes

#### See Also

Applies to: Global<sub>7</sub>

# CompressDocumentOverKiloBytes Field

Compress the documents in the storage file if it is over this size (default = 100 Kilobytes)

- You will be trading CPU for disk IO

C#

public static UInt16 CompressDocumentOverKiloBytes

#### **See Also**

Applies to: Global7

# **DefaultStringKeySize Field**

Default maximum string key size for indexes

C#

public static byte DefaultStringKeySize

#### **See Also**

Applies to: Global<sub>7</sub>

# FlushStorageFileImmediately Field

Flush the StorageFile stream immediately

C#

public static bool FlushStorageFileImmediately

### See Also

Applies to: Global7

# FreeBitmapMemoryOnSave Field

Free bitmap index memory on save

C#

public static bool FreeBitmapMemoryOnSave

#### See Also

Applies to: Global<sub>7</sub>

# HighFrequencyKVDiskBlockSize Field

Disk block size for high frequency KV storage file (default = 2048)

\* Do not use anything under 512 with large string keys

C#

public static UInt16 HighFrequencyKVDiskBlockSize

### See Also

Applies to: Global7

# **PageItemCount Field**

Number of items in each index page (default = 10000) [Expert only, do not change]

C#

public static UInt16 PageItemCount

#### See Also

Applies to: Global<sub>7</sub>

# SaveAsBinaryJSON Field

Save doc as binary json

C#

public static bool SaveAsBinaryJSON

#### See Also

Applies to: Global7

# SaveIndexToDiskTimerSeconds Field

KeyStore save to disk timer

C#

public static int SaveIndexToDiskTimerSeconds

#### **See Also**

Applies to: Global<sub>7</sub>

# SplitStorageFilesMegaBytes Field

Split the data storage files in MegaBytes (default 0 = off) [500 = 500mb]

- You can set and unset this value anytime and it will operate from that point on.
- If you unset (0) the value previous split files will remain and all the data will go to the last file.

C#

public static UInt16 SplitStorageFilesMegaBytes

### **See Also**

Applies to: Global7

# **UseLessMemoryStructures Field**

```
public static bool UseLessMemoryStructures
```

#### See Also

Applies to: Global<sub>7</sub>

### **Hoot Class**

```
public class Hoot
```

# Requirements

Namespace:RaptorDB<sub>7</sub>

Assembly: Hoot.Standard (in Hoot.Standard.dll)

#### **Constructors**

Hoot<sub>10</sub>

### **Properties**

DocumentCount<sub>12</sub>, HootConfOptions<sub>12</sub>, WordCount<sub>13</sub>, Words<sub>13</sub>

### **Methods**

Fetch<T><sub>13</sub>, FindDocumentFileNames<sub>14</sub>, FindDocuments<T><sub>14</sub>, FindRows<sub>14</sub>, FreeMemory<sub>15</sub>, Index<sub>16</sub>, IsIndexed<sub>17</sub>, OptimizeIndex<sub>17</sub>, Query<sub>17</sub>, RemoveDocument<sub>18</sub>, Save<sub>18</sub>, Shutdown<sub>19</sub>

# Hoot(String, String, Boolean) Constructor

NOTE: This member is now obsolete.

Construct a new Hoot Index

```
[Obsolete()]
public Hoot(
   string IndexPath,
   string FileName,
   bool DocMode
)
```

#### **Parameters**

**IndexPath** 

Path to Index File Storage

**FileName** 

Filename prefix for indexes

**DocMode** 

Use Document Mode

#### See Also

Applies to: Hoot<sub>10</sub>

# Hoot(String, String, Boolean, ITokenizer) Constructor

NOTE: This member is now obsolete.

Construct a new Hoot Index

```
[Obsolete()]
public Hoot(
   string indexPath,
   string fileName,
   bool docMode,
   ITokenizer tokenizer
)
```

#### **Parameters**

indexPath

fileName

docMode

tokenizer

Custom Tokenizer to parse text

#### **See Also**

Applies to: Hoot<sub>10</sub>

# Hoot(IHootConfig) Constructor

Initialize with the Configuration file

```
public Hoot(
   IHootConfig config
)
```

#### **Parameters**

config

Configuration File

#### **See Also**

Applies to: Hoot<sub>10</sub>

# Hoot(IHootConfig, ITokenizer) Constructor

Construct a new object using configuration file and custom tokenizer

```
public Hoot(
    IHootConfig config,
    ITokenizer tokenizer
)
```

