Ruby - Bug #17364

Fix documentation for String#encode options

12/03/2020 07:44 PM - tjschuck (T.J. Schuck)

Status:	Closed		
Priority:	Normal		
Assignee:			
Target version:			
ruby -v:		**Backport:**	2.5: UNKNOWN, 2.6: UNKNOWN, 2.7: REQUIRED

Description

(Everything below is written about String#encode, but it also applies to String#encode! — only referring to encode for brevity.)

The current signature for String#encode is str.encode(dst_encoding, src_encoding [, options]), and the docs below say:

> The options Hash gives details for conversion...

However, starting in Ruby 2.7, if you pass the options as a Hash, you get the warning "Using the last argument as keyword parameters is deprecated", and in Ruby 3.0-preview1, it raises "ArgumentError (wrong number of arguments (given 3, expected 0..2))".

In the ultimately called str_transcode, you can see that the argument format is "02:" in transcode.c:L2760, i.e. they're actually keyword arguments.

Since there are so many keyword arguments that don't have "obvious" defaults to document in the method signature itself, attached are two proposed patches for how to fix the docs:

1. keep_options.diff uses a similar approach to the one used in, e.g., CSV#filter, using **options in the signature and then specifying that those are intended to be keyword arguments — see csv.rb:997-1042

2. list_all_kwargs.diff is probably the more strictly "correct" option, but definitely more unwieldy. You can see a similar usage to this in the current Ruby 2.7 docs for CSV#new, but even that has since changed to using the **options style — see ruby/csv/pull/124

Associated revisions

Revision 9195310168fa43186b1918fb0432a54b000fcbba - 12/03/2020 08:47 PM - jeremyevans (Jeremy Evans)

Update documentation for String#encode{,!} [ci skip]

These methods take keywords, not a hash.

From tjschuck (T.J. Schuck)

Fixes [Bug #17364]

Revision 91953101 - 12/03/2020 08:47 PM - jeremyevans (Jeremy Evans)

Update documentation for String#encode{,!} [ci skip]

These methods take keywords, not a hash.

From tjschuck (T.J. Schuck)

Fixes [Bug #17364]

History

#1 - 12/03/2020 08:24 PM - jeremyevans0 (Jeremy Evans)

Which format should be used in documentation depends on the method implementation. If the method ignores unrecognized keywords, then **options should be used. If the method raises an ArgumentError for unrecognized keywords, then keywords should be listed explicitly. This is to mirror how the method would work if implemented in Ruby.

In this case, String#encode ignores unrecognized keywords, so the **options approach is preferable:

```
"a".encode('UTF-8', :foo=>:bar)
# => "a"
```

Note that you should use str.encode(encoding, **options), (no [] around options), because a keyword splat is always optional. Personally, I don't think we should use [] around optional arguments in call-seq, we should use a default value for the argument or separate call-seq line. That is the approach recommended by the method documentation guide (doc/method_documentation.rdoc).

#2 - 12/03/2020 08:39 PM - tjschuck (T.J. Schuck)

- File string_encode_docs.diff added

Aha, thanks for the pointer to doc/method_documentation.rdoc, Jeremy — very helpful!

Based on the info you provided, it seems like using **options and axing the [] in the call-seq is the preferred method. The attached diff should be the "final" state, then. Should I open a PR on GitHub since this is a "minor" change, submit a patch here, or just leave the diff below?

(It would also be ideal if this could be backported to 2.7 to save anyone else hitting the warning from taking the journey I did to get here.)

#3 - 12/03/2020 08:46 PM - jeremyevans0 (Jeremy Evans)

- Backport changed from 2.5: UNKNOWN, 2.6: UNKNOWN, 2.7: UNKNOWN to 2.5: UNKNOWN, 2.6: UNKNOWN, 2.7: REQUIRED

tjschuck (T.J. Schuck) wrote in #note-2:

> Aha, thanks for the pointer to doc/method_documentation.rdoc, Jeremy — very helpful!
>
> Based on the info you provided, it seems like using **options and axing the [] in the call-seq is the preferred method. The attached diff should be the "final" state, then. Should I open a PR on GitHub since this is a "minor" change, submit a patch here, or just leave the diff below?

I can apply your patch.

> (It would also be ideal if this could be backported to 2.7 to save anyone else hitting the warning from taking the journey I did to get here.)

Since you requested this, I'll mark this for backporting. I do not think it is worth it from a cost/benefit perspective to backport documentation patches, but whether to do so is up to branch maintainer.

#4 - 12/03/2020 08:51 PM - tjschuck (T.J. Schuck)

Thank you, Jeremy — I appreciate all the assistance you gave here!

#5 - 12/03/2020 09:08 PM - jeremyevans (Jeremy Evans)

- Status changed from Open to Closed

Applied in changeset git|9195310168fa43186b1918fb0432a54b000fcbba.

Update documentation for String#encode{,!} [ci skip]

These methods take keywords, not a hash.

From tjschuck (T.J. Schuck)

Fixes [Bug #17364]

Files

keep_options.diff	1.85 KB	12/03/2020	tjschuck (T.J. Schuck)
list_all_kwargs.diff	2.44 KB	12/03/2020	tjschuck (T.J. Schuck)