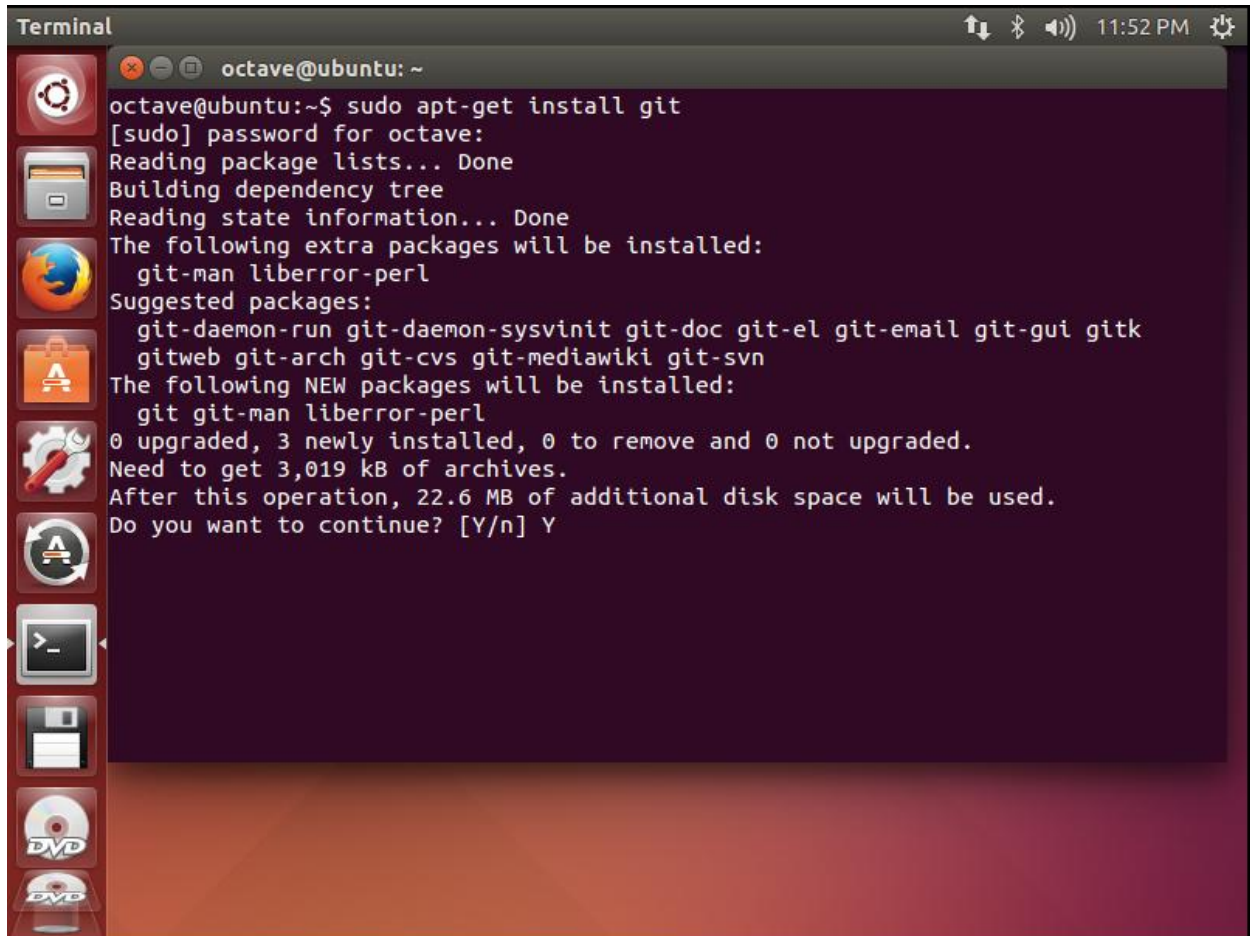


Build in HOME directory (as non-root user)

