

Ruby - Bug #21343

Namespace: singleton classes of root namespace leak between namespaces

05/15/2025 11:35 PM - jhawthorn (John Hawthorn)

Status:Open Priority:Normal Assignee: Target version: ruby -v:	Backport:3.2: UNKNOWN, 3.3: UNKNOWN, 3.4: UNKNOWN
Description Ruby classes all have singleton classes, those singleton classes have singleton classes, and so on with infinite nesting. Since we don't have infinite resources, we create these lazily. Because of this, only a certain number of singleton classes exist in the root namespace. At a certain depth, mutable singleton classes end up shared between namespaces. <pre>File.write("/tmp/ntest.rb", <<~'RUBY') p String.singleton_class.singleton_class::Foo String.singleton_class.singleton_class::Bar = 456 RUBY String.singleton_class.singleton_class::Foo = 123 ns = Namespace.new ns.require("/tmp/ntest.rb") p String.singleton_class.singleton_class::Bar RUBY_NAMESPACE=1 ruby nstest2.rb ruby: warning: Namespace is experimental, and the behavior may change in the future! See doc/namespace.md for known issues, etc. 123 456</pre>	

History

#1 - 05/16/2025 07:34 AM - byroot (Jean Boussier)

Seems adjacent to <https://bugs.ruby-lang.org/issues/21330>.

The klass field like the flags one isn't part of the classex_t, so it's not effectively namespaced.