

Collector

1

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Chapter 1

Class Index

1.1 Class List

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Chapter 2

Class Documentation

2.1 tweetoscope::cascade::Cascade Class Reference

Public Member Functions

- [Cascade](#) (const [tweet](#) &tw, const std::string &key)
Construct a new [Cascade](#) object from a tweet (std::string) and a key (std::string)
- [Cascade](#) (const [Cascade](#) &process)=default
Construct a new [Cascade](#) object by copy.
- [Cascade](#) ([Cascade](#) &&process)=default
Construct a new [Cascade](#) object by displacement (move)
- [Cascade](#) & operator= (const [Cascade](#) &process)=default
Overload operator = to construct a new [Cascade](#) object by recopy.
- [Cascade](#) & operator= ([Cascade](#) &&process)=default
Overload operator = to construct a new [Cascade](#) object by recopying the right value.
- [~Cascade](#) ()
Destroy the [Cascade](#) object.
- std::string [getId](#) () const
Get the Id object.
- std::string [getMsg](#) () const
Get the Msg object.
- timestamp [getTimeOfFirstTweet](#) () const
Get the Time Of First Tweet object.
- timestamp [getTimeOfLastTweet](#) () const
Get the Time Of Last Tweet object.
- std::vector< std::pair< timestamp, int > > [getpairsOfTimesAndMagnitudes](#) () const
Get the pair (Times, magnitude) from a [Cascade](#) object.
- source::idf [getSource](#) () const
Get the Source object.
- void [addTweetToCascade](#) (const [tweet](#) &tw, const std::string &key)
Add a tweet to a cascade object.
- void [operator+=](#) (std::pair< [tweet](#), std::string > &elt)
Overload operator += to add a tweet and its key to a cascade.
- bool [operator<](#) (const cascade_ref &ref_other_cascade) const
Overload operator < to compare the cascade object from its sharepointer reference with another reference of a cascade.

Friends

- class **Processor**
- struct **CascadeRefComaparator**
- `std::ostream & operator<<` (`std::ostream &os`, `std::vector< std::pair< timestamp, int > > &time_magnitude`)
Overload operator << to add time and magnitude to an output to print.

2.1.1 Constructor & Destructor Documentation

2.1.1.1 Cascade() [1/3]

```
tweetoscope::cascade::Cascade::Cascade (
    const tweet & twt,
    const std::string & key ) [inline]
```

Construct a new [Cascade](#) object from a tweet (`std::string`) and a key (`std::string`)

Parameters

<i>tw</i>	
<i>key</i>	

2.1.1.2 Cascade() [2/3]

```
tweetoscope::cascade::Cascade::Cascade (
    const Cascade & process ) [default]
```

Construct a new [Cascade](#) object by copy.

Parameters

<i>process</i>	
----------------	--

2.1.1.3 Cascade() [3/3]

```
tweetoscope::cascade::Cascade::Cascade (
    Cascade && process ) [default]
```

Construct a new [Cascade](#) object by displacement (move)

Parameters

<i>process</i>	
----------------	--

2.1.2 Member Function Documentation

2.1.2.1 addTweetToCascade()

```
void tweetoscope::cascade::Cascade::addTweetToCascade (
    const tweet & twt,
    const std::string & key ) [inline]
```

Add a tweet to a cascade object.

Parameters

<i>tw</i>	
<i>key</i>	

2.1.2.2 getId()

```
std::string tweetoscope::cascade::Cascade::getId ( ) const [inline]
```

Get the Id object.

Returns

std::string

2.1.2.3 getMsg()

```
std::string tweetoscope::cascade::Cascade::getMsg ( ) const [inline]
```

Get the Msg object.

Returns

std::string

2.1.2.4 getpairsOfTimesAndMagnitudes()

```
std::vector< std::pair< timestamp, int > > tweetoscope::cascade::Cascade::getpairsOfTimesAndMagnitudes ( ) const [inline]
```

Get the pair (Times, magnitude) from a [Cascade](#) object.

Returns

std::vector<std::pair<timestamp, int> >

2.1.2.5 getSource()

```
source::idf tweetoscope::cascade::Cascade::getSource ( ) const [inline]
```

Get the Source object.

Returns

source::idf

2.1.2.6 getTimeOfFirstTweet()

```
timestamp tweetoscope::cascade::Cascade::getTimeOfFirstTweet ( ) const [inline]
```

Get the Time Of First Tweet object.

Returns

timestamp

2.1.2.7 getTimeOfLastTweet()

```
timestamp tweetoscope::cascade::Cascade::getTimeOfLastTweet ( ) const [inline]
```

Get the Time Of Last Tweet object.

Returns

timestamp

2.1.2.8 operator+=()

```
void tweetoscope::cascade::Cascade::operator+= (
    std::pair< tweet, std::string > & elt ) [inline]
```

Overload operator += to add a tweet and its key to a cascade.

