

## NAME

Encode::Encoder -- Object Oriented Encoder

## SYNOPSIS

```

use Encode::Encoder;
# Encode::encode("ISO-8859-1", $data);
Encode::Encoder->new($data)->iso_8859_1; # OOP way
# shortcut
use Encode::Encoder qw(encoder);
encoder($data)->iso_8859_1;
# you can stack them!
encoder($data)->iso_8859_1->base64; # provided base64() is defined
# you can use it as a decoder as well
encoder($base64)->bytes('base64')->latin1;
# stringified
print encoder($data)->utf8->latin1; # prints the string in latin1
# numified
encoder("\x{abcd}\x{ef}g")->utf8 == 6; # true. bytes::length($data)

```

## ABSTRACT

**Encode::Encoder** allows you to use Encode in an object-oriented style. This is not only more intuitive than a functional approach, but also handier when you want to stack encodings. Suppose you want your UTF-8 string converted to Latin1 then Base64: you can simply say

```
my $base64 = encoder($utf8)->latin1->base64;
```

instead of

```
my $latin1 = encode("latin1", $utf8);
my $base64 = encode_base64($utf8);
```

or the lazier and more convoluted

```
my $base64 = encode_base64(encode("latin1", $utf8));
```

## Description

Here is how to use this module.

- There are at least two instance variables stored in a hash reference, {data} and {encoding}.
- When there is no method, it takes the method name as the name of the encoding and encodes the instance *data* with *encoding*. If successful, the instance *encoding* is set accordingly.
- You can retrieve the result via `->data` but usually you don't have to because the stringify operator `()` is overridden to do exactly that.

### Predefined Methods

This module predefines the methods below:

```
$e = Encode::Encoder->new([$data, $encoding]);
```

returns an encoder object. Its data is initialized with **\$data** if present, and its encoding is set to **\$encoding** if present.

When **\$encoding** is omitted, it defaults to utf8 if **\$data** is already in utf8 or (empty string) otherwise.

```
encoder()
```

is an alias of `Encode::Encoder->new()`. This one is exported on demand.

```
$e->data([$data])
```

When **\$data** is present, sets the instance data to **\$data** and returns the object itself. Otherwise, the current instance data is returned.

`$e->encoding([$encoding])`

When `$encoding` is present, sets the instance encoding to `$encoding` and returns the object itself. Otherwise, the current instance encoding is returned.

`$e->bytes([$encoding])`

decodes instance data from `$encoding`, or the instance encoding if omitted. If the conversion is successful, the instance encoding will be set to `.`

The name *bytes* was deliberately picked to avoid namespace tainting — this module may be used as a base class so method names that appear in [Encode::Encoding](#) are avoided.

#### Example: base64 transcoder

This module is designed to work with `Encode::Encoding`. To make the Base64 transcoder example above really work, you could write a module like this:

```
package Encode::Base64;
use parent 'Encode::Encoding';
__PACKAGE__->Define('base64');
use MIME::Base64;
sub encode{
my ($obj, $data) = @_;
return encode_base64($data);
}
sub decode{
my ($obj, $data) = @_;
return decode_base64($data);
}
1;
__END__
```

And your caller module would be something like this:

```
use Encode::Encoder;
use Encode::Base64;

# now you can really do the following

encoder($data)->iso_8859_1->base64;
encoder($base64)->bytes('base64')->latin1;
```

#### Operator Overloading

This module overloads two operators, `stringify ()` and `numify (0+)`.

`Stringify` dumps the data inside the object.

`Numify` returns the number of bytes in the instance data.

They come in handy when you want to print or find the size of data.

#### SEE ALSO

Encode, [Encode::Encoding](#)