### **Parameters**

config

Configuration file

tokenizer

Custom Tokenizer to parse text

#### See Also

Applies to: Hoot<sub>10</sub>

# **Hoot.DocumentCount Property**

**Get Document Count** 

```
public int DocumentCount {get;}
```

#### See Also

Applies to: Hoot<sub>10</sub>

# **Hoot.HootConfOptions Property**

Configuration file

```
public IHootConfig HootConfOptions {get; set;}
```

### See Also

Applies to: Hoot<sub>10</sub>

# **Hoot.WordCount Property**

**Get Word Count** 

```
public int WordCount {get;}
```

### **See Also**

Applies to: Hoot<sub>10</sub>

# **Hoot.Words Property**

Get List of Words

```
public string[] Words {get;}
```

# **See Also**

Applies to: Hoot<sub>10</sub>

# Hoot.Fetch<T> Method

Fetch a Document

```
public T Fetch<T>(
   int docnum
)
```

# **Type Parameters**

Τ

Type of Document

#### **Parameters**

docnum

**Document Number** 

### **See Also**

Applies to: Hoot<sub>10</sub>

# Hoot.FindDocumentFileNames Method

Find Documents File Names

```
public IEnumerable<string> FindDocumentFileNames(
    string filter
)
```

#### **Parameters**

filter

### **See Also**

Applies to: Hoot<sub>10</sub>

# Hoot.FindDocuments<T> Method

**Find Documents** 

```
public IEnumerable<T> FindDocuments<T>(
    string filter
)
```

# **Type Parameters**

Τ

#### **Parameters**

filter

### **See Also**

Applies to: Hoot<sub>10</sub>

# **Hoot.FindRows Method**

**Find Rows** 

```
public IEnumerable<int> FindRows(
    string filter
)
```

### **Parameters**

filter

### **See Also**

Applies to: Hoot<sub>10</sub>

# **Hoot.FreeMemory Method**

Free Memory

```
public void FreeMemory()
```

### **See Also**

Applies to: Hoot<sub>10</sub>

# Hoot.Index (Int32, String, IHootFilter) Method

Index a Text String using a filter

```
public void Index(
  int recordnumber,
  string text,
  IHootFilter filter
)
```

#### **Parameters**

recordnumber

text

filter

# **See Also**

Applies to: Hoot<sub>10</sub>

# Hoot.Index (Document, Boolean, IHootFilter) Method

Index a Document

```
public int Index(
   Document doc,
```

```
bool deleteold,
IHootFilter filter
)
```

### **Parameters**

doc

deleteold

filter

#### See Also

Applies to: Hoot<sub>10</sub>

# Hoot.Index (Int32, String) Method

Index a text String

```
public void Index(
   int recordnumber,
   string text
)
```

#### **Parameters**

recordnumber

text

# **See Also**

Applies to: Hoot<sub>10</sub>

# Hoot.Index (Document, Boolean) Method

Index a Document

```
public int Index(
    Document doc,
    bool deleteold
)
```

#### **Parameters**

doc

deleteold

# **See Also**

Applies to: Hoot<sub>10</sub>

# **Hoot.IsIndexed Method**

Check if a File is Indexed

```
public bool IsIndexed(
    string filename
)
```

#### **Parameters**

filename

### **See Also**

Applies to: Hoot<sub>10</sub>

# **Hoot.OptimizeIndex Method**

Optimize the Index

```
public void OptimizeIndex()
```

### **See Also**

Applies to: Hoot<sub>10</sub>

# **Hoot.Query Method**

Query the Index

```
public MGRB Query(
   string filter,
   int maxsize
)
```

### **Parameters**

filter

maxsize

# **See Also**

Applies to: Hoot<sub>10</sub>

# Hoot.RemoveDocument (Int32) Method

Remove a Document

```
public void RemoveDocument(
   int number
)
```

#### **Parameters**

number

### **See Also**

Applies to: Hoot<sub>10</sub>

# Hoot.RemoveDocument (String) Method

Remove a Document by File Name

```
public bool RemoveDocument(
    string filename
)
```

### **Parameters**

filename

### **See Also**

Applies to: Hoot<sub>10</sub>

# **Hoot.Save Method**

Save the Index

```
public void Save()
```

### **See Also**

Applies to: Hoot<sub>10</sub>

# **Hoot.Shutdown Method**

Shutdown the Process

```
public void Shutdown()
```

### **See Also**

Applies to: Hoot<sub>10</sub>

# **HootConfig Class**

Hoot Configuration file that can be initialized and passed to hoot Constructor

```
public class HootConfig : IHootConfig
```

# Requirements

Namespace:RaptorDB<sub>7</sub>

Assembly: Hoot.Standard (in Hoot.Standard.dll)

#### **Constructors**

HootConfig<sub>19</sub>

# **Properties**

DocMode<sub>19</sub>, FileName<sub>20</sub>, IgnoreNumerics<sub>20</sub>, IndexPath<sub>20</sub>, UseStopList<sub>21</sub>