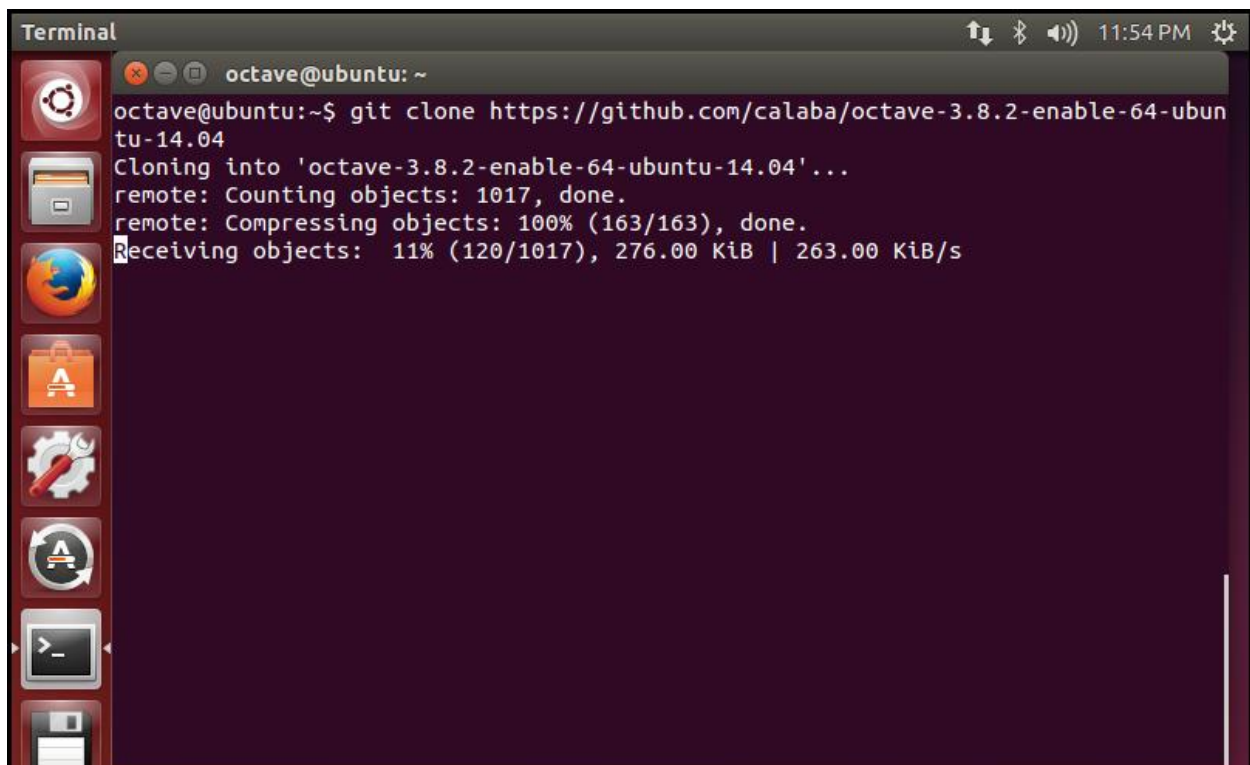
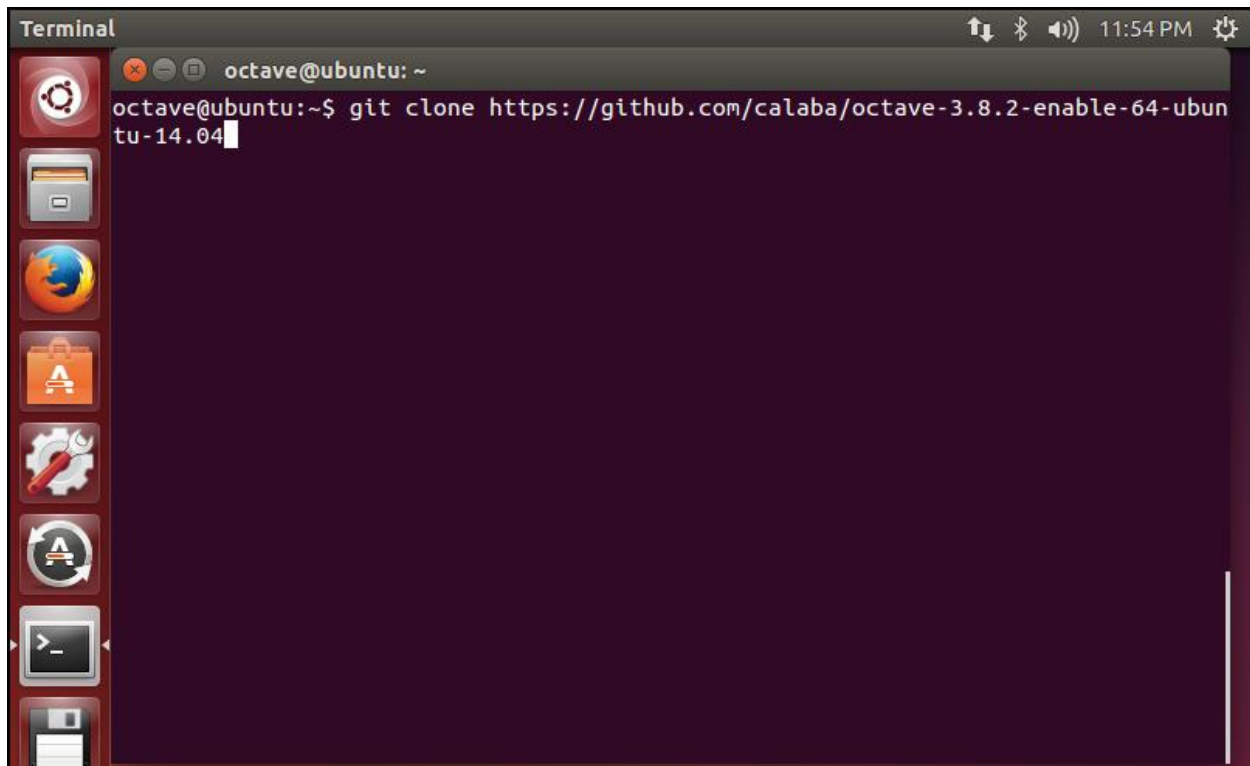
A screenshot of a terminal window titled "Terminal" with a dark purple background. The window shows the command "sudo apt-get install git" being executed. The output displays the package lists, dependency tree, and state information. It lists extra packages to be installed (git-man, liberror-perl) and suggested packages (git-daemon-run, git-daemon-sysvinit, git-doc, git-el, git-email, git-gui, gitk, gitweb, git-arch, git-cvs, git-mediawiki, git-svn). It also shows the disk space requirements and asks for confirmation to continue, which is answered with 'Y'. The terminal window is part of a desktop environment with a sidebar on the left containing icons for applications, home, and media.

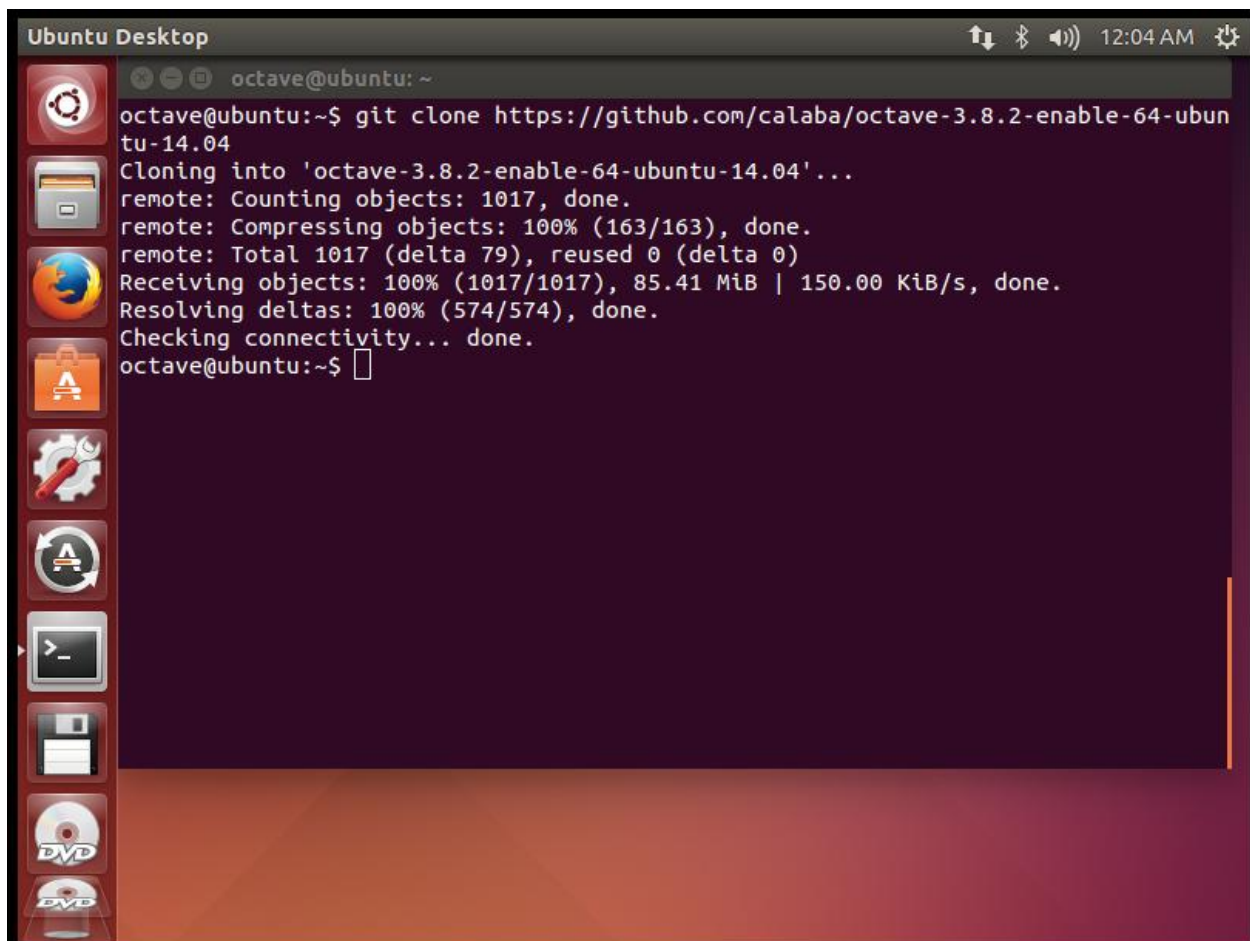
```
Terminal
octave@ubuntu: ~
octave@ubuntu:~$ sudo apt-get install git
[sudo] password for octave:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following extra packages will be installed:
  git-man liberror-perl
Suggested packages:
  git-daemon-run git-daemon-sysvinit git-doc git-el git-email git-gui gitk
  gitweb git-arch git-cvs git-mediawiki git-svn
The following NEW packages will be installed:
  git git-man liberror-perl
0 upgraded, 3 newly installed, 0 to remove and 0 not upgraded.
Need to get 3,019 kB of archives.
After this operation, 22.6 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
```

