Ruby master - Bug #18156

3.0.2 configuration checks by default for C++ compiler instead of C?

09/08/2021 02:54 PM - vo.x (Vít Ondruch)

Status: Open
Priority: Normal
Assignee:
Target version:
ruby -v: ruby 3.0.2p107 (2021-07-07 revision 0db68f0233) [x86_64-linux]
Backport: 2.6: UNKNOWN, 2.7: UNKNOWN, 3.0: UNKNOWN

Description
It seems that with git/c32375883a696fcf8e9e99875f1339ee5474a255 the configure script does not check for C compiler but for C++ using Autoconf 2.71. This is the difference between 2.69 1 and 2.71 2:

```bash
--- 2.69
+++ 2.71
@@ -1,40 +1,27 @@
-../configure --prefix=/home/chkbuild/chkbuild/tmp/build/20210908T123006Z --with-baseruby=/home/chkbuild/.rbenv/versions/3.0.2/bin/ruby --enable-debug-env --with-valgrind
-downloading config.guess ... done
-downloading config.sub ... done
++../configure --prefix=/home/chkbuild/chkbuild/tmp/build/20210908T120006Z --with-baseruby=/home/chkbuild/.rbenv/versions/3.0.2/bin/ruby --enable-debug-env --with-valgrind
+tool/config.guess already exists
+tool/config.sub already exists
- checking build system type... x86_64-pc-linux-gnu
- checking host system type... x86_64-pc-linux-gnu
- checking target system type... x86_64-pc-linux-gnu
- checking for gcc... gcc
- checking for ld... ld
- checking for gcc-ar... gcc-ar
- checking for g++... no
+ checking for g++... g++
+ checking for gcc-nm... gcc-nm
+ checking for gcc-ranlib... gcc-ranlib
- checking for gcc... (cached) gcc
- checking whether the C compiler works... yes
- checking for C compiler default output file name... a.out
+ checking whether the C++ compiler works... yes
+ checking for C++ compiler default output file name... a.out
+ checking for suffix of executables...
+ checking whether we are cross compiling... no
+ checking for suffix of object files... o
- checking whether we are using the GNU C compiler... yes
+ checking whether the compiler supports GNU C++... yes
+ checking whether g++ accepts -g... yes
+ checking for g++ option to enable C++11 features... none needed
+ checking for gcc... (cached) gcc
+ checking whether the compiler supports GNU C... yes
+ checking whether gcc accepts -g... yes
- checking for gcc option to accept ISO C89... none needed
- checking for gcc option to accept ISO C99... none needed
- checking for g++... no
- checking for c++... no
- checking for gpp... no
- checking for aCC... no
- checking for CC... no
- checking for cxx... no
- checking for cc++... no
- checking for cl.exe... no
- checking for FCC... no
- checking for KCC... no
```
checking for RCC... no
checking for xlc_r... no
checking for xlc... no
checking whether we are using the GNU C++ compiler... no
checking whether g++ accepts -g... no
+checking for gcc option to enable C11 features... none needed
checking how to run the C preprocessor... gcc -E
cHECKING for ranlib... (cached) gcc-ranlib
checking for gas... no
@@ -45,22 +32,20 @@
 checking for objdump... objdump
 checking for gstrip... no
 checking for strip... strip
 -checking for grep that handles long lines and -e... /usr/bin/grep
 -checking for egrep... /usr/bin/grep -E
 -checking for ANSI C header files... yes
 -checking for sys/types.h... yes
 +checking for stdio.h... yes
 +checking for stdlib.h... yes
 +checking for string.h... yes
 -checking for memory.h... yes
 -checking for strings.h... yes
 -checking for inttypes.h... yes
 checking for stdint.h... yes
 +checking for strings.h... yes
 +checking for sys/stat.h... yes
 +checking for sys/types.h... yes
 checking for unistd.h... yes
 -checking minix/config.h usability... no
 -checking minix/config.h presence... no
 +checking for wchar.h... yes
 +checking for minix/config.h... no
 +checking for vfork.h... no
 checking whether it is safe to define __EXTENSIONS__... yes
 +checking whether _XOPEN_SOURCE should be defined... no
 checking whether the linker is GNU ld... yes
 checking whether gcc -E accepts -o... yes
 checking for gcc... /usr/bin/gcc
 @@ -68,7 +53,7 @@
 checking whether ln -s works... yes
 checking whether make sets $(MAKE)... yes
 checking for a BSD-compatible install... /usr/bin/install -c