# **HootConfig Constructor**

```
public HootConfig()
```

### **See Also**

Applies to: HootConfig<sub>19</sub>

# **HootConfig.DocMode Property**

Use Document Mode

```
public bool DocMode {get; set;}
```

# **Implements**

IHootConfig.DocMode<sub>22</sub>

#### **See Also**

Applies to: HootConfig<sub>19</sub>

# **HootConfig.FileName Property**

Filename prefix for index files. Defaults to indexx

```
public string FileName {get; set;}
```

# **Implements**

IHootConfig.FileName<sub>23</sub>

#### **See Also**

Applies to: HootConfig<sub>19</sub>

# HootConfig.IgnoreNumerics Property

Ignore numeric words, ie 123,555, etc

```
public bool IgnoreNumerics {get; set;}
```

# **Implements**

IHootConfig.IgnoreNumerics23

#### See Also

Applies to: HootConfig<sub>19</sub>

# HootConfig.IndexPath Property

Path where index files are stored

```
public string IndexPath {get; set;}
```

# **Implements**

IHootConfig.IndexPath<sub>23</sub>

#### **See Also**

Applies to: HootConfig<sub>19</sub>

# **HootConfig.UseStopList Property**

Use Word Stop List

```
public bool UseStopList {get; set;}
```

# **Implements**

IHootConfig.UseStopList23

#### **See Also**

Applies to: HootConfig<sub>19</sub>

# tokenizer Class

```
public class tokenizer : ITokenizer
```

### Requirements

Namespace:RaptorDB<sub>7</sub>

Assembly: Hoot.Standard (in Hoot.Standard.dll)

#### Methods

GenerateWordFreq<sub>21</sub>, InitializeStopList<sub>22</sub>

# tokenizer.GenerateWordFreq Method

```
public Dictionary<string, int> GenerateWordFreq(
    string text,
    IHootConfig config
)
```

#### **Parameters**

text

config

# **Implements**

ITokenizer.GenerateWordFreq25

#### **See Also**

Applies to: tokenizer<sub>21</sub>

# tokenizer.InitializeStopList Method

Initialize the Stop List

```
public void InitializeStopList(
    string indexFolder
)
```

#### **Parameters**

indexFolder

# **Implements**

ITokenizer.InitializeStopList<sub>25</sub>

#### **See Also**

Applies to: tokenizer<sub>21</sub>

# **IHootConfig Interface**

```
public interface IHootConfig
```

### Requirements

Namespace:RaptorDB<sub>7</sub>

Assembly: Hoot.Standard (in Hoot.Standard.dll)

### **Properties**

DocMode<sub>22</sub>, FileName<sub>23</sub>, IgnoreNumerics<sub>23</sub>, IndexPath<sub>23</sub>, UseStopList<sub>23</sub>

# IHootConfig.DocMode Property

```
C#
bool DocMode {get; set;}
```

### **See Also**

Applies to: IHootConfig<sub>22</sub>

# **IHootConfig.FileName Property**

```
C#
string FileName {get; set;}
```

# **See Also**

Applies to: IHootConfig<sub>22</sub>

# **IHootConfig.IgnoreNumerics Property**

```
C#
bool IgnoreNumerics {get; set;}
```

### **See Also**

Applies to: IHootConfig<sub>22</sub>

# IHootConfig.IndexPath Property

```
C#
string IndexPath {get; set;}
```

### **See Also**

Applies to: IHootConfig<sub>22</sub>

# IHootConfig.UseStopList Property

```
bool UseStopList {get; set;}
```

### **See Also**

Applies to: IHootConfig<sub>22</sub>

# **IHootFilter Interface**

```
public interface IHootFilter
```

# Requirements

Namespace:RaptorDB<sub>7</sub>

Assembly: Hoot.Standard (in Hoot.Standard.dll)

Methods

FilterText<sub>24</sub>, InitializeFilter<sub>24</sub>

# IHootFilter.FilterText Method

Filter the input test

```
c#
string FilterText(
   string input
)
```

#### **Parameters**

input

Text to Filter

#### **Returns**

Filtered Text

# **See Also**

Applies to: IHootFilter<sub>24</sub>

# IHootFilter.InitializeFilter Method

Perform Initialization of Filter

```
void InitializeFilter(
   string filterPath
)
```

#### **Parameters**

filterPath

Path of Filter Text to load

See Also

Applies to: IHootFilter24

# **ITokenizer Interface**

```
public interface ITokenizer
```

### Requirements

Namespace:RaptorDB<sub>7</sub>

Assembly: Hoot.Standard (in Hoot.Standard.dll)

Methods

GenerateWordFreq<sub>25</sub>, InitializeStopList<sub>25</sub>

# ITokenizer.GenerateWordFreq Method

```
Dictionary<string, int> GenerateWordFreq(
    string text,
    IHootConfig config
)
```