Terminal

11:52 PM

```
octave@ubuntu: ~  
git git-man liberror-perl  
0 upgraded, 3 newly installed, 0 to remove and 0 not upgraded.  
Need to get 3,019 kB of archives.  
After this operation, 22.6 MB of additional disk space will be used.  
Do you want to continue? [Y/n] Y  
Get:1 http://us.archive.ubuntu.com/ubuntu/ utopic/main liberror-perl all 0.17-1.  
1 [21.1 kB]  
Get:2 http://us.archive.ubuntu.com/ubuntu/ utopic/main git-man all 1:2.1.0-1 [69  
9 kB]  
Get:3 http://us.archive.ubuntu.com/ubuntu/ utopic/main git amd64 1:2.1.0-1 [2,29  
9 kB]  
Fetched 3,019 kB in 18s (163 kB/s)  
Selecting previously unselected package liberror-perl.  
(Reading database ... 197714 files and directories currently installed.)  
Preparing to unpack .../liberror-perl_0.17-1.1_all.deb ...  
Unpacking liberror-perl (0.17-1.1) ...  
Selecting previously unselected package git-man.  
Preparing to unpack .../git-man_1%3a2.1.0-1_all.deb ...  
Unpacking git-man (1:2.1.0-1) ...  
Selecting previously unselected package git.  
Preparing to unpack .../git_1%3a2.1.0-1_amd64.deb ...  
Unpacking git (1:2.1.0-1) ...  
Processing triggers for man-db (2.7.0.2-2) ...  
octave@ubuntu:~$
```





```
Terminal
octave@ubuntu: ~/octave-3.8.2-enable-64-ubuntu-14.04
octave@ubuntu:~$ cd ~
octave@ubuntu:~$ sudo ls
Desktop      examples.desktop      Pictures      Videos
Documents    Music                  Public
Downloads    octave-3.8.2-enable-64-ubuntu-14.04  Templates
octave@ubuntu:~$ cd octave-3.8.2-enable-64-ubuntu-14.04/
octave@ubuntu:~/octave-3.8.2-enable-64-ubuntu-14.04$ ls
1-compile-install-prereq.sh  compile-params.in
2-compile-unpack-src.sh     debug_show_env.sh
3-compile-64-libs.sh        doc
4-compile-64-octave.sh      README.md
5-run_64bit_octave.sh       tools_create_so_libs_from_a.sh
all.sh                      x64-libs
octave@ubuntu:~/octave-3.8.2-enable-64-ubuntu-14.04$ nano compile-params.in
```



```
octave@ubuntu: ~/octave-3.8.2-enable-64-ubuntu-14.04
GNU nano 2.2.6      File: compile-params.in      Modified

#!/bin/sh
#####$
### MAIN COMPILATION PARAMETERS
#####$
# -- git clone directory
# -- the directory created by the command: 'cd ~ && git clone https://github.co$
export octave64_gitroot=${HOME}/octave-3.8.2-enable-64-ubuntu-14.04

# -- installation directory for libraries needed for octave compilation & runti$
# use /usr/local as standard installation dir for libs ...
export prefix64=/usr/local
# or use your own directory to get libs compiled and installed to -> i.e. x64-l$
#export prefix64=${octave64_gitroot}/x64-libs

# SuiteSparse version for compilation - currently only 4.2.1 and 4.4.1 (latest)$
# In SuiteSparse 4.3.x there was a interface API change causing octave compilat$
# Octave can be compiled with 4.4.1 and testing goes well (only 54 SKIPPED test$
# export octave64_SS_version=4.2.1
# export octave64_SS_version=4.4.1

^G Get Help  ^O WriteOut  ^R Read File  ^Y Prev Page  ^K Cut Text   ^C Cur Pos
^X Exit      ^J Justify   ^W Where Is   ^V Next Page  ^U UnCut Text^T To Spell
```

```
octave@ubuntu: ~/octave-3.8.2-enable-64-ubuntu-14.04
GNU nano 2.2.6      File: compile-params.in      Modified

# export octave64_SS_version=4.2.1
# export octave64_SS_version=4.4.1
export octave64_SS_version=4.2.1

# to enable testing of compiled libraries set following parameter to:
# export octave64_libs_compilation_test=Y
export octave64_libs_compilation_test=Y

# to enable testing of compiled octave set following parameter to:
# export octave64_compilation_test=Y
export octave64_compilation_test=Y

# -- other directories for automated compilation
export JAVA_HOME=/usr/lib/jvm/default-java

#####$
### MAIN RUNTIME PARAMETERS
#####$

^G Get Help  ^O WriteOut  ^R Read File  ^Y Prev Page  ^K Cut Text   ^C Cur Pos
^X Exit      ^J Justify   ^W Where Is   ^V Next Page  ^U UnCut Text^T To Spell
```

```
Terminal
octave@ubuntu: ~/octave-3.8.2-enable-64-ubuntu-14.04
octave@ubuntu:~/octave-3.8.2-enable-64-ubuntu-14.04$ ./all.sh 2>all-err.log
```

```
Terminal
octave@ubuntu: ~/octave-3.8.2-enable-64-ubuntu-14.04
octave@ubuntu:~/octave-3.8.2-enable-64-ubuntu-14.04$ ./all.sh 2>all-err.log
Mon Dec 15 00:08:05 PST 2014 : Installing required development tools & libraries
...
Mon Dec 15 01:07:22 PST 2014 : Unpacking source codes ...
Mon Dec 15 01:07:24 PST 2014 : Compiling required libraries with 64-bit indexing
support ...
[sudo] password for octave:
[sudo] password for octave:
```

```
Terminal
octave@ubuntu: ~/octave-3.8.2-enable-64-ubuntu-14.04
octave@ubuntu:~/octave-3.8.2-enable-64-ubuntu-14.04$ ./all.sh 2>all-err.log
Mon Dec 15 00:08:05 PST 2014 : Installing required development tools & libraries
...
Mon Dec 15 01:07:22 PST 2014 : Unpacking source codes ...
Mon Dec 15 01:07:24 PST 2014 : Compiling required libraries with 64-bit indexing
support ...
[sudo] password for octave:
[sudo] password for octave:
Mon Dec 15 03:10:17 PST 2014 : Compiling Octave source code with 64-bit indexing
support...
```



```
Terminal
octave@ubuntu: ~/octave-3.8.2-enable-64-ubuntu-14.04
octave@ubuntu:~/octave-3.8.2-enable-64-ubuntu-14.04$ ./all.sh 2>all-err.log
Mon Dec 15 00:08:05 PST 2014 : Installing required development tools & libraries
...
Mon Dec 15 01:07:22 PST 2014 : Unpacking source codes ...
Mon Dec 15 01:07:24 PST 2014 : Compiling required libraries with 64-bit indexing
support ...
[sudo] password for octave:
[sudo] password for octave:
Mon Dec 15 03:10:17 PST 2014 : Compiling Octave source code with 64-bit indexing
support...
Mon Dec 15 09:40:05 PST 2014 : Octave compilation finished, press ENTER to run o
ctave ...

