NAME

Mail::Box::Message::Destructed − a destructed message

INHERITANCE

```
 Mail::Box::Message::Destructed
   is a Mail::Box::Message
   is a Mail::Message
   is a Mail::Reporter
```

SYNOPSIS

```
 $folder−>message(3)−>destruct;
```

DESCRIPTION

When a message folder is read, each message will be parsed into Perl structures. Especially the header structure can consume a huge amount of memory (message bodies can be moved to external temporary files). Destructed messages have forcefully cleaned-up all header and body information, and are therefore much smaller. Some useful information is still in the object.

BE WARNED: once a message is destructed, it cannot be revived. Destructing enforces irreversable deletion from the folder. If you have a folder opened for read-only, the message will stay in that folder, but otherwise it may be deleted.

Extends "DESCRIPTION" in Mail::Box::Message.

METHODS

Extends "METHODS" in Mail::Box::Message.

Constructors

Extends "Constructors" in Mail::Box::Message.

$obj−>**clone**(%options)

Inherited, see "Constructors" in Mail::Message

Mail::Box::Message::Destructed−>**new**($message_id, %options)

You cannot instantiate a destructed message object. Destruction is done by calling **Mail::Box::Message::destruct()**.

```
 −Option    −−Defined in        −−Default
  body        Mail::Message       undef
  body_type   Mail::Box::Message  <from folder>
  deleted     Mail::Message       <false>
  field_type  Mail::Message       undef
  folder      Mail::Box::Message  <required>
  head        Mail::Message       undef
  head_type   Mail::Message       Mail::Message::Head::Complete
  labels      Mail::Message       {}
  log         Mail::Reporter      'WARNINGS'
  messageId   Mail::Message       undef
  modified    Mail::Message       <false>
  size        Mail::Box::Message  undef
  trace       Mail::Reporter      'WARNINGS'
  trusted     Mail::Message       <false>
```

body => OBJECT
body_type => CODE|CLASS
deleted => BOOLEAN
field_type => CLASS
folder => FOLDER
head => OBJECT

head_type => CLASS
labels => ARRAY|HASH
log => LEVEL
messageId => STRING
modified => BOOLEAN
size => INTEGER
trace => LEVEL
trusted => BOOLEAN

Constructing a message

Extends "Constructing a message" in Mail::Box::Message.

`$obj`−>**bounce**([<$rg_object|%options>])
Inherited, see "Constructing a message" in Mail::Message::Construct::Bounce

Mail::Box::Message::Destructed−>**build**([$message|$part|$body], `$content`)
Inherited, see "Constructing a message" in Mail::Message::Construct::Build

Mail::Box::Message::Destructed−>**buildFromBody**($body, [$head], `$headers`)
Inherited, see "Constructing a message" in Mail::Message::Construct::Build

`$obj`−>**forward**(%options)
Inherited, see "Constructing a message" in Mail::Message::Construct::Forward

`$obj`−>**forwardAttach**(%options)
Inherited, see "Constructing a message" in Mail::Message::Construct::Forward

`$obj`−>**forwardEncapsulate**(%options)
Inherited, see "Constructing a message" in Mail::Message::Construct::Forward

`$obj`−>**forwardInline**(%options)
Inherited, see "Constructing a message" in Mail::Message::Construct::Forward

`$obj`−>**forwardNo**(%options)
Inherited, see "Constructing a message" in Mail::Message::Construct::Forward

`$obj`−>**forwardPostlude**()
Inherited, see "Constructing a message" in Mail::Message::Construct::Forward

`$obj`−>**forwardPrelude**()
Inherited, see "Constructing a message" in Mail::Message::Construct::Forward

`$obj`−>**forwardSubject**(STRING)
Inherited, see "Constructing a message" in Mail::Message::Construct::Forward

Mail::Box::Message::Destructed−>**read**($fh|STRING|SCALAR|ARRAY, `%options`)
Inherited, see "Constructing a message" in Mail::Message::Construct::Read