Parameters

<i>elt</i>	
------------	--

2.1.2.9 operator<()

```
bool tweetoscope::cascade::Cascade::operator< (
    const cascade_ref & ref_other_cascade ) const [inline]
```

Overload operator < to compare the cascade object from its sharepointer reference with another reference of a cascade.

Parameters

<i>ref_other_cascade</i>	
--------------------------	--

Returns

true
false

2.1.2.10 operator=() [1/2]

```
Cascade& tweetoscope::cascade::Cascade::operator= (
    Cascade && process ) [default]
```

Overload operateur = to construct a new [Cascade](#) object by recopying the right value.

Parameters

<i>process</i>	
----------------	--

Returns

[Cascade](#)&

2.1.2.11 operator=() [2/2]

```
Cascade& tweetoscope::cascade::Cascade::operator= (
    const Cascade & process ) [default]
```

Overload operateur = to construct a new [Cascade](#) object by recopy.

Parameters

<i>process</i>	
----------------	--

Returns

[Cascade](#)&

2.1.3 Friends And Related Function Documentation

2.1.3.1 operator<<

```
std::ostream& operator<< (
    std::ostream & os,
    std::vector< std::pair< timestamp, int > > & time_magnitude ) [friend]
```

Overload operator << to add time and magnitude to an output to print.

Parameters

<i>os</i>	
<i>time_magnitude</i>	

Returns

std::ostream&

The documentation for this class was generated from the following file:

- tweetoscopeCollectorParams.hpp

2.2 tweetoscope::params::section::Cascade Struct Reference

[Cascade](#) class.

```
#include <tweetoscopeCollectorParams.hpp>
```

Public Attributes

- std::size_t **min_cascade_size**

2.2.1 Detailed Description

[Cascade](#) class.

The documentation for this struct was generated from the following file:

- tweetoscopeCollectorParams.hpp

2.3 tweetoscope::cascade::CascadeRefComparator Struct Reference

[CascadeRefComparator](#) class.

```
#include <tweetoscopeCollectorParams.hpp>
```

Public Member Functions

- bool [operator\(\)](#) (cascade_ref ref_c1, cascade_ref ref_c2) const
Overload () operator.

2.3.1 Detailed Description

[CascadeRefComparator](#) class.

2.3.2 Member Function Documentation

2.3.2.1 operator()()

```
bool tweetoscope::cascade::CascadeRefComparator::operator() (
    cascade_ref ref_c1,
    cascade_ref ref_c2 ) const [inline]
```

Overload () operator.

Parameters

<i>ref_c1</i>	
<i>ref_c2</i>	

Returns

true

false

The documentation for this struct was generated from the following file:

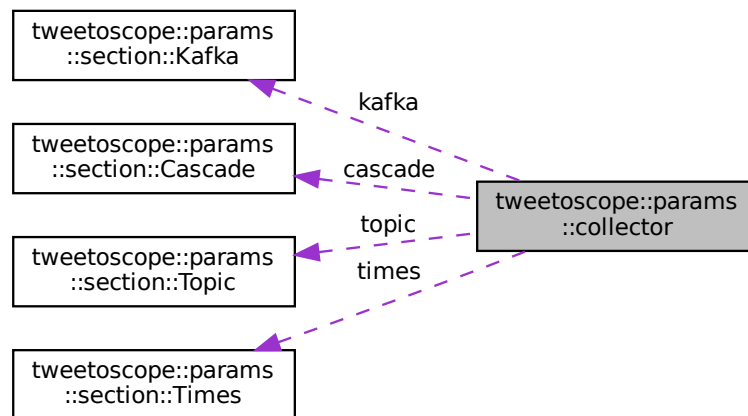
- tweetoscopeCollectorParams.hpp

2.4 tweetoscope::params::collector Struct Reference

collector class

```
#include <tweetoscopeCollectorParams.hpp>
```

Collaboration diagram for tweetoscope::params::collector:



Public Member Functions

- [collector](#) (const std::string &config_filename)
Construct a new collector object.

Public Attributes

- [section::Kafka](#) **kafka**
- [section::Topic](#) **topic**
- [section::Times](#) **times**
- [section::Cascade](#) **cascade**

2.4.1 Detailed Description

collector class

2.4.2 Constructor & Destructor Documentation

2.4.2.1 collector()

```
tweetoscope::params::collector::collector (
    const std::string & config_filename ) [inline]
```

Construct a new collector object.

Parameters

<i>config_filename</i>	
------------------------	--

The documentation for this struct was generated from the following file:

- tweetoscopeCollectorParams.hpp

2.5 tweetoscope::params::section::Kafka Struct Reference

[Kafka](#) class.

```
#include <tweetoscopeCollectorParams.hpp>
```

Public Attributes

- std::string **brokers**

2.5.1 Detailed Description

[Kafka](#) class.