### **Parameters**

text

config

#### **See Also**

Applies to: ITokenizer<sub>25</sub>

# ITokenizer.InitializeStopList Method

```
void InitializeStopList(
   string indexFolder
)
```

### **Parameters**

indexFolder

### **See Also**

Applies to: ITokenizer<sub>25</sub>

# **RaptorDB.Common Namespace**

### **Classes**

FastDateTime<sub>27</sub>, Helper<sub>28</sub>, SafeDictionary<TKey, TValue><sub>37</sub>, SafeSortedList<T, V><sub>41</sub>

#### Interfaces

IKV<T, V>41

# **FastDateTime Class**

C#

public static class FastDateTime

# Requirements

Namespace:RaptorDB.Common<sub>27</sub>

Assembly: Hoot.Standard (in Hoot.Standard.dll)

# **Properties**

Now<sub>27</sub>

#### **Fields**

LocalUtcOffset<sub>27</sub>

# FastDateTime.Now Property

```
C#
```

public static DateTime Now {get;}

### **See Also**

Applies to: FastDateTime27

# LocalUtcOffset Field

C#

public static TimeSpan LocalUtcOffset

#### **See Also**

Applies to: FastDateTime27

# **Helper Class**

```
public static class Helper
```

# Requirements

Namespace:RaptorDB.Common<sub>27</sub>

Assembly: Hoot.Standard (in Hoot.Standard.dll)

### Methods

CompareMemCmp<sub>28</sub>, GetBytes<sub>29</sub>, GetString<sub>30</sub>, ToInt16<sub>31</sub>, ToInt32<sub>32</sub>, ToInt64<sub>32</sub>

#### **Fields**

MurMur<sub>33</sub>

# Helper.CompareMemCmp Method

```
public static int CompareMemCmp(
   byte[] left,
   byte[] right
)
```

#### **Parameters**

left

right

# **See Also**

Applies to: Helper<sub>28</sub>

# Helper.GetBytes (String) Method

```
public static byte[] GetBytes(
    string s
)
```

### **Parameters**

S

### **See Also**

Applies to: Helper<sub>28</sub>

# Helper.GetBytes (Int16, Boolean) Method

```
public static byte[] GetBytes(
    short num,
    bool reverse
)
```

#### **Parameters**

num

reverse

### **See Also**

Applies to: Helper<sub>28</sub>

# Helper.GetBytes (Int32, Boolean) Method

```
public static byte[] GetBytes(
   int num,
   bool reverse
)
```

#### **Parameters**

num

reverse

### **See Also**

Applies to: Helper<sub>28</sub>

# Helper.GetBytes (Int64, Boolean) Method

```
public static byte[] GetBytes(
   long num,
   bool reverse
)
```

### **Parameters**

num

reverse

# **See Also**

Applies to: Helper<sub>28</sub>

# **Helper.GetString Method**

```
public static string GetString(
   byte[] buffer,
   int index,
   short Length
)
```

### **Parameters**

buffer

index

length

### **See Also**

Applies to: Helper<sub>28</sub>

# Helper.ToInt16 (Byte(), Int32) Method

```
public static short ToInt16(
    byte[] value,
    int startIndex
)
```

#### **Parameters**

value

startIndex

# **See Also**

Applies to: Helper<sub>28</sub>

# Helper.ToInt16 (Byte(), Int32, Boolean) Method

```
public static short ToInt16(
   byte[] value,
   int startIndex,
   bool reverse
)
```

#### **Parameters**

value

startIndex

reverse

# **See Also**

Applies to: Helper<sub>28</sub>

# Helper.ToInt32 (Byte(), Int32, Boolean) Method

```
public static int ToInt32(
    byte[] value,
    int startIndex,
    bool reverse
)
```

# **Parameters**

value

startIndex

reverse

### **See Also**

Applies to: Helper<sub>28</sub>

# Helper.ToInt32 (Byte(), Int32) Method

```
public static int ToInt32(
   byte[] value,
   int startIndex
)
```

#### **Parameters**

value

startIndex

### **See Also**

Applies to: Helper<sub>28</sub>

# Helper.ToInt64 (Byte(), Int32, Boolean) Method

```
public static long ToInt64(
   byte[] value,
   int startIndex,
   bool reverse
)
```

### **Parameters**

value

startIndex

reverse

### See Also

Applies to: Helper<sub>28</sub>

# Helper.ToInt64 (Byte(), Int32) Method

```
public static long ToInt64(
   byte[] value,
   int startIndex
)
```

#### **Parameters**

value

startIndex

### **See Also**

Applies to: Helper<sub>28</sub>

# MurMur Field

C#

new public static MurmurHash2Unsafe MurMur

### **See Also**

Applies to: Helper<sub>28</sub>

# SafeDictionary<TKey, TValue> Class

C#

public class SafeDictionary<TKey, TValue> : IKV<TKey, TValue>

# **Type Parameters**

TKey

**TValue** 

### Requirements

Namespace:RaptorDB.Common<sub>27</sub>

Assembly: Hoot.Standard (in Hoot.Standard.dll)