`$obj`−>**rebuild**(%options)
Inherited, see "Constructing a message" in Mail::Message::Construct::Rebuild

`$obj`−>**reply**(%options)
Inherited, see "Constructing a message" in Mail::Message::Construct::Reply

`$obj`−>**replyPrelude**([STRING|$field|$address|ARRAY−$of−$things])
Inherited, see "Constructing a message" in Mail::Message::Construct::Reply

`$obj`−>**replySubject**(STRING)
Mail::Box::Message::Destructed−>**replySubject**(STRING)
Inherited, see "Constructing a message" in Mail::Message::Construct::Reply

The message

Extends "The message" in Mail::Box::Message.

`$obj−>`**container**()
Inherited, see ‘‘The message’’ in Mail::Message

`$obj−>`**copyTo**($folder, `%options`)
Inherited, see ‘‘The message’’ in Mail::Box::Message

`$obj−>`**folder**([$folder])
Inherited, see ‘‘The message’’ in Mail::Box::Message

`$obj−>`**isDummy**()
Inherited, see ‘‘The message’’ in Mail::Message

`$obj−>`**isPart**()
Inherited, see ‘‘The message’’ in Mail::Message

`$obj−>`**messageId**()
Inherited, see ‘‘The message’’ in Mail::Message

`$obj−>`**moveTo**($folder, `%options`)
Inherited, see ‘‘The message’’ in Mail::Box::Message

`$obj−>`**partNumber**()
Inherited, see ‘‘The message’’ in Mail::Message

`$obj−>`**print**([$fh])
Inherited, see ‘‘The message’’ in Mail::Message

`$obj−>`**send**([$mailer], `%options`)
Inherited, see ‘‘The message’’ in Mail::Message

`$obj−>`**seqnr**([$integer])
Inherited, see ‘‘The message’’ in Mail::Box::Message

`$obj−>`**size**()
Inherited, see ‘‘The message’’ in Mail::Message

`$obj−>`**toplevel**()
Inherited, see ‘‘The message’’ in Mail::Message

`$obj−>`**write**([$fh])
Inherited, see ‘‘The message’’ in Mail::Message

The header

Extends ‘‘The header’’ in Mail::Box::Message.

`$obj−>`**bcc**()
Inherited, see ‘‘The header’’ in Mail::Message

`$obj−>`**cc**()
Inherited, see ‘‘The header’’ in Mail::Message

`$obj−>`**date**()
Inherited, see ‘‘The header’’ in Mail::Message

`$obj−>`**destinations**()
Inherited, see ‘‘The header’’ in Mail::Message

`$obj−>`**from**()
Inherited, see ‘‘The header’’ in Mail::Message

`$obj−>`**get**($fieldname)
Inherited, see ‘‘The header’’ in Mail::Message

`$obj−>`**guessTimestamp**()
Inherited, see ‘‘The header’’ in Mail::Message

`$obj->`**head**([$head])
: When `undef` is specified for `$head`, no change has to take place and the method returns silently. In all other cases, this method will complain that the header has been removed.

`$obj->`**nrLines**()
: Inherited, see ''The header'' in Mail::Message

`$obj->`**sender**()
: Inherited, see ''The header'' in Mail::Message

`$obj->`**study**($fieldname)
: Inherited, see ''The header'' in Mail::Message

`$obj->`**subject**()
: Inherited, see ''The header'' in Mail::Message

`$obj->`**timestamp**()
: Inherited, see ''The header'' in Mail::Message

`$obj->`**to**()
: Inherited, see ''The header'' in Mail::Message

The body

Extends ''The body'' in Mail::Box::Message.

`$obj->`**body**([$body])
: When `undef` is specified for `$body`, no change has to take place and the method returns silently. In all other cases, this method will complain that the body data has been removed.