The documentation for this struct was generated from the following file:

- tweetoscopeCollectorParams.hpp

2.6 tweetoscope::cascade::Processor Class Reference

Public Member Functions

- [Processor](#) (const [tweet](#) &tw)
- Construct a new [Processor](#) object from a tweet.*
- [Processor](#) (const [Processor](#) &process)=default
- Construct a new [Processor](#) object by copy.*
- [Processor](#) ([Processor](#) &&process)=default
- Construct a new [Processor](#) object by displacement.*
- [Processor](#) & [operator=](#) (const [Processor](#) &process)=default
- Overload operateur = to construct a new [Cascade](#) object by recopy.*
- [Processor](#) & [operator=](#) ([Processor](#) &&process)=default
- Overload operateur = to construct a new [Cascade](#) object by recopying its right value.*
- [~Processor](#) ()
- Destroy the [Processor](#) object.*
- source::idf [getSource](#) () const
- Get the Source object.*
- timestamp [getSourceTime](#) () const
- Get the Source Time object.*
- priority_queue [getPriorityQueue](#) () const
- Get the Priority Queue object.*
- std::map< timestamp, std::queue< cascade_wref > > [getFIFO](#) () const
- Get the FIFO object.*
- std::map< std::string, cascade_wref > [getSymbolTable](#) () const
- Get the Symbol Table object.*
- void [setSourceTime](#) (const timestamp &src_time)
- Set the Source Time object.*
- void [addToFIFO](#) (const int &pos, const cascade_wref &weak_ref_cascade)
- Add a cascade of a tweet to the FIFO from its weak reference.*
- void [addToSymbolTable](#) (const std::string &key, const cascade_wref &weak_ref_cascade)
- Add a cascade of a tweet to the Symbole Table from its weak reference and the key of the tweet.*
- auto [addToPriorityQueue](#) (const cascade_ref &sh_ref_cascade)
- Add a cascade of a tweet to the Priority Queue from its the share pointer of the reference.*
- void [decreasePriorityQueue](#) (const priority_queue::handle_type &elt, const cascade_ref &sh_ref_cascade)
- Remove a [Cascade](#) of the Priority Queue from the share pointer that references the cascade object.*
- std::vector< std::string > [sendPartialCascade](#) (const std::vector< std::size_t > &obs)
- Method to send a serie which is a partial cascade.*
- std::vector< std::string > [sendTerminatedCascade](#) (timestamp &end_time, const std::size_t &min_size)
- Method to send properties which correspond to a terminated cascade.*

Friends

- class **Cascade**
- std::ostream & [operator<<](#) (std::ostream &os, std::vector< std::pair< timestamp, int > > &time_magnitude)
- Overload operator << to add time and magnitude to an output to print.*

2.6.1 Constructor & Destructor Documentation

2.6.1.1 Processor() [1/3]

```
tweetoscope::cascade::Processor::Processor (
    const tweet & twt ) [inline]
```

Construct a new [Processor](#) object from a tweet.

Parameters

<i>tw</i>	
-----------	--

2.6.1.2 Processor() [2/3]

```
tweetoscope::cascade::Processor::Processor (
    const Processor & process ) [default]
```

Construct a new [Processor](#) object by copy.

Parameters

<i>process</i>	
----------------	--

2.6.1.3 Processor() [3/3]

```
tweetoscope::cascade::Processor::Processor (
    Processor && process ) [default]
```

Construct a new [Processor](#) object by displacement.

Parameters

<i>process</i>	
----------------	--

2.6.2 Member Function Documentation

2.6.2.1 addToFIFO()

```
void tweetoscope::cascade::Processor::addToFIFO (
    const int & pos,
    const cascade_wref & weak_ref_cascade ) [inline]
```

Add a cascade of a tweet to the FIFO from its weak reference.

Parameters

<i>pos</i>	
<i>weak_ref_cascade</i>	

2.6.2.2 addToPriorityQueue()

```
auto tweetoscope::cascade::Processor::addToPriorityQueue (
    const cascade_ref & sh_ref_cascade ) [inline]
```

Add a cascade of a tweet to the Priority Queue from its the share pointer of the reference.

Parameters

<i>sh_ref_cascade</i>	
-----------------------	--

Returns

auto

2.6.2.3 addToSymbolTable()

```
void tweetoscope::cascade::Processor::addToSymbolTable (
    const std::string & key,
    const cascade_wref & weak_ref_cascade ) [inline]
```

Add a cascade of a tweet to the Symbol Table from its weak reference and the key of the tweet.