 -checking for a thread-safe mkdir -p... /usr/bin/mkdir -p
 +checking for a race-free mkdir -p... /usr/bin/mkdir -p
 checking for dtrace... no
 checking for dot... no
 checking for doxygen... no
 @@ -126,157 +111,64 @@
 checking whether -fexcess-precision=standard is accepted as CFLAGS... yes
 checking whether -fp-model precise is accepted as CFLAGS... no
 checking whether compiler has statement and declarations in expressions... yes
 -configure: Test skipped due to lack of a C++ compiler.
 +configure: Test skipped due to lack of a C++ compiler.
 +checking whether CXXFLAGS is valid... yes
 checking for crypt in -lcrypt... yes
 checking for dlopen in -ldl... yes
 checking for shl_load in -ldl... no
 checking for shutdown in -lsocket... no
 checking for dirent.h that defines DIR... yes
 checking for library containing opendir... none required
 +checking for _Bool... yes
 checking for stdbool.h that conforms to C99... yes
 -checking for _Bool... yes
 checking for sys/wait.h that is POSIX.1 compatible... yes
 -checking atomic.h usability... no
 -checking atomic.h presence... no
 checking for atomic.h... no
- checking copyfile.h usability... no
- checking copyfile.h presence... no
- checking for copyfile.h.... no
- checking direct.h usability... no
- checking direct.h presence... no
- checking for direct.h.... no
- checking grp.h usability... yes
- checking grp.h presence... yes
- checking for grp.h.... yes
- checking fcntl.h usability... yes
- checking fcntl.h presence... yes
- checking for fcntl.h.... yes
- checking float.h usability... yes
- checking float.h presence... yes
- checking for float.h.... yes
- checking ieeefp.h usability... no
- checking ieeefp.h presence... no
- checking for ieeefp.h.... no
- checking intrinsics.h usability... no
- checking intrinsics.h presence... no
- checking for intrinsics.h.... no
- checking langinfo.h usability... yes
- checking langinfo.h presence... yes
- checking for langinfo.h.... yes
- checking limits.h usability... yes
- checking limits.h presence... yes
- checking for limits.h.... yes
- checking locale.h usability... yes
- checking locale.h presence... yes
- checking for locale.h.... yes
- checking malloc.h usability... yes
- checking malloc.h presence... yes
- checking for malloc.h.... yes
- checking malloc/malloc.h usability... no
- checking malloc/malloc.h presence... no
- checking for malloc/malloc.h.... no
- checking malloc_np.h usability... no
- checking malloc_np.h presence... no
- checking for malloc_np.h.... no
- checking net/socket.h usability... no
- checking net/socket.h presence... no
- checking for net/socket.h.... no
- checking process.h usability... no
- checking process.h presence... no
- checking for process.h.... no
- checking pwd.h usability... yes
- checking pwd.h presence... yes
- checking for pwd.h.... yes
- checking sanitizer/asan_interface.h usability... yes
- checking sanitizer/asan_interface.h presence... yes
- checking for sanitizer/asan_interface.h.... yes
- checking sanitizer/msan_interface.h usability... no
- checking sanitizer/msan_interface.h presence... no
- checking for sanitizer/msan_interface.h.... no
- checking setjmpex.h usability... no
- checking setjmpex.h presence... no
- checking for setjmpex.h.... no
- checking stdalign.h usability... yes
- checking stdalign.h presence... yes
- checking for stdalign.h.... yes
- checking sys/attr.h usability... no
- checking sys/attr.h presence... no
- checking for sys/attr.h.... no
- checking sys/eventfd.h usability... yes
- checking sys/eventfd.h presence... yes
- checking for sys/eventfd.h.... yes
- checking sys/fcntl.h usability... yes
checking sys/fcntl.h presence... yes
checking for sys/fcntl.h... yes
checking sys/file.h usability... yes
checking sys/file.h presence... yes
checking for sys/file.h... yes
checking sys/id.h usability... no
checking sys/id.h presence... no
checking for sys/id.h... no
checking sys/ioctl.h usability... yes
checking sys/ioctl.h presence... yes
checking for sys/ioctl.h... yes
checking sys/mkdev.h usability... no
checking sys/mkdev.h presence... no