```

```
GNU Octave, version 3.8.2
Copyright (C) 2014 John W. Eaton and others.
This is free software; see the source code for copying conditions.
There is ABSOLUTELY NO WARRANTY; not even for MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. For details, type 'warranty'.

Octave was configured for "x86_64-unknown-linux-gnu".

Additional information about Octave is available at http://www.octave.org.

Please contribute if you find this software useful.
For more information, visit http://www.octave.org/get-involved.html

Read http://www.octave.org/bugs.html to learn how to submit bug reports.
For information about changes from previous versions, type 'news'.

octave:1> a = zeros( 1024*1024 * 1024 *3,1,'int8');
octave:2>
```


Terminal

8:49 PM

```
root@ubuntu: /opt/octave-3.8.2-enable-64-ubuntu-14.04
Compiling required libraries with 64-bit indexing support ...
Compiling Octave source code with 64-bit indexing support...
GNU Octave, version 3.8.2
Copyright (C) 2014 John W. Eaton and others.
This is free software; see the source code for copying conditions.
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FITNESS FOR A PARTICULAR PURPOSE.  For details, type 'warranty'.

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For more information, visit http://www.octave.org/get-involved.html

Read http://www.octave.org/bugs.html to learn how to submit bug reports.
For information about changes from previous versions, type 'news'.

octave:1> a = zeros (1024*1024*1024*3, 1, 'int8');
octave:2> quit

Octave interactive test done, if you are satisfied run 'sudo make install' from
/opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2 directory ...
root@ubuntu:/opt/octave-3.8.2-enable-64-ubuntu-14.04#
```

```
octave@ubuntu: ~/octave-3.8.2-enable-64-ubuntu-14.04
octave@ubuntu:~/octave-3.8.2-enable-64-ubuntu-14.04$ tail -n 22 4-compile-64-octave.log
PASS      11561
FAIL       0
XFAIL      7
SKIPPED    36

See the file test/fntests.log for additional details.

Expected failures (listed as XFAIL above) are known bugs.
Please help improve Octave by contributing fixes for them.

Tests are most often skipped because the features they require
have been disabled.  Features are most often disabled because
they require dependencies that were not present when Octave
was built.  The configure script should have printed a summary
at the end of its run indicating which dependencies were not found.

245 (of 833) .m files have no tests.

Please help improve Octave by contributing tests for
these files (see the list in the file fntests.log).

make[1]: Leaving directory '/home/octave/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2/test'
octave@ubuntu:~/octave-3.8.2-enable-64-ubuntu-14.04$
```

```
Terminal
octave@ubuntu: ~/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2
octave@ubuntu:~/octave-3.8.2-enable-64-ubuntu-14.04$ cd octave-3.8.2/
octave@ubuntu:~/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2$ sudo make install
```

```
octave@ubuntu: ~/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2

make[3]: Entering directory '/home/octave/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2'
Makefile:2848: warning: overriding recipe for target 'check'
Makefile:2410: warning: ignoring old recipe for target 'check'
make[3]: Nothing to be done for 'install-exec-am'.
/bin/mkdir -p /usr/local/share/octave/site/m /usr/local/share/octave/site/api-v49+/m /usr/local/share/octave/3.8.2/site/m /usr/local/lib/octave/site/oct/x86_64-unknown-linux-gnu /usr/local/lib/octave/site/oct/api-v49+/x86_64-unknown-linux-gnu /usr/local/lib/octave/3.8.2/site/oct/x86_64-unknown-linux-gnu /usr/local/libexec/octave/site/exec/x86_64-unknown-linux-gnu /usr/local/libexec/octave/api-v49+/site/exec/x86_64-unknown-linux-gnu /usr/local/libexec/octave/3.8.2/site/exec/x86_64-unknown-linux-gnu
/bin/mkdir -p '/usr/local/include/octave-3.8.2/octave'
/usr/bin/install -c -m 644 config.h '/usr/local/include/octave-3.8.2/octave'
/bin/mkdir -p '/usr/local/share/octave/3.8.2/etc'
/usr/bin/install -c -m 644 CITATION NEWS config.log '/usr/local/share/octave/3.8.2/etc'
/bin/mkdir -p '/usr/local/include/octave-3.8.2/octave'
/usr/bin/install -c -m 644 oct-conf-post.h '/usr/local/include/octave-3.8.2/octave'
make[3]: Leaving directory '/home/octave/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2'
make[2]: Leaving directory '/home/octave/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2'
make[1]: Leaving directory '/home/octave/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2'
octave@ubuntu:~/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2$
```



```
octave@ubuntu: ~/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2
ve'
make[3]: Leaving directory '/home/octave/octave-3.8.2-enable-64-ubuntu-14.04/octa
ve-3.8.2'
make[2]: Leaving directory '/home/octave/octave-3.8.2-enable-64-ubuntu-14.04/octa
ve-3.8.2'
make[1]: Leaving directory '/home/octave/octave-3.8.2-enable-64-ubuntu-14.04/octa
ve-3.8.2'
octave@ubuntu:~/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2$ octave
GNU Octave, version 3.8.2
Copyright (C) 2014 John W. Eaton and others.
This is free software; see the source code for copying conditions.
There is ABSOLUTELY NO WARRANTY; not even for MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. For details, type 'warranty'.

Octave was configured for "x86_64-unknown-linux-gnu".

Additional information about Octave is available at http://www.octave.org.

Please contribute if you find this software useful.
For more information, visit http://www.octave.org/get-involved.html

Read http://www.octave.org/bugs.html to learn how to submit bug reports.
For information about changes from previous versions, type 'news'.

octave:1> a = zeros( 1024*1024 * 1024 *3,1,'int8');
octave:2> quit

octave@ubuntu:~/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2$
```