`$obj->`**contentType**()
: Inherited, see ''The body'' in Mail::Message

`$obj->`**decoded**(%options)
: Inherited, see ''The body'' in Mail::Message

`$obj->`**encode**(%options)
: Inherited, see ''The body'' in Mail::Message

`$obj->`**isMultipart**()
: Inherited, see ''The body'' in Mail::Message

`$obj->`**isNested**()
: Inherited, see ''The body'' in Mail::Message

`$obj->`**parts**([<'ALL'|'ACTIVE'|'DELETED'|'RECURSE'|$filter>])
: Inherited, see ''The body'' in Mail::Message

Flags

Extends ''Flags'' in Mail::Box::Message.

`$obj->`**delete**()
: Inherited, see ''Flags'' in Mail::Message

`$obj->`**deleted**([BOOLEAN])
: Inherited, see ''Flags'' in Mail::Message

`$obj->`**isDeleted**()
: Inherited, see ''Flags'' in Mail::Message

`$obj->`**isModified**()
: Inherited, see ''Flags'' in Mail::Message

`$obj->`**label**($label|PAIRS)
: It is possible to delete a destructed message, but not to undelete it.

`$obj->`**labels**()
Inherited, see ‘‘Flags’’ in Mail::Message

`$obj->`**labelsToStatus**()
Inherited, see ‘‘Flags’’ in Mail::Message

`$obj->`**modified**([BOOLEAN])
Inherited, see ‘‘Flags’’ in Mail::Message

`$obj->`**statusToLabels**()
Inherited, see ‘‘Flags’’ in Mail::Message

The whole message as text

Extends ‘‘The whole message as text’’ in Mail::Box::Message.

`$obj->`**file**()
Inherited, see ‘‘The whole message as text’’ in Mail::Message::Construct::Text

`$obj->`**lines**()
Inherited, see ‘‘The whole message as text’’ in Mail::Message::Construct::Text

`$obj->`**printStructure**([$fh|undef],[$indent])
Inherited, see ‘‘The whole message as text’’ in Mail::Message::Construct::Text

`$obj->`**string**()
Inherited, see ‘‘The whole message as text’’ in Mail::Message::Construct::Text

Internals

Extends ‘‘Internals’’ in Mail::Box::Message.

`$obj->`**clonedFrom**()
Inherited, see ‘‘Internals’’ in Mail::Message

Mail::Box::Message::Destructed−>**coerce**($message)
Coerce a Mail::Box::Message into destruction.

example: of coercion to death

```
Mail::Box::Message::Destructed->coerce($folder->message(1));
$folder->message(1)->destruct;  # same

my $msg = $folder->message(1);
Mail::Box::Message::Destructed->coerce($msg);
$msg->destruct;                 # same
```

`$obj->`**diskDelete**()
Inherited, see ‘‘Internals’’ in Mail::Box::Message

`$obj->`**isDelayed**()
Inherited, see ‘‘Internals’’ in Mail::Message

`$obj->`**readBody**(`$parser`, `$head`, [$bodytype])
Inherited, see ‘‘Internals’’ in Mail::Box::Message

`$obj->`**readFromParser**(`$parser`, [$bodytype])
Inherited, see ‘‘Internals’’ in Mail::Message

`$obj->`**readHead**(`$parser`, [$class])
Inherited, see ‘‘Internals’’ in Mail::Message

`$obj->`**recursiveRebuildPart**($part, `%options`)
Inherited, see ‘‘Internals’’ in Mail::Message::Construct::Rebuild

`$obj->`**storeBody**($body)
Inherited, see ‘‘Internals’’ in Mail::Message

$obj->**takeMessageId**([STRING])
Inherited, see "Internals" in Mail::Message

Error handling

Extends "Error handling" in Mail::Box::Message.