#### **Constructors**

SafeDictionary<TKey, TValue>37

# **Properties**

Item<sub>37</sub>

### **Methods**

Add<sub>37</sub>, Clear<sub>37</sub>, Count<sub>37</sub>, GetEnumerator<sub>37</sub>, GetValue<sub>37</sub>, Keys<sub>37</sub>, Remove<sub>37</sub>, TryGetValue<sub>37</sub>

# SafeDictionary<TKey, TValue> Constructor

```
public SafeDictionary()
```

#### See Also

Applies to: SafeDictionary<TKey, TValue>37

# SafeDictionary<TKey, TValue>(Int32) Constructor

```
public SafeDictionary(
   int capacity
)
```

#### **Parameters**

capacity

#### See Also

Applies to: SafeDictionary<TKey, TValue>37

# SafeDictionary<TKey, TValue>.Item Property

```
public TValue this[
   TKey key
] {get; set;}
```

### **Parameters**

key

# **See Also**

Applies to: SafeDictionary<TKey, TValue>37

# SafeDictionary<TKey, TValue>.Add Method

```
public void Add(
   TKey key,
   TValue value
)
```

#### **Parameters**

key

value

# **Implements**

IKV.Add<sub>42</sub>

### **See Also**

Applies to: SafeDictionary<TKey, TValue>37

# SafeDictionary<TKey, TValue>.Clear Method

```
public void Clear()
```

# **Implements**

IKV.Clear<sub>42</sub>

### **See Also**

Applies to: SafeDictionary<TKey, TValue>37

# SafeDictionary<TKey, TValue>.Count Method

```
public int Count()
```

# **Implements**

IKV.Count<sub>42</sub>

### **See Also**

Applies to: SafeDictionary<TKey, TValue>37

# SafeDictionary<TKey, TValue>.GetEnumerator Method

```
public IEnumerator<KeyValuePair<TKey, TValue>> GetEnumerator()
```

# **Implements**

IKV.GetEnumerator<sub>43</sub>

#### See Also

Applies to: SafeDictionary<TKey, TValue>37

# SafeDictionary<TKey, TValue>.GetValue Method

```
public TValue GetValue(
   TKey key
)
```

#### **Parameters**

key

# **Implements**

IKV.GetValue<sub>43</sub>

### **See Also**

Applies to: SafeDictionary<TKey, TValue>37

# SafeDictionary<TKey, TValue>.Keys Method

```
public TKey[] Keys()
```

# **Implements**

IKV.Keys<sub>43</sub>

#### See Also

Applies to: SafeDictionary<TKey, TValue>37

# SafeDictionary<TKey, TValue>.Remove Method

```
public bool Remove(
TKey key
)
```

#### **Parameters**

key

### **Implements**

IKV.Remove<sub>43</sub>

#### **See Also**

Applies to: SafeDictionary<TKey, TValue>37

## SafeDictionary<TKey, TValue>.TryGetValue Method

```
public bool TryGetValue(
   TKey key,
   out TValue value
)
```

#### **Parameters**

key

value

### **Implements**

IKV.TryGetValue<sub>44</sub>

#### **See Also**

Applies to: SafeDictionary<TKey, TValue>37

## SafeSortedList<T, V> Class

```
public class SafeSortedList<T, V> : IKV<T, V>
```

#### **Type Parameters**

Τ

V

### Requirements

Namespace:RaptorDB.Common<sub>27</sub>

Assembly: Hoot.Standard (in Hoot.Standard.dll)

### **Properties**

Item<sub>41</sub>

#### Methods

Add<sub>41</sub>, Clear<sub>41</sub>, Count<sub>41</sub>, GetEnumerator<sub>41</sub>, GetKey<sub>41</sub>, GetValue<sub>41</sub>, Keys<sub>41</sub>, Remove<sub>41</sub>, TryGetValue<sub>41</sub>

