

NAME

Mail::Field – base-class for manipulation of mail header fields

INHERITANCE

```
Mail::Field is extended by
  Mail::Field::AddrList
  Mail::Field::Date
  Mail::Field::Generic
```

SYNOPSIS

```
use Mail::Field;

my $field = Mail::Field->new('Subject', 'some subject text');
my $field = Mail::Field->new(Subject => 'some subject text');
print $field->tag, ":", $field->stringify, "\n";

my $field = Mail::Field->subject('some subject text');
```

DESCRIPTION

Mail::Field creates and manipulates fields in MIME headers, collected within a Mail::Header object. Different field types have their own sub-class (extension), defining additional useful accessors to the field content.

People are invited to merge their implementation to special fields into MailTools, to maintain a consistent set of packages and documentation.

METHODS**Constructors**

Mail::Field (and it's sub-classes) define several methods which return new objects. These can all be categorized as constructor.

Mail::Field->**combine**(\$fields)

Take a LIST of Mail::Field objects (which should all be of the same sub-class) and create a new object in that same class.

Mail::Field->**extract**(\$tag, \$head [, \$index])

Takes as arguments the tag name, a Mail::Head object and optionally an index.

If the index argument is given then `extract` will retrieve the given tag from the Mail::Head object and create a new Mail::Field based object. *undef* will be returned in the field does not exist.

If the index argument is not given the result depends on the context in which `extract` is called. If called in a scalar context the result will be as if `extract` was called with an index value of zero. If called in an array context then all tags will be retrieved and a list of Mail::Field objects will be returned.

Mail::Field->**new**(\$tag [, STRING | %options])

Create an object in the class which defines the field specified by the `$tag` argument.

“Fake” constructors

\$obj->**create**(%options)

This constructor is used internally with preprocessed field information. When called on an existing object, its original content will get replaced.

\$obj->**parse**()

Parse a field line.

Accessors

\$obj->**set**(%options)

Change the settings (the content, but then smart) of this field.

`$obj->stringify()`

Returns the field as a string.

`$obj->tag()`

`Mail::Field->tag()`

Return the tag (in the correct case) for this item. Well, actually any casing is OK, because the field tags are treated case-insensitive; however people have some preferences.

Smart accessors

`$obj->text([STRING])`

Without arguments, the field is returned as `stringify()` does. Otherwise, the STRING is parsed with `parse()` to replace the object's content.

It is more clear to call either `stringify()` or `parse()` directly, because this method does not add additional processing.

DETAILS

SUB-CLASS PACKAGE NAMES

All sub-classes should be called `Mail::Field::name` where *name* is derived from the tag using these rules.

- Consider a tag as being made up of elements separated by '-'
- Convert all characters to lowercase except the first in each element, which should be uppercase.
- *name* is then created from these elements by using the first N characters from each element.
- N is calculated by using the formula :-

$$\text{int}((7 + \text{\#elements}) / \text{\#elements})$$

- *name* is then limited to a maximum of 8 characters, keeping the first 8 characters.

For an example of this take a look at the definition of the `_header_pkg_name()` subroutine in `Mail::Field`

DIAGNOSTICS

Error: Undefined subroutine <method> called

Mail::Field objects use autoloading to compile new functionality. Apparently, the method called is not implemented for the specific class of the field object.

SEE ALSO

This module is part of the MailTools distribution, <http://perl.overmeer.net/mailtools/>.

AUTHORS

The MailTools bundle was developed by Graham Barr. Later, Mark Overmeer took over maintenance without commitment to further development.

Mail::Cap by Gisle Aas <aas@oslonett.no>. Mail::Field::AddrList by Peter Orbaek <poe@cit.dk>. Mail::Mailer and Mail::Send by Tim Bunce <Tim.Bunce@ig.co.uk>. For other contributors see ChangeLog.

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