checking for sys/mkdev.h... no
checking sys/param.h usability... yes
checking sys/param.h presence... yes
checking for sys/param.h... yes
checking sys/prctl.h usability... yes
checking sys/prctl.h presence... yes
checking for sys/prctl.h... yes
checking sys/random.h usability... yes
checking sys/random.h presence... yes
checking for sys/random.h... yes
checking sys/resource.h usability... yes
checking sys/resource.h presence... yes
checking for sys/resource.h... yes
checking sys/select.h usability... yes
checking sys/select.h presence... yes
checking for sys/select.h... yes
checking sys/sendfile.h usability... yes
checking sys/sendfile.h presence... yes
checking for sys/sendfile.h... yes
checking sys/socket.h usability... yes
checking sys/socket.h presence... yes
checking for sys/socket.h... yes
checking sys/syscall.h usability... yes
checking sys/syscall.h presence... yes
checking for sys/syscall.h... yes
checking sys/sysmacros.h usability... yes
checking sys/sysmacros.h presence... yes
checking for sys/sysmacros.h... yes
checking sys/time.h usability... yes
checking sys/time.h presence... yes
checking for sys/time.h... yes
checking sys/times.h usability... yes
checking sys/times.h presence... yes
checking for sys/times.h... yes
checking sys/uio.h usability... yes
checking sys/uio.h presence... yes
checking for sys/uio.h... yes
checking sys/utime.h usability... no
checking sys/utime.h presence... no
checking for sys/utime.h... no
checking syscall.h usability... yes
checking syscall.h presence... yes
checking for syscall.h... yes
checking time.h usability... yes
checking time.h presence... yes
checking for time.h... yes
checking ucontext.h usability... yes
checking ucontext.h presence... yes
checking for ucontext.h... yes
checking utime.h usability... yes
checking utime.h presence... yes
checking for utime.h... yes
checking x86intrin.h usability... yes
checking x86intrin.h presence... yes
checking for x86intrin.h... yes
-checking gmp.h usability... no
-checking gmp.h presence... no
-checking for gmp.h... no
+checking for gmp.h... yes
+checking for library containing __gmpz_init... -lgmp
-checking for special C compiler options needed for large files... no
-checking for _FILE_OFFSET_BITS value needed for large files... no
-checking whether byte ordering is bigendian... no
@@ -285,7 +177,7 @@
 checking for inline... inline
 checking for working volatile... yes
 checking for typeof syntax and keyword spelling... typeof
-checking for C/C++ restrict keyword... _restrict
+checking for C/C++ restrict keyword... _restrict_
 checking for long long... yes
 checking for off_t... yes
 checking char bit... 8
@@ -311,7 +223,7 @@
 checking for DEPRECATED_BY function attribute... __attribute__ ((__deprecated__("by ")\) x
 checking for NOINLINE function attribute... __attribute__ ((__noinline__)) x
 checking for ALWAYS_INLINE function attribute... __attribute__ ((__always_inline__)) x
-checking for NO_SANITIZE function attribute... x
+checking for NO_SANITIZE function attribute... __attribute__ ((__no_sanitize__)) x
+checking for NO_SANITIZE_ADDRESS function attribute... __attribute__ ((__no_sanitize_address__)) x
 x
-checking for NO_ADDRESS_SAFETY_ANALYSIS function attribute... __attribute__ ((__no_address_safety analysis__)) x
 checking for WARN_UNUSED_RESULT function attribute... __attribute__ ((__warn_unused_result__)) x
@@ -339,8 +231,8 @@
 checking for ERRORFUNC function attribute... __attribute__ ((__error__ msg)) x
 checking for WARNINGFUNC function attribute... __attribute__ ((__warning__ msg)) x
 checking for WEAK function attribute... __attribute__ ((__weak__)) x
-checking for __attribute__((__depreacted__(msg))) in C++... no
-checking for std::nullptr_t... no
+checking for __attribute__((__depreacted__(msg))) in C++... yes
+checking for std::nullptr_t... yes
 checking for FUNC_STDCALL function attribute... x
 checking for FUNC_CDECL function attribute... x
 checking for FUNC_FASTCALL function attribute... x
@@ -354,7 +246,8 @@
 checking for RFC_FUNC_NONNULL function attribute... __attribute__ ((__nonnull__(n))) x