## SafeSortedList<T, V>.Item Property

```
public V this[
   T key
] {get; set;}
```

#### **Parameters**

key

#### **See Also**

Applies to: SafeSortedList<T, V>41

## SafeSortedList<T, V>.Add Method

```
public void Add(
   T key,
   V val
)
```

#### **Parameters**

key

val

### **Implements**

IKV.Add<sub>42</sub>

#### **See Also**

Applies to: SafeSortedList<T, V>41

## SafeSortedList<T, V>.Clear Method

```
public void Clear()
```

#### **Implements**

#### IKV.Clear<sub>42</sub>

#### See Also

Applies to: SafeSortedList<T, V>41

## SafeSortedList<T, V>.Count Method

```
public int Count()
```

### **Implements**

IKV.Count<sub>42</sub>

#### **See Also**

Applies to: SafeSortedList<T, V>41

## SafeSortedList<T, V>.GetEnumerator Method

```
public IEnumerator<KeyValuePair<T, V>> GetEnumerator()
```

### **Implements**

IKV.GetEnumerator<sub>43</sub>

#### See Also

Applies to: SafeSortedList<T, V>41

## SafeSortedList<T, V>.GetKey Method

```
public T GetKey(
   int index
)
```

#### **Parameters**

index

#### **See Also**

Applies to: SafeSortedList<T, V>41

## SafeSortedList<T, V>.GetValue (Int32) Method

```
public V GetValue(
   int index
)
```

#### **Parameters**

index

### **Implements**

**Error! Hyperlink reference not valid.** 

#### **See Also**

Applies to: SafeSortedList<T, V>41

## SafeSortedList<T, V>.GetValue (T) Method

```
public V GetValue(
   T key
)
```

#### **Parameters**

key

### **Implements**

IKV.GetValue<sub>43</sub>

#### **See Also**

Applies to: SafeSortedList<T, V>41

## SafeSortedList<T, V>.Keys Method

```
public T[] Keys()
```

#### **Implements**

IKV.Keys<sub>43</sub>

#### **See Also**

Applies to: SafeSortedList<T, V>41

# SafeSortedList<T, V>.Remove Method

```
public bool Remove(
   T key
)
```

#### **Parameters**

key

## **Implements**

IKV.Remove<sub>43</sub>

#### **See Also**

Applies to: SafeSortedList<T, V>41

## SafeSortedList<T, V>.TryGetValue Method

```
public bool TryGetValue(
   T key,
   out V value
)
```

#### **Parameters**

key

value

## **Implements**

IKV.TryGetValue<sub>44</sub>

#### **See Also**

Applies to: SafeSortedList<T, V>41

## IKV<T, V> Interface

```
public interface IKV<T, V>
```

### **Type Parameters**

Τ

V

### Requirements

Namespace:RaptorDB.Common<sub>27</sub>

Assembly: Hoot.Standard (in Hoot.Standard.dll)

**Methods** 

Add<sub>42</sub>, Clear<sub>42</sub>, Count<sub>42</sub>, GetEnumerator<sub>43</sub>, GetValue<sub>43</sub>, Keys<sub>43</sub>, Remove<sub>43</sub>, TryGetValue<sub>44</sub>

## IKV<T, V>.Add Method

```
void Add(
   T key,
   V value
)
```

#### **Parameters**

key

value

#### **See Also**

Applies to: IKV<T, V>41

## IKV<T, V>.Clear Method

```
void Clear()
```

#### **See Also**

Applies to: IKV<T, V>41

## IKV<T, V>.Count Method

```
int Count()
```

#### **See Also**

Applies to: IKV<T, V>41

## IKV<T, V>.GetEnumerator Method

```
C#
IEnumerator<KeyValuePair<T, V>> GetEnumerator()
```

#### **See Also**

Applies to: IKV<T, V>41

# IKV<T, V>.GetValue Method

```
V GetValue(
   T key
)
```

#### **Parameters**

key

#### **See Also**

Applies to: IKV<T, V>41

# IKV<T, V>.Keys Method

```
C#
T[] Keys()
```

#### **See Also**

Applies to: IKV<T, V>41

# IKV<T, V>.Remove Method

```
C#
bool Remove(
   T key
)
```

#### **Parameters**

key

## **See Also**

Applies to: IKV<T, V>41

# IKV<T, V>.TryGetValue Method

```
bool TryGetValue(
   T key,
   out V val
)
```

#### **Parameters**

key

val

## **See Also**

Applies to: IKV<T, V>41

## **RaptorDB.Filters Namespace**

#### Classes

HtmlFilter<sub>45</sub>, NoFilter<sub>46</sub>

### **HtmlFilter Class**

```
public class HtmlFilter : IHootFilter
```

### Requirements

Namespace:RaptorDB.Filters<sub>45</sub>

Assembly: Hoot.Standard (in Hoot.Standard.dll)

**Methods** 

FilterText<sub>45</sub>, InitializeFilter<sub>45</sub>

### HtmlFilter.FilterText Method

Filter Html Text

```
public string FilterText(
    string input
)
```

#### **Parameters**

input

### **Implements**

IHootFilter.FilterText24

#### **See Also**

Applies to: HtmlFilter<sub>45</sub>

### HtmlFilter.InitializeFilter Method

Initialize the filter, Not used

```
public void InitializeFilter(
    string filterPath = null
```

)

#### **Parameters**

filterPath

### **Implements**

IHootFilter.InitializeFilter24

#### See Also

Applies to: HtmlFilter<sub>45</sub>

## **NoFilter Class**

```
public class NoFilter : IHootFilter
```

### Requirements

Namespace:RaptorDB.Filters<sub>45</sub>

Assembly: Hoot.Standard (in Hoot.Standard.dll)

#### Methods

FilterText<sub>46</sub>, InitializeFilter<sub>47</sub>

### NoFilter.FilterText Method

Just return the Text in default Filter

```
public string FilterText(
    string input
)
```

#### **Parameters**

input

### **Implements**

IHootFilter.FilterText24

#### **See Also**

Applies to: NoFilter<sub>46</sub>

## NoFilter.InitializeFilter Method

Do nothing in the default filter

```
public void InitializeFilter(
    string filterPath
)
```

#### **Parameters**

filterPath

Path to full text folder

## **Implements**

IHootFilter.InitializeFilter24

### **See Also**

Applies to: NoFilter<sub>46</sub>

## **hOOt Namespace**

#### **Classes**

Document<sub>48</sub>

### **Document Class**

```
public class Document
```

### Requirements

Namespace:hOOt48

Assembly: Hoot.Standard (in Hoot.Standard.dll)

#### **Constructors**

Document<sub>49</sub>

### **Properties**

DocNumber<sub>49</sub>, FileName<sub>49</sub>, ModifiedDate<sub>49</sub>, Text<sub>49</sub>

#### **Methods**

ToString<sub>50</sub>

#### **Fields**

FileSize<sub>50</sub>

# **Document(FileInfo, String) Constructor**

```
public Document(
   FileInfo fileinfo,
   string text
)
```

### **Parameters**

fileinfo

text

#### **See Also**

Applies to: Document<sub>48</sub>

### **Document Constructor**

```
public Document()
```

#### **See Also**

Applies to: Document<sub>48</sub>

## **Document.DocNumber Property**

```
public int DocNumber {get; set;}
```

#### **See Also**

Applies to: Document<sub>48</sub>

## **Document.FileName Property**

```
public string FileName {get; set;}
```

#### **See Also**

Applies to: Document<sub>48</sub>

# **Document.ModifiedDate Property**

```
public DateTime ModifiedDate {get; set;}
```

#### **See Also**

Applies to: Document<sub>48</sub>

## **Document.Text Property**

```
[XmlIgnore()]
public string Text {get; set;}
```

### **See Also**

Applies to: Document<sub>48</sub>

# **Document.ToString Method**

```
C#
```

public override string ToString()

