

## Fixing "Cannot find autoconf" error while building PHP extension from a FreeBSD port

Today I had to add the PHP 'bcmath' extension to my FreeBSD host.  
Actually, that's a fairly easy one-liner:

```
[root@localhost ~]# cd /usr/ports/math/php5-bcmath && make clean install
```

However, I ended up with a crude error message:

```
Cannot find autoconf. Please check your autoconf installation and the
$PHP_AUTOCONF environment variable. Then, rerun this script.
```

Bummer! So let's see how to fix this.

Here's the complete output from the failed build:

```
[root@localhost /usr/ports/math/php5-bcmath]# make
====> Vulnerability check disabled, database not found
====> License check disabled, port has not defined LICENSE
====> Extracting for php5-bcmath-5.3.3_2
=> SHA256 Checksum OK for php-5.3.3.tar.bz2.
====> Patching for php5-bcmath-5.3.3_2
====> php5-bcmath-5.3.3_2 depends on file: /usr/local/bin/phpize - found
====> php5-bcmath-5.3.3_2 depends on file: /usr/local/bin/autoconf-2.68 - found
====> PHPizing for php5-bcmath-5.3.3_2
Configuring for:
PHP Api Version:      20090626
Zend Module Api No:   20090626
Zend Extension Api No: 220090626
Cannot find autoconf. Please check your autoconf installation and the
$PHP_AUTOCONF environment variable. Then, rerun this script.

*** Error code 1
```

Stop in /usr/ports/math/php5-bcmath.

From this we see, that error occurs during **phpize**, which tries to configure/build the extension matching up the currently installed PHP.

Looking into **phpize**, which is actually a plain script, we find these lines:

```
[root@noc2 /usr/ports/math/php5-bcmath]# grep -E -e 'PHP_AUTO(CONF|HEADER)' /usr/local/bin/phpize
test -z "$PHP_AUTOCONF" && PHP_AUTOCONF=autoconf-2.62
```

```
test -z "$PHP_AUTOHEADER" && PHP_AUTOHEADER=autoheader-2.62
if test ! -x "$PHP_AUTOCONF" && test ! -x "`$php_shtool path $PHP_AUTOCONF`"; then
$PHP_AUTOCONF environment variable. Then, rerun this script.
if test ! -x "$PHP_AUTOHEADER" && test ! -x "`$php_shtool path $PHP_AUTOHEADER`"; then
$PHP_AUTOHEADER environment variable. Then, rerun this script.
$PHP_AUTOCONF || exit 1
$PHP_AUTOHEADER || exit 1
```

So **phpize** actually checks for existence of the `PHP_AUTOCONF` and `PHP_AUTOHEADER` environment variables. If these are missing, it will use some defaults for the `autoconf`/`autoheader` tools. The default were derived during the initial build which at that time were **autoconf-2.62** and **autoheader-2.62**.

Checking installed ports reveals that there's a newer version installed, which is why **phpize** fails so terribly.

```
[root@noc2 /usr/ports/math/php5-bcmath]# pkg_info|grep autoconf
autoconf-2.68      Automatically configure source code on many Un*x platforms
autoconf-wrapper-20071109 Wrapper script for GNU autoconf
```

To permanently fix this, you can do either of the following:

simply change the `PHP_AUTOCONF` and `PHP_AUTOHEADER` variables in `/usr/local/bin/phpize` to reflect the currently installed version

- additionally install the old `autoconf` version besides the new one

Invoke the build like this:

```
PHP_AUTOCONF=autoconf PHP_AUTOHEADER=autoheader make configure
```