

Ruby master - Bug #14737

Split default gems into separate directory structure

05/04/2018 10:38 AM - vo.x (Vit Ondruch)

Status: Assigned	
Priority: Normal	
Assignee: hsbt (Hiroshi SHIBATA)	
Target version:	
ruby -v: ruby 2.5.1p57 (2018-03-29 revision 63029) [x86_64-linux]	Backport: 2.3: UNKNOWN, 2.4: UNKNOWN, 2.5: UNKNOWN
Description	
<p>On Fedora, we are using <code>operating_system.rb</code> 1, 2 to setup various RubyGems paths. Unfortunately, if we change <code>Gem.default_dir</code> (which we want to point into user home directory on Fedora), then this also changes location for default gems (!!), which are later not discovered by RubyGems 3. It was not been a big deal for use, since we used to unbundle the gems shipped in Ruby, but with the gemification of StdLib, unbundling becomes unsustainable (it is more work, but mainly it is incompatible change).</p> <p>To fix this issue, I modified the <code>operating_system.rb</code> to behave similarly to what Arch does 4, i.e. we started to inject "--user-install" option 1. Unfortunately, this revealed the RubyGems are not respecting their own interfaces and I had to fix at least one of them along the way to make it work 6. Apparently, using the "--user-install" option itself has some drawbacks and what is worse, it is not respected by Bundler, which was recently pointed out 5.</p> <p>When I was fixing RubyGems 6, I just realized how the default gems are hacked up and how much is the original RubyGems configurability broken by this. This leads me to the proposal: Could we please install default gems into different directory then the other, user installed, gems? Since RubyGems were always designed to support various gem directory structures, the directory structure for default gems would become just other directory directory structure and would not collide with overrides in <code>operating_system.rb</code>, letting the distributions to override what was always designed to be overridable.</p> <p>BTW I believe that one nice side effect of this change would be simplification of RubyGems code base. The default gems would live in "default_gems" directory, their <code>.gemspec</code> files could be in standard "default_gems/specifications" directory and we could forget about "default_gems/specifications/defaults", etc.</p> <p>BTW2 I could fill this against RubyGems, but the default gems are Ruby stuff IMO, so I think this is appropriate tracker.</p>	

History

#1 - 05/05/2018 08:23 AM - shevegen (Robert A. Heiler)

BTW2 I could fill this against RubyGems, but the default gems are Ruby stuff IMO, so I think this is appropriate tracker.

It may be a chicken-egg problem, e. g. where to start.

I think it may take a little while altogether; bundler integration; using gems for distributed ruby add-ons. The actual change towards that will take a little while. See how bundler integration had to be delayed after Hiroshi Shibata encountered problems.

To Arch using --user-install - I am not sure this would be the recommended or assumed way. I myself use --user-install when I am in a restricted environment (such as having a user account on a university *nix system). At home I use prefixes such as `/Programs/Ruby/VERSION_HERE` to install gems. Most people I guess may use `/usr/` or `/usr/local/` as prefix, which understandably creates more problems for them. I also have to agree in general that the directory structure of rubygems used is not very ... intuitive. I always wondered about that, but I guess it is difficult to change without momentum or "sufficient need".

Perhaps it may actually be better to get a discussion going on the rubygems tracker; in particular get some of the people who have been working with gem code for a long time, such as `drbrain`, to see whether (after all the gemification and bundler-integration is done) the whole ordeal can be simplified

or changed. For instance, I am not even sure that you MUST have separate directory structures. You could keep track of the information in a file too, or?

#2 - 05/05/2018 11:15 AM - hsbt (Hiroshi SHIBATA)

- Assignee set to *hsbt (Hiroshi SHIBATA)*
- Status changed from *Open* to *Assigned*

#3 - 09/11/2019 02:48 PM - vo.x (Vit Ondruch)

I opened PR [1](#) implementing this.