

## Ruby 1.8 - Bug #6424

### mkmf generates incorrect Makefile

05/12/2012 04:07 AM - restless (Aleksey Kravchenko)

<b>Status:</b>	Open
<b>Priority:</b>	Normal
<b>Assignee:</b>	
<b>Target version:</b>	
<b>ruby -v:</b>	ruby 1.8.7 (2012-02-08 patchlevel 358) [x86_64-linux]

**Description**

The code to reproduce the bug:

```
--- begin of extconf.rb ---
require 'mkmf'
create_makefile('test')
--- end of extconf.rb ---

--- begin of test.c ---
/* empty ruby module */
--- end of test.c ---
```

The steps to reproduce and error log:

```
$ ruby extconf.rb
$ make -j2 install DESTDIR=/tmp MAKEDIRS="sleep 1; echo do_mkdir; mkdir -p"
sleep 1; echo do_mkdir; mkdir -p /tmp/usr/local/lib/site_ruby/1.8/x86_64-linux
gcc -I. -I/usr/lib/ruby/1.8/x86_64-linux -I/usr/lib/ruby/1.8/x86_64-linux -I. -D_FORTIFY_SOURCE=2 -fPIC -g -O2 -fstack-protector
--param=ssp-buffer-size=4 -Wformat -Wformat-security -Werror=format-security -Wall -fno-strict-aliasing -g -g -O2 -fPIC -c test.c
gcc -shared -o test.so test.o -L. -L/tmp/usr/lib -L. -Wl,-z,relro -rdynamic -Wl,-export-dynamic -lruby1.8 -lpthread -lrt -ldl -lcrypt -lm
-lc
/usr/bin/install -c -m 0755 test.so /tmp/usr/local/lib/site_ruby/1.8/x86_64-linux
/usr/bin/install: cannot create regular file `tmp/usr/local/lib/site_ruby/1.8/x86_64-linux': No such file or directory
make: *** [tmp/usr/local/lib/site_ruby/1.8/x86_64-linux/test.so] Error 1
make: *** Waiting for unfinished jobs....
do_mkdir
```

Expected: no error shall occur. The \$(MAKEDIRS) mkdir command must be executed always before installing \*.so file.

Note: I've specified MAKEDIRS command with 'sleep' only to reproduce the concurrency bug. Originally it occurred on busy Debian build-server, running make -j2 install (in 2 parallel threads).

The cause of the bug is incorrect dependency of 'install-so' in Makefile:

```
--- part of generated Makefile ---
install: install-so install-rb

install-so: $(RUBYARCHDIR)
install-so: $(RUBYARCHDIR)/$(DLLIB)
$(RUBYARCHDIR)/$(DLLIB): $(DLLIB)
$(INSTALL_PROG) $(DLLIB) $(RUBYARCHDIR)
...
$(RUBYARCHDIR):
$(MAKEDIRS) $@
--- end of part of generated Makefile ---
```