Ruby master - Feature #12913
A way to configure the default maximum width of pp

11/09/2016 03:04 PM - mame (Yusuke Endoh)

Status: Closed
Priority: Normal
Assignee: nobu (Nobuyoshi Nakada)
Target version:

Description
How about having an easy way to configure the maximum width of a line of pp output? Currently, pp accepts the maximum width as an optional argument:

```ruby
pp(big_array, $>, 120)
```

However, this is obviously too long for a useful debugging-purpose method like pp. Even worse, we must add the fragment ", $>, 120" to all calls to pp. I don't feel this is reasonable.

The patch attached provides PP.default_maxwidth= and PP.default_maxwidth, which can be used to configure the default setting of the maxwidth.

```ruby
PP.default_maxwidth = 1
pp([1, 2, 3])
#=> [1, 2, 3]
```

Akr-san, what do you think?

Associated revisions
Revision eac347fd - 11/30/2021 02:43 AM - mame (Yusuke Endoh)
lib/pp.rb (PP.pp): Use io/console's winsize by default

[Feature #12913]

Revision dfd9728c - 12/07/2021 03:07 AM - mame (Yusuke Endoh)
NEWS.md: Describe the change of the default width of pp

[Feature #12913]

Revision c6cf1934 - 12/23/2021 09:00 AM - nobu (Nobuyoshi Nakada)
[ruby/pp] [DOC] Update for PP.width_for [Feature #12913]
https://github.com/ruby/pp/commit/cad3cc762c

History
#1 - 11/09/2016 04:10 PM - akr (Akira Tanaka)
I think the columns obtained by IO#winsize of io/console is better default now.
I'm not sure you are satisfied with it, though.

#2 - 11/09/2016 10:52 PM - mame (Yusuke Endoh)
Akr-san, thank you for your reply.

However, I'd still like to have PP.default_maxwidth= too. My motivation is to show abstract syntax tree (in my article). In such a case, I think that "break as far as possible" would be useful.

Thank you for your consideration,
Yusuke Endoh wrote:

In such a case, I think that "break as far as possible" would be useful.

"break as far as possible" is opposite to pp.rb's intent:
"don't break as far as possible (in screen width limitation)".

I think a global configuration to choose different intent for single API is not a good idea.

pp (including pretty_inspect and PP.pp) method is used in many gems.
I think the intent of most of them is "don't break as far as possible".
PP.default_maxwidth = 1 breaks the intent.

I recommend that you define a method to call PP.pp with width = 1.

Akira Tanaka wrote:

Note that my proposal is only for PP; the scope does not include pretty_inspect.

PP is a debugging-purpose API, so it is rarely used in a released code. So, we don't have to consider the case where PP is used in multiple modules simultaneously, I think. Also, because of debugging-purpose, it would be good to prioritize usability than safety.

So, I think global configuration is dangerous,

What about this?

• affects PP.pp and Kernel#pp only
• try console window size, COLUMNs environment variable, then old good 80

diff --git a/lib/pp.rb b/lib/pp.rb
index 85401c8aa6..a364d0fc2a 100644
--- a/lib/pp.rb
+++ b/lib/pp.rb
@@ -68,7 +68,7 @@
 # If +width+ is omitted, 79 is assumed.
 #
 # PP.pp returns +out+.
- def PP.pp(obj, out<=$>, width=79)
+ def PP.pp(obj, out<=$>, width=PP.width_for(out))
 q = PP.new(out, width)
 q.guard_inspect_key {q.pp obj}
 q.flush
@@ -91,6 +91,15 @@
 def PP.mcall(obj, mod, meth, *args, &block)
 mod.instance_method(meth).bind(obj).call(*args, &block)
 end
+ def PP.width_for(out)
+ begin
+ require 'io/console'
nobu (Nobuyoshi Nakada) wrote:

What about this?

- affects PP.pp and Kernel#pp only
- try console window size, COLUMNS environment variable, then old good 80

It seems fine.

akr (Akira Tanaka) wrote in #note-8:

nobu (Nobuyoshi Nakada) wrote:

What about this?

- affects PP.pp and Kernel#pp only
- try console window size, COLUMNS environment variable, then old good 80

It seems fine.

I prefer nobu (Nobuyoshi Nakada)'s patch to mine. Since it was fine to akr (Akira Tanaka), how about committing it?

https://github.com/nobu/ruby/runs/2672425246?check_suite_focus=true#step:15:239
A test in rbs passes keyword arguments to pp.
Also ko1 (Koichi Sasada) says he uses keywords arguments with pp very often.

So, some people (including ko1 (Koichi Sasada)) have a custom to pass keyword arguments to Kernel#pp:

```
foo = 42
bar = 43
pp(foo: foo, bar: bar). #=> {:foo=>42, :bar=>43}
```

Unfortunately, introducing keyword arguments to Kernel#pp breaks their custom.

How about introducing pp_out and pp_width keywords? It is a bit dirty, but good enough.
We discussed this issue in today's dev-meeting. 🚀 (Akira Tanaka) suggested that

1. To make the default size to be io/console's winsize (width)
2. Instead of changing Kernel#pp, extend PP.pp to accept keywords out and width
3. If we want width=1, define another new method like PP.fully_expanded_pp(obj) or something (Note that there is already PP.singleline_pp(obj))

and we agreed with them. I'll commit a change for 1 later.

I am happy to create another patch for 2 and 3. Anyone have an idea about the name of fully_expanded_pp?

#13 - 06/17/2021 02:51 PM - jeremyevans0 (Jeremy Evans)

mame (Yusuke Endoh) wrote in #note-12:
We discussed this issue in today's dev-meeting. ak (Akira Tanaka) suggested that

1. To make the default size to be io/console's winsize (width)
2. Instead of changing Kernel#pp, extend PP.pp to accept keywords out and width
3. If we want width=1, define another new method like PP.fully_expanded_pp(obj) or something (Note that there is already PP.singleline_pp(obj))

and we agreed with them. I'll commit a change for 1 later.

I am happy to create another patch for 2 and 3. Anyone have an idea about the name of fully_expanded_pp?

In keeping with the spirit that Kernel#pp is more expanded than Kernel#, I suggest PP.ppp. :)

#14 - 11/30/2021 02:44 AM - mame (Yusuke Endoh)
- Status changed from Assigned to Closed

Applied in changeset git/eac3477db04023e1a365d84a8c163263cc7a5904.

lib/pp.rb (PP.pp): Use io/console's winsize by default

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#15 - 11/30/2021 04:14 AM - mame (Yusuke Endoh)
- Status changed from Closed to Open

I have committed the change for 1.

#16 - 12/07/2021 03:08 AM - mame (Yusuke Endoh)
- Status changed from Open to Closed

Applied in changeset git/dfd9728c87640d9699b1e7c63a6f6b8b2797fbc.

NEWS.md: Describe the change of the default width of pp

[Feature #12913]

#17 - 12/07/2021 07:44 AM - mame (Yusuke Endoh)
- Status changed from Closed to Open

#18 - 12/23/2021 09:03 AM - nobu (Nobuyoshi Nakada)
- Status changed from Open to Closed

Applied in changeset git/c6cf19340a116f21d71ecc218a2e8c31fe2f1d95.

[ruby/pp] [DOC] Update for PP.width_for [Feature #12913]
https://github.com/ruby/pp/commit/cad3cc762c

Files

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<tr>
<td>pp-default-maxwidth.patch</td>
<td>1.05 KB</td>
<td>11/09/2016</td>
<td>mame (Yusuke Endoh)</td>
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