$obj->**AUTOLOAD**()
Inherited, see "METHODS" in Mail::Message::Construct

$obj->**addReport**($object)
Inherited, see "Error handling" in Mail::Reporter

$obj->**defaultTrace**([$level]|[$loglevel, $tracelevel]|[$level, $callback])
Mail::Box::Message::Destructed->**defaultTrace**([$level]|[$loglevel, $tracelevel]|[$level, $callback])
Inherited, see "Error handling" in Mail::Reporter

$obj->**errors**()
Inherited, see "Error handling" in Mail::Reporter

$obj->**log**([$level, [$strings]])
Mail::Box::Message::Destructed->**log**([$level, [$strings]])
Inherited, see "Error handling" in Mail::Reporter

$obj->**logPriority**($level)
Mail::Box::Message::Destructed->**logPriority**($level)
Inherited, see "Error handling" in Mail::Reporter

$obj->**logSettings**()
Inherited, see "Error handling" in Mail::Reporter

$obj->**notImplemented**()
Inherited, see "Error handling" in Mail::Reporter

$obj->**report**([$level])
Inherited, see "Error handling" in Mail::Reporter

$obj->**reportAll**([$level])
Inherited, see "Error handling" in Mail::Reporter

$obj->**shortSize**([$value])
Mail::Box::Message::Destructed->**shortSize**([$value])
Inherited, see "Error handling" in Mail::Message

$obj->**shortString**()
Inherited, see "Error handling" in Mail::Message

$obj->**trace**([$level])
Inherited, see "Error handling" in Mail::Reporter

$obj->**warnings**()
Inherited, see "Error handling" in Mail::Reporter

Cleanup

Extends "Cleanup" in Mail::Box::Message.

$obj->**DESTROY**()
Inherited, see "Cleanup" in Mail::Reporter

$obj->**destruct**()
Inherited, see "Cleanup" in Mail::Box::Message

DETAILS

Extends "DETAILS" in Mail::Box::Message.

DIAGNOSTICS

Error: Cannot coerce a (class) into destruction

Only real Mail::Box::Message objects can get destructed into Mail::Box::Message::Destructed objects. Mail::Message free their memory immediately when the last reference is lost.

Error: Cannot include forward source as `$include`.

Unknown alternative for the forward(include). Valid choices are `NO`, `INLINE`, `ATTACH`, and `ENCAPSULATE`.

Error: Cannot include reply source as `$include`.

Unknown alternative for the `include` option of **reply()**. Valid choices are `NO`, `INLINE`, and `ATTACH`.

Error: Destructed message has no labels except 'deleted'
Error: Destructed messages can not be undeleted

Once a message is destructed, it can not be revived. Destruction is an optimization in memory usage: if you need an undelete functionality, then you can not use **Mail::Box::Message::destruct()**.

Error: Method bounce requires To, Cc, or Bcc

The message **bounce()** method forwards a received message off to someone else without modification; you must specified it's new destination. If you have the urge not to specify any destination, you probably are looking for **reply()**. When you wish to modify the content, use **forward()**.

Error: Method forwardAttach requires a preamble
Error: Method forwardEncapsulate requires a preamble
Error: No address to create forwarded to.

If a forward message is created, a destination address must be specified.

Error: No default mailer found to send message.

The message **send()** mechanism had not enough information to automatically find a mail transfer agent to sent this message. Specify a mailer explicitly using the `via` options.

Error: No rebuild rule `$name` defined.
Error: Only **build()** Mail::Message's; they are not in a folder yet

You may wish to construct a message to be stored in a some kind of folder, but you need to do that in two steps. First, create a normal Mail::Message, and then add it to the folder. During this **Mail::Box::addMessage()** process, the message will get **coerce()**−d into the right message type, adding storage information and the like.

Error: Package `$package` does not implement `$method`.

Fatal error: the specific package (or one of its superclasses) does not implement this method where it should. This message means that some other related classes do implement this method however the class at hand does not. Probably you should investigate this and probably inform the author of the package.

Error: You cannot instantiate a destructed message

You cannot instantiate a destructed message object directly. Destruction is done by calling **Mail::Box::Message::destruct()** on any existing folder message.

Error: You cannot take the head/body of a destructed message

The message originated from a folder, but its memory has been freed-up forcefully by means of **Mail::Box::Message::destruct()**. Apparently, your program still tries to get to the header or body data after this destruction, which is not possible.

SEE ALSO

This module is part of Mail-Box distribution version 3.009, built on August 18, 2020. Website: *http://perl.overmeer.net/CPAN/*

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