Additional issues

'make distcheck' still causes some errors – probably issue of the makefiles rather than our compilation ...

```
octave@ubuntu: ~/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2
checking whether CDOTU is called correctly from Fortran... no
checking whether ZDOTU is called correctly from Fortran... yes
checking whether the integer size is correct... no
checking if sgemm_ is being linked in already... no
checking for ATL_xerbla in -latlas... (cached) no
checking for sgemm_ in -lblas... (cached) yes
checking for dgemm_ in -ldgemm... (cached) no
checking for sgemm_ in -lmkl... (cached) no
checking for sgemm_ in -framework vecLib... no
checking for sgemm_ in -lcxml... (cached) no
checking for sgemm_ in -ldxml... (cached) no
checking for sgemm_ in -lscs... (cached) no
checking for sgemm_ in -lcomplib.sgimath... (cached) no
checking for sgemm_ in -lblas... (cached) yes
checking for sgemm_ in -lessl... (cached) no
checking for sgemm_ in -lblas... (cached) yes
checking whether LSAME is called correctly from Fortran... yes
checking whether ISAMAX is called correctly from Fortran... no
checking whether SDOT is called correctly from Fortran... no
checking whether DDOT is called correctly from Fortran... yes
checking whether CDOTU is called correctly from Fortran... no
checking whether ZDOTU is called correctly from Fortran... no
checking whether the integer size is correct... no
configure: error: A BLAS library was detected but found incompatible with your Fortran 77 compiler settings.
Makefile:2327: recipe for target 'distcheck' failed
make: *** [distcheck] Error 1
octave@ubuntu:~/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2$
```

After that octave-3.8.2 sub-folder and tar.gz are created OK:

```
octave@ubuntu: ~/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2
octave@ubuntu:~/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2$ ls
aclocal.m4      config.log      INSTALL        Makefile       README
AUTHORS         config.status   INSTALL.OCTAVE Makefile.am     run-octave
BUGS            configure      libgnu         Makefile.in    run-octave.in
build-aux       configure.ac    libgui         NEWS           scripts
ChangeLog       COPYING        libinterp     octave-3.8.2   src
CITATION        doc            liboctave     octave-3.8.2.tar.gz stamp-h1
config.h         etc            libtool       oct-conf-post.h test
config.in.h     examples       m4            oct-conf-post.in.h
octave@ubuntu:~/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2$
```

After 'make dist' -> the octave- sub folder gone – the tar.gz is here:

```
octave@ubuntu: ~/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2
aclocal.m4      config.log      INSTALL      Makefile      run-octave
AUTHORS        config.status  INSTALL.OCTAVE Makefile.am    run-octave.in
BUGS           configure     libgnu       Makefile.in    scripts
build-aux      configure.ac  libgui       NEWS           src
ChangeLog     COPYING      libinterp    octave-3.8.2.tar.gz stamp-h1
CITATION      doc          liboctave    oct-conf-post.h test
config.h      etc          libtool      oct-conf-post.in.h
config.in.h   examples    m4           README
octave@ubuntu:~/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2$
```

Build in /opt directory (as root user)

```
Terminal
root@ubuntu: /opt
octave@ubuntu:~$ sudo su
[sudo] password for octave:
root@ubuntu:/home/octave# cd /opt
root@ubuntu:/opt# apt-get install git
```

```
root@ubuntu: /opt
git git-man liberror-perl
0 upgraded, 3 newly installed, 0 to remove and 0 not upgraded.
Need to get 3,019 kB of archives.
After this operation, 22.6 MB of additional disk space will be used.
Do you want to continue? [Y/n] Y
Get:1 http://us.archive.ubuntu.com/ubuntu/ utopic/main liberror-perl all 0.17-1.1 [21.1 kB]
Get:2 http://us.archive.ubuntu.com/ubuntu/ utopic/main git-man all 1:2.1.0-1 [699 kB]
Get:3 http://us.archive.ubuntu.com/ubuntu/ utopic/main git amd64 1:2.1.0-1 [2,299 kB]
Fetched 3,019 kB in 5s (600 kB/s)
Selecting previously unselected package liberror-perl.
(Reading database ... 197714 files and directories currently installed.)
Preparing to unpack .../liberror-perl_0.17-1.1_all.deb ...
Unpacking liberror-perl (0.17-1.1) ...
Selecting previously unselected package git-man.
Preparing to unpack .../git-man_1%3a2.1.0-1_all.deb ...
Unpacking git-man (1:2.1.0-1) ...
Selecting previously unselected package git.
Preparing to unpack .../git_1%3a2.1.0-1_amd64.deb ...
Unpacking git (1:2.1.0-1) ...
Processing triggers for man-db (2.7.0.2-2) ...
root@ubuntu:/opt#
```

Git Clone

```
Terminal
root@ubuntu: /opt
root@ubuntu: /# cd /opt
root@ubuntu: /opt# git clone https://github.com/calaba/octave-3.8.2-enable-64-ubuntu-14.04
```

```
Terminal
root@ubuntu: /opt
root@ubuntu: /# cd /opt
root@ubuntu: /opt# git clone https://github.com/calaba/octave-3.8.2-enable-64-ubuntu-14.04
Cloning into 'octave-3.8.2-enable-64-ubuntu-14.04'...
remote: Counting objects: 1020, done.
remote: Compressing objects: 100% (166/166), done.
remote: Total 1020 (delta 81), reused 0 (delta 0)
Receiving objects: 100% (1020/1020), 85.41 MiB | 718.00 KiB/s, done.
Resolving deltas: 100% (576/576), done.
Checking connectivity... done.
root@ubuntu: /opt#
```