 checking for function name string predefined identifier... __func__
 checking if enum over int is allowed... yes
+checking whether sys_nerr is declared... yes
+checking whether sys_nerr is declared... no
 checking whether getenv is declared... yes
 checking size of size_t... 8
@@ -413,6 +306,8 @@
 checking size of ssize_t... 8
 checking for printf prefix for int64_t... NONE
 checking for stack end address... __libc_stack_end
+checking for grep that handles long lines and -e... /usr/bin/grep
+checking for egrep... /usr/bin/grep -E
 checking for uid_t in sys/types.h... (cached) yes
 checking type of array argument to getgroups... gid_t
 checking for working alloca.h... yes
@@ -440,13 +335,8 @@
 checking for strlcpy... no
 checking for strstr... yes
 checking for tgamma... yes
+checking for sys/pstat.h usability... no
+checking for sys/pstat.h presence... no
+checking for sys/pstat.h... no
 checking for pid_t... (cached) yes
checking vfork.h usability... no
checking vfork.h presence... no
checking for vfork.h... no
checking for fork... yes
checking for vfork... yes
checking for working fork... yes
@@ -514,7 +404,7 @@
 checking for isfinite... no
 checking for issetugid... no
 checking for killpg... yes
 -checking for lchmod... no
 +checking for lchmod... yes
 checking for lchown... yes
 checking for link... yes
 checking for llabs... yes
@@ -591,8 +481,6 @@
 -checking crypt.h usability... yes
 -checking crypt.h presence... yes
 checking for crypt.h... yes
 checking for struct crypt_data.initialized... yes
 checking for __builtin_alloca_with_align... yes
@@ -659,27 +547,17 @@
 checking for getcontext... yes
 checking for setcontext... yes
 checking if fork works with pthread... yes
 -checking sys/user.h usability... yes
 -checking sys/user.h presence... yes
 checking for sys/user.h... yes
 checking whether PAGE_SIZE is compile-time const... yes
 checking ioctl request type... unsigned long
 checking whether ELF binaries are produced... yes
 -checking elf.h usability... yes
 -checking elf.h presence... yes
 -checking elf_abi.h usability... no
 -checking elf_abi.h presence... no
 checking for elf_abi.h... no
 checking for uncompress in -lz... yes
 -checking mach-o/loader.h usability... no
 -checking mach-o/loader.h presence... no
 checking for mach-o/loader.h... no
 checking whether OS depend dynamic link works... yes
 checking for backtrace... yes
 checking for broken backtrace... no
 -checking valgrind/memcheck.h usability... no
 -checking valgrind/memcheck.h presence... no
 checking for valgrind/memcheck.h... no
 checking for strip flags... -S -x
 checking whether -fPIE is accepted as CFLAGS... yes
@@ -692,8 +570,6 @@
 checking for sigsetjmp as a macro or function... no
 checking for setjmp type... __builtin_setjmp
 checking for prefix of external symbols... NONE
 -checking pthread.h usability... yes
 -checking pthread.h presence... yes
 checking for pthread.h... yes
 checking if make is GNU make... yes
 .ext/include/x86_64-linux/ruby/config.h updated
@@ -704,7 +580,7 @@
---
Configuration summary for ruby version 3.1.0
- * Installation prefix: /home/chkbuild/chkbuild/tmp/build/20210908T123006Z
+ * Installation prefix: /home/chkbuild/chkbuild/tmp/build/20210908T120006Z

09/24/2021
Not sure what is the practical impact other than that the OpenSUSE CI is going break once it update to Autoconf 2.71, because there is not C++ compiler installed (and something similar already happened on Fedora 3, that is why I am looking into this).

History
#1 - 09/08/2021 02:58 PM - vo.x (Vit Ondruch)

BTW I assume, that the AC_PROG_CC_C99 check was removed due to the following message:

```
$ autoconf
configure.ac:207: warning: The macro `AC_PROG_CC_C99' is obsolete.
configure.ac:207: You should run autoupdate.
./lib/autoconf/c.m4:1659: AC_PROG_CC_C99 is expanded from...
configure.ac:207: the top level
```

But I think the correct fix would be to use just AC_PROG_CC according to the release notes 1, because I'd find strange that C applications would not check for C compiler on the first place.