

Ruby master - Feature #16563

Let `rb_mod_const_at` and `rb_const_list` use an ID table instead for inherited VS private constant segregation

01/26/2020 04:38 PM - methodmissing (Lourens Naudé)

Status:	Open
Priority:	Normal
Assignee:	
Target version:	
Description	
References https://github.com/ruby/ruby/pull/2840	
It feels unnatural to cast an ID to <code>st_data_t</code> if we already have an ID table implementation.	
Despite these declarations in <code>ruby/intern.h</code> returning void pointers, which were in fact pointers to ST tables, I don't think this change would / should break any extensions:	
<pre>void *rb_mod_const_at(VALUE, void*); void *rb_mod_const_of(VALUE, void*);</pre>	
<pre>lourens@CarbonX1:~/src/ruby/ruby\$ make benchmark ITEM=constants COMPARE_RUBY=~/.src/ruby/trunk/ruby OPTS="-v --repeat-count 12 --repeat-result median" /usr/local/bin/ruby --disable=gems --rrubygems -I./benchmark/lib ./benchmark/benchmark-driver/exe/benchmark-driver \ --executables="compare-ruby::~/~/src/ruby/trunk/ruby -I.ext/common --disable-gem" \ --executables="built-ruby::~/~/miniruby -I./lib -I. -I.ext/common ./tool/runruby.rb --extout=.ext -- --disable-gems --disable-gem" \ \$(find ./benchmark -maxdepth 1 -name 'constants' -o -name '*constants*.yml' -o -name '*constants*.rb' sort) -v --repeat-count 12 --repeat-result median compare-ruby: ruby 2.8.0dev (2020-01-15T01:50:53Z master ac93cf4ff8) [x86_64-linux] built-ruby: ruby 2.8.0dev (2020-01-15T02:06:58Z opt-const-at 3d5e2d4f68) [x86_64-linux] Calculating ----- compare-ruby built-ruby all 412.156k 519.808k i/s - 1.000M times in 2.443206s 1.932313s inherited 431.349k 522.407k i/s - 1.000M times in 2.338914s 1.930936s</pre>	
Comparison:	
<pre> all built-ruby: 519808.1 i/s compare-ruby: 412156.0 i/s - 1.26x slower</pre>	
<pre> inherited built-ruby: 522406.7 i/s compare-ruby: 431348.9 i/s - 1.21x slower</pre>	