Nano compile-params.in

```
Terminal
root@ubuntu: /opt/octave-3.8.2-enable-64-ubuntu-14.04
root@ubuntu:/opt# cd octave-3.8.2-enable-64-ubuntu-14.04/
root@ubuntu:/opt/octave-3.8.2-enable-64-ubuntu-14.04# nano compile-params.in
```

```
GNU nano 2.2.6      File: compile-params.in      Modified

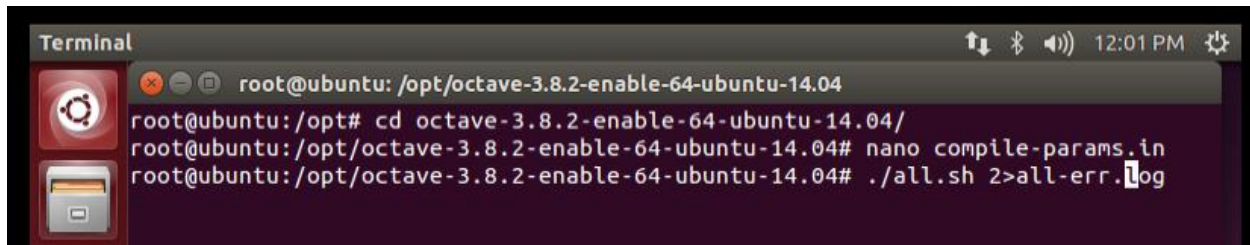
#!/bin/sh
#####$
### MAIN COMPILATION PARAMETERS
#####$
# -- git clone directory
# -- the directory created by the command: 'cd ~ && git clone https://github.co$
export octave64_gitroot=/opt/octave-3.8.2-enable-64-ubuntu-14.04

# -- installation directory for libraries needed for octave compilation & runti$
# use /usr/local as standard installation dir for libs ...
export prefix64=/usr/local
# or use your own directory to get libs compiled and installed to -> i.e. x64-l$
#export prefix64=${octave64_gitroot}/x64-libs

# SuiteSparse version for compilation - currently only 4.2.1 and 4.4.1 (latest)$
# In SuiteSparse 4.3.x there was a interface API change causing octave compilat$
# Octave can be compiled with 4.4.1 and testing goes well (only 54 SKIPPED test$
# export octave64_SS_version=4.2.1
# export octave64_SS_version=4.4.1

^G Get Help  ^O WriteOut  ^R Read File ^Y Prev Page ^K Cut Text  ^C Cur Pos
^X Exit      ^J Justify   ^W Where Is  ^V Next Page ^U UnCut Text^T To Spell
```

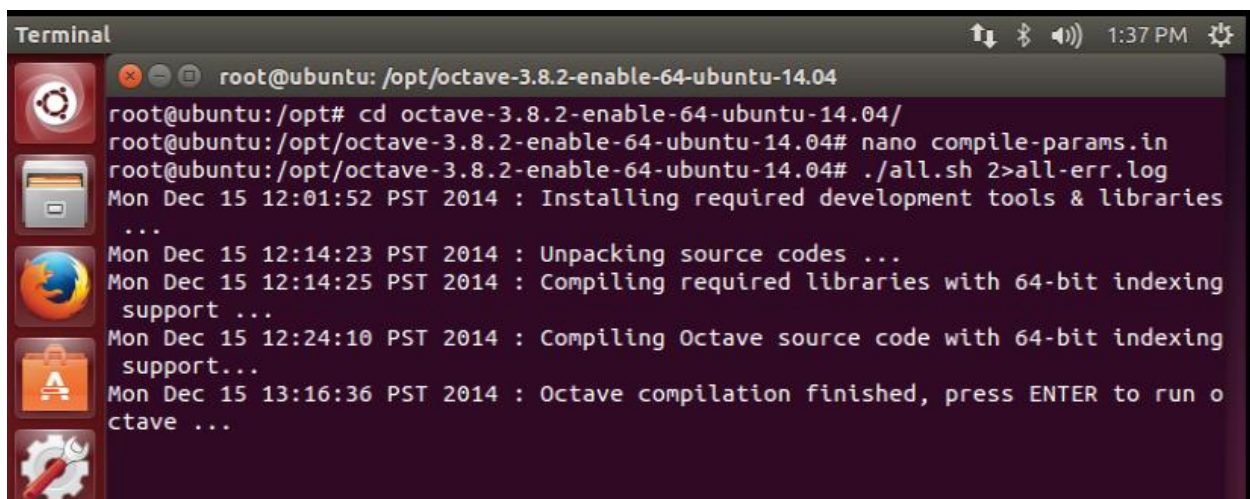
Build all



A terminal window titled "Terminal" with a dark background. The title bar shows system icons and the time "12:01 PM". The terminal text shows the user is root at an Ubuntu machine, in the directory /opt/octave-3.8.2-enable-64-ubuntu-14.04. The user runs 'cd octave-3.8.2-enable-64-ubuntu-14.04/', then 'nano compile-params.in', and finally './all.sh 2>all-err.log'.

```
root@ubuntu: /opt/octave-3.8.2-enable-64-ubuntu-14.04
root@ubuntu:/opt# cd octave-3.8.2-enable-64-ubuntu-14.04/
root@ubuntu:/opt/octave-3.8.2-enable-64-ubuntu-14.04# nano compile-params.in
root@ubuntu:/opt/octave-3.8.2-enable-64-ubuntu-14.04# ./all.sh 2>all-err.log
```

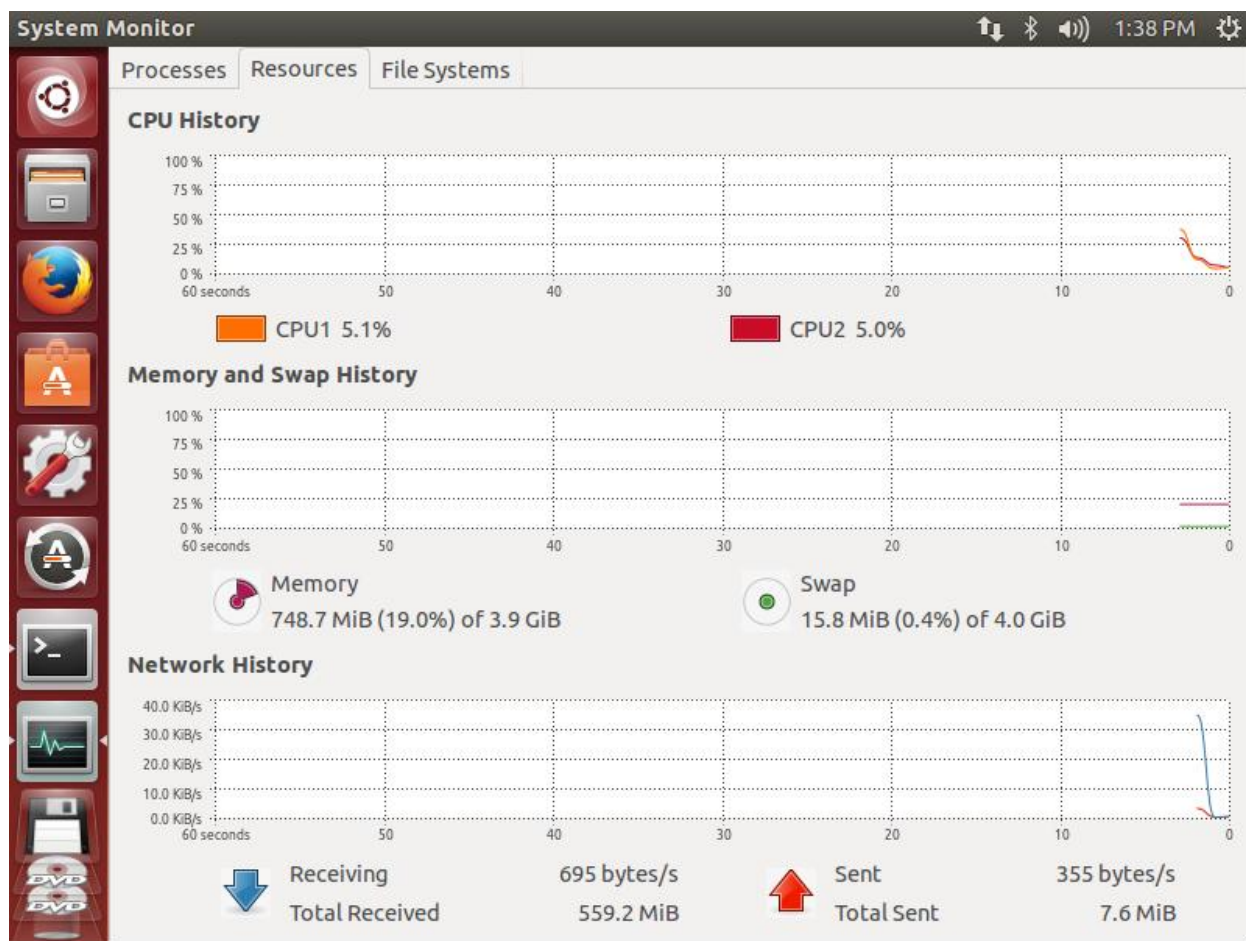
Execution Times to install/make all:



A terminal window titled "Terminal" with a dark background. The title bar shows system icons and the time "1:37 PM". The terminal text shows the same directory as the previous window. The user runs 'nano compile-params.in' and './all.sh 2>all-err.log'. The script outputs a series of timestamps and progress messages: "Installing required development tools & libraries", "Unpacking source codes", "Compiling required libraries with 64-bit indexing support", "Compiling Octave source code with 64-bit indexing support", and "Octave compilation finished, press ENTER to run octave".

```
root@ubuntu: /opt/octave-3.8.2-enable-64-ubuntu-14.04
root@ubuntu:/opt# cd octave-3.8.2-enable-64-ubuntu-14.04/
root@ubuntu:/opt/octave-3.8.2-enable-64-ubuntu-14.04# nano compile-params.in
root@ubuntu:/opt/octave-3.8.2-enable-64-ubuntu-14.04# ./all.sh 2>all-err.log
Mon Dec 15 12:01:52 PST 2014 : Installing required development tools & libraries
...
Mon Dec 15 12:14:23 PST 2014 : Unpacking source codes ...
Mon Dec 15 12:14:25 PST 2014 : Compiling required libraries with 64-bit indexing
support ...
Mon Dec 15 12:24:10 PST 2014 : Compiling Octave source code with 64-bit indexing
support...
Mon Dec 15 13:16:36 PST 2014 : Octave compilation finished, press ENTER to run o
ctave ...
```

Test Octave 64-bit indexing:




```

root@ubuntu: /opt/octave-3.8.2-enable-64-ubuntu-14.04
support ...
Mon Dec 15 12:24:10 PST 2014 : Compiling Octave source code with 64-bit indexing
support...
Mon Dec 15 13:16:36 PST 2014 : Octave compilation finished, press ENTER to run o
ctave ...

GNU Octave, version 3.8.2
Copyright (C) 2014 John W. Eaton and others.
This is free software; see the source code for copying conditions.
There is ABSOLUTELY NO WARRANTY; not even for MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE. For details, type 'warranty'.

Octave was configured for "x86_64-unknown-linux-gnu".

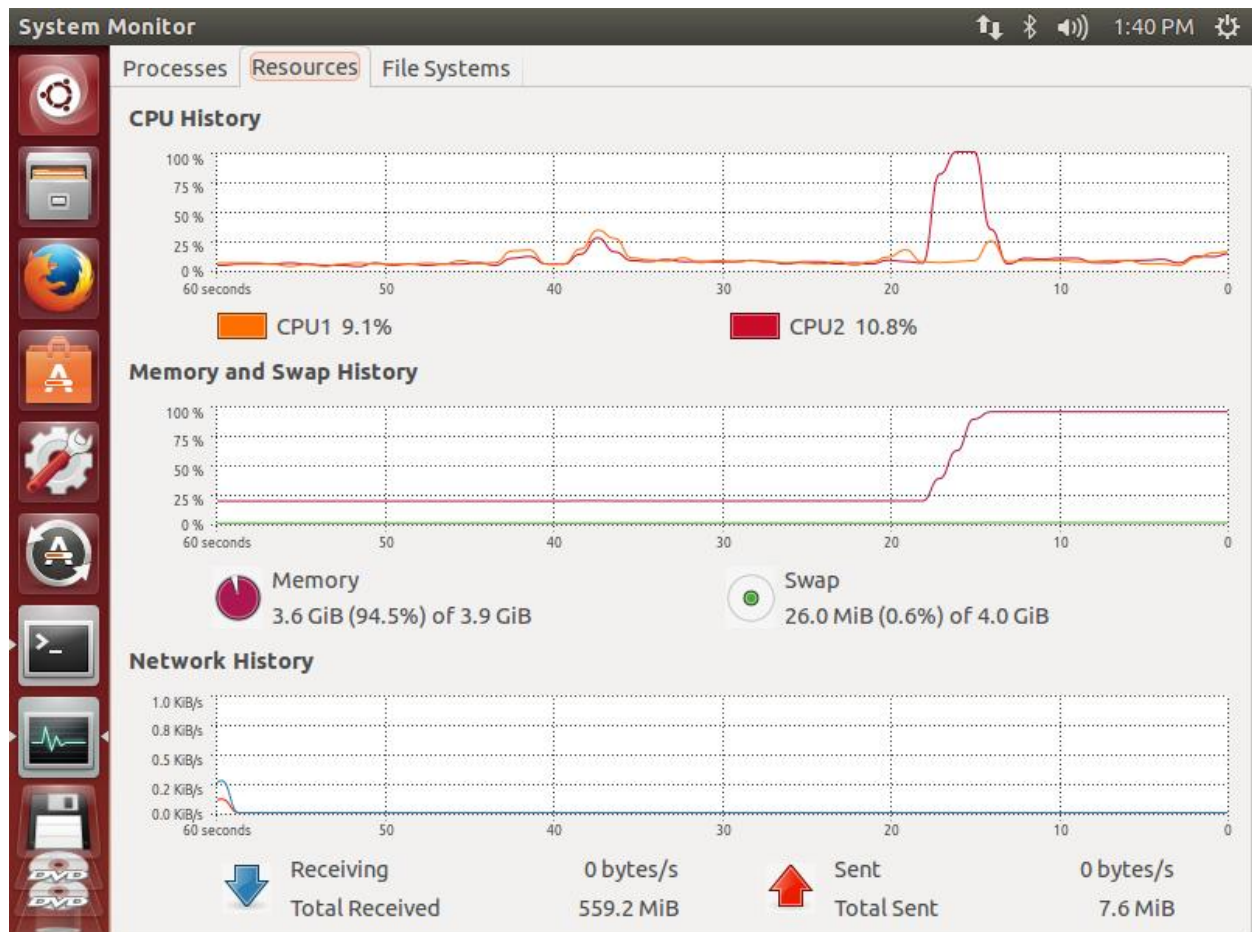
Additional information about Octave is available at http://www.octave.org.

Please contribute if you find this software useful.
For more information, visit http://www.octave.org/get-involved.html

Read http://www.octave.org/bugs.html to learn how to submit bug reports.
For information about changes from previous versions, type 'news'.

octave:1> a = zeros(1024*1024*1024*3,1,'int8');
octave:2>

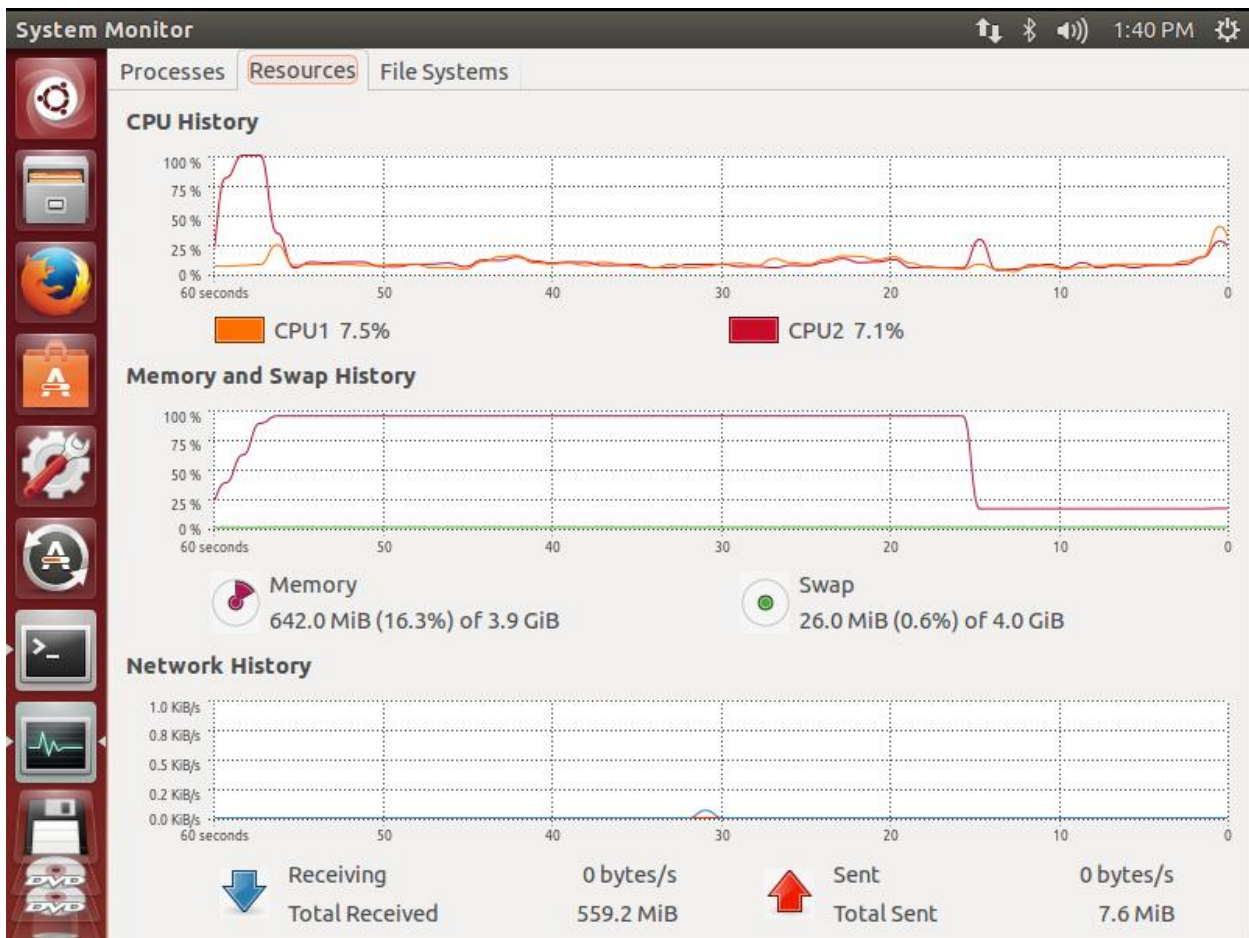
```




```
octave:1> a = zeros(1024*1024*1024*3,1,'int8');
octave:2> quit
```

```
Mon Dec 15 13:40:26 PST 2014 : Octave interactive test done.
To install octave run: 'sudo make install' from /opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2 ...
```

```
root@ubuntu:/opt/octave-3.8.2-enable-64-ubuntu-14.04#
```



Internal tests from compilation:

```
root@ubuntu: /opt/octave-3.8.2-enable-64-ubuntu-14.04
root@ubuntu:/opt/octave-3.8.2-enable-64-ubuntu-14.04# tail -n 23 4-compile-64-octave.log

PASS      11561
FAIL       0
XFAIL      7
SKIPPED    36

See the file test/fntests.log for additional details.

Expected failures (listed as XFAIL above) are known bugs.
Please help improve Octave by contributing fixes for them.

Tests are most often skipped because the features they require
have been disabled.  Features are most often disabled because
they require dependencies that were not present when Octave
was built.  The configure script should have printed a summary
at the end of its run indicating which dependencies were not found.