Parameters

<i>key</i>	
<i>weak_ref_cascade</i>	

2.6.2.4 decreasePriorityQueue()

```
void tweetoscope::cascade::Processor::decreasePriorityQueue (
    const priority_queue::handle_type & elt,
    const cascade_ref & sh_ref_cascade ) [inline]
```

Remove a [Cascade](#) of the Priority Queue from the share pointer that references the cascade object.

Parameters

<i>elt</i>	
<i>sh_ref_cascade</i>	

2.6.2.5 getFIFO()

```
std::map< timestamp, std::queue< cascade_wref > > tweetoscope::cascade::Processor::getFIFO (
) const [inline]
```

Get the FIFO object.

Returns

std::map<timestamp, std::queue<cascade_wref> >

2.6.2.6 getPriorityQueue()

```
priority_queue tweetoscope::cascade::Processor::getPriorityQueue ( ) const [inline]
```

Get the Priority Queue object.

Returns

priority_queue

2.6.2.7 getSource()

```
source::idf tweetoscope::cascade::Processor::getSource ( ) const [inline]
```

Get the Source object.

Returns

source::idf

2.6.2.8 getSourceTime()

```
timestamp tweetoscope::cascade::Processor::getSourceTime ( ) const [inline]
```

Get the Source Time object.

Returns

timestamp

2.6.2.9 getSymbolTable()

```
std::map< std::string, cascade_wref > tweetoscope::cascade::Processor::getSymbolTable ( )  
const [inline]
```

Get the Symbol Table object.

Returns

std::map<std::string, cascade_wref>

2.6.2.10 operator=() [1/2]

```
Processor& tweetoscope::cascade::Processor::operator= (   
    const Processor & process ) [default]
```

Overload operateur = to construct a new [Cascade](#) object by recopy.

Parameters

<i>process</i>	
----------------	--

Returns

[Processor](#)&

2.6.2.11 operator=() [2/2]

```
Processor& tweetoscope::cascade::Processor::operator= (   
    Processor && process ) [default]
```

Overload operateur = to construct a new [Cascade](#) object by recopying its right value.

Parameters

<i>process</i>	
----------------	--

Returns

[Processor](#)&

2.6.2.12 sendPartialCascade()

```
std::vector< std::string > tweetoscope::cascade::Processor::sendPartialCascade (
    const std::vector< std::size_t > & obs ) [inline]
```

Method to send a serie which is a partial cascade.

Parameters

<i>obs</i>	
------------	--

Returns

std::vector<std::string>

2.6.2.13 sendTerminatedCascade()

```
std::vector< std::string > tweetoscope::cascade::Processor::sendTerminatedCascade (
    timestamp & end_time,
    const std::size_t & min_size ) [inline]
```

Method to send properties which correspond to a terminated cascade.

Parameters

<i>end_time</i>	
<i>min_size</i>	

Returns

std::vector<std::string>

2.6.2.14 setSourceTime()

```
void tweetoscope::cascade::Processor::setSourceTime (
    const timestamp & src_time ) [inline]
```

Set the Source Time object.

Parameters

<i>src_time</i>	
-----------------	--

2.6.3 Friends And Related Function Documentation

2.6.3.1 operator<<

```
std::ostream& operator<< (
    std::ostream & os,
    std::vector< std::pair< timestamp, int > > & time_magnitude ) [friend]
```

Overload operator << to add time and magnitude to an output to print.

Parameters

<i>os</i>	
<i>time_magnitude</i>	

Returns

std::ostream&

The documentation for this class was generated from the following file:

- tweetoscopeCollectorParams.hpp

2.7 tweetoscope::params::section::Times Struct Reference

[Times](#) class.

```
#include <tweetoscopeCollectorParams.hpp>
```

Public Attributes

- std::vector< std::size_t > **observation**
- std::size_t **terminated**

2.7.1 Detailed Description

[Times](#) class.

The documentation for this struct was generated from the following file:

- tweetoscopeCollectorParams.hpp

2.8 tweetoscope::params::section::Topic Struct Reference

[Topic](#) class.

```
#include <tweetoscopeCollectorParams.hpp>
```

Public Attributes

- std::string **in**
- std::string **out_series**
- std::string **out_properties**

2.8.1 Detailed Description

[Topic](#) class.

The documentation for this struct was generated from the following file:

- tweetoscopeCollectorParams.hpp

2.9 tweetoscope::tweet Struct Reference

Structure tweet, objet with tweet parameters.

```
#include <tweetoscopeCollectorParams.hpp>
```

Public Attributes

- std::string **type** = ""
- std::string **msg** = ""
- timestamp **time** = 0
- double **magnitude** = 0
- source::idf **source** = 0
- std::string **info** = ""

2.9.1 Detailed Description

Structure tweet, objet with tweet parameters.

The documentation for this struct was generated from the following file:

- tweetoscopeCollectorParams.hpp

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