### **See Also**

Applies to: Document<sub>48</sub>

## FileSize Field

C#

public long FileSize

### **See Also**

Applies to: Document<sub>48</sub>

#### **Index**

Add Method {RaptorDB.Common.IKV<T, V>} 42 Add Method {RaptorDB.Common.SafeDictionary<TKey, GetEnumerator Method TValue>} 37 {RaptorDB.Common.SafeSortedList<T, V>} 41 Add Method {RaptorDB.Common.SafeSortedList<T, V>} GetKey Method 41 GetString Method 30 Clear Method {RaptorDB.Common.IKV<T, V>} 42 GetValue (Int32) Method Clear Method {RaptorDB.Common.SafeDictionary<TKey, {RaptorDB.Common.SafeSortedList<T, V>} 41 TValue>} 37 GetValue (T) Method Clear Method {RaptorDB.Common.SafeSortedList<T, V>} {RaptorDB.Common.SafeSortedList<T, V>} 41 GetValue Method {RaptorDB.Common.IKV<T, V>} 43 CompareMemCmp Method 28 GetValue Method CompressBitmapBytes Field 7 {RaptorDB.Common.SafeDictionary<TKey, TValue>} CompressDocumentOverKiloBytes Field 7 37 Count Method {RaptorDB.Common.IKV<T, V>} 42 Global Class 7 Count Method {RaptorDB.Common.SafeDictionary<TKey, Helper Class 28 HighFrequencyKVDiskBlockSize Field 8 TValue>} 37 Count Method {RaptorDB.Common.SafeSortedList<T, Hoot (IHootConfig) Constructor 11 V>} 41 Hoot (IHootConfig, ITokenizer) Constructor 12 DefaultStringKeySize Field 8 Hoot (String, String, Boolean) Constructor 10 DocMode Property {RaptorDB.HootConfig} 19 Hoot (String, String, Boolean, ITokenizer) Constructor DocMode Property {RaptorDB.IHootConfig} 22 11 Hoot Class 10 DocNumber Property 49 Document Constructor 49 Hoot.Standard Reference 6 Document (FileInfo, String) Constructor 48 HootConfOptions Property 12 Document Class 48 HootConfig Class 19 HootConfig Constructor 19 DocumentCount Property 12 FastDateTime Class 27 HtmlFilter Class 45 Fetch<T> Method 13 IHootConfig Interface 22 FileName Property {RaptorDB.HootConfig} 20 IHootFilter Interface 24 FileName Property {RaptorDB.IHootConfig} 23 IKV<T, V> Interface 41 FileName Property {hOOt.Document} 49 ITokenizer Interface 25 FileSize Field 50 IgnoreNumerics Property {RaptorDB.HootConfig} 20 FilterText Method {RaptorDB.Filters.HtmlFilter} 45 IgnoreNumerics Property {RaptorDB.IHootConfig} 23 FilterText Method {RaptorDB.Filters.NoFilter} 46 Index (Document, Boolean) Method 16 FilterText Method {RaptorDB.IHootFilter} 24 Index (Document, Boolean, IHootFilter) Method 15 FindDocumentFileNames Method 14 Index (Int32, String) Method 16 FindDocuments<T> Method 14 Index (Int32, String, IHootFilter) Method 15 FindRows Method 14 IndexPath Property {RaptorDB.HootConfig} 20 FlushStorageFileImmediately Field 8 IndexPath Property {RaptorDB.IHootConfig} 23 FreeBitmapMemoryOnSave Field 8 InitializeFilter Method {RaptorDB.Filters.HtmlFilter} 45 FreeMemory Method 15 InitializeFilter Method {RaptorDB.Filters.NoFilter} 47 GenerateWordFreq Method {RaptorDB.ITokenizer} 25 InitializeFilter Method {RaptorDB.IHootFilter} 24 GenerateWordFreq Method {RaptorDB.tokenizer} 21 InitializeStopList Method {RaptorDB.ITokenizer} 25 GetBytes (Int16, Boolean) Method 29 InitializeStopList Method {RaptorDB.tokenizer} 22 GetBytes (Int32, Boolean) Method 29 IsIndexed Method 17 Item Property {RaptorDB.Common.SafeDictionary<TKey, GetBytes (Int64, Boolean) Method 29 GetBytes (String) Method 29 TValue>} 37 GetEnumerator Method {RaptorDB.Common.IKV<T, V>} Item Property {RaptorDB.Common.SafeSortedList<T, V>} 43 41 GetEnumerator Method Keys Method {RaptorDB.Common.IKV<T, V>} 43 {RaptorDB.Common.SafeDictionary<TKey, TValue>} Keys Method {RaptorDB.Common.SafeDictionary<TKey, 37 TValue>} 37

```
Keys Method {RaptorDB.Common.SafeSortedList<T, V>}
LocalUtcOffset Field 27
ModifiedDate Property 49
MurMur Field 33
NoFilter Class 46
Now Property 27
OptimizeIndex Method 17
PageItemCount Field 9
Query Method 17
RaptorDB Namespace 7
RaptorDB.Common Namespace 27
RaptorDB.Filters Namespace 45
Remove Method {RaptorDB.Common.IKV<T, V>} 43
Remove Method
  {RaptorDB.Common.SafeDictionary<TKey, TValue>}
Remove Method {RaptorDB.Common.SafeSortedList<T,
  V>} 41
RemoveDocument (Int32) Method 18
RemoveDocument (String) Method 18
SafeDictionary<TKey, TValue> Constructor 37
SafeDictionary<TKey, TValue> (Int32) Constructor 37
SafeDictionary<TKey, TValue> Class 37
SafeSortedList<T, V> Class 41
Save Method 18
SaveAsBinaryJSON Field 9
SaveIndexToDiskTimerSeconds Field 9
Shutdown Method 19
SplitStorageFilesMegaBytes Field 9
Text Property 49
ToInt16 (Byte(), Int32) Method 31
ToInt16 (Byte(), Int32, Boolean) Method 31
ToInt32 (Byte(), Int32) Method 32
ToInt32 (Byte(), Int32, Boolean) Method 32
ToInt64 (Byte(), Int32) Method 32
ToInt64 (Byte(), Int32, Boolean) Method 32
ToString Method 50
TryGetValue Method {RaptorDB.Common.IKV<T, V>} 44
TryGetValue Method
  \{Raptor DB. Common. Safe Dictionary < TKey, \ TValue > \}
TryGetValue Method
  {RaptorDB.Common.SafeSortedList<T, V>} 41
UseLessMemoryStructures Field 10
UseStopList Property {RaptorDB.HootConfig} 21
UseStopList Property {RaptorDB.IHootConfig} 23
WordCount Property 13
Words Property 13
hOOt Namespace 48
tokenizer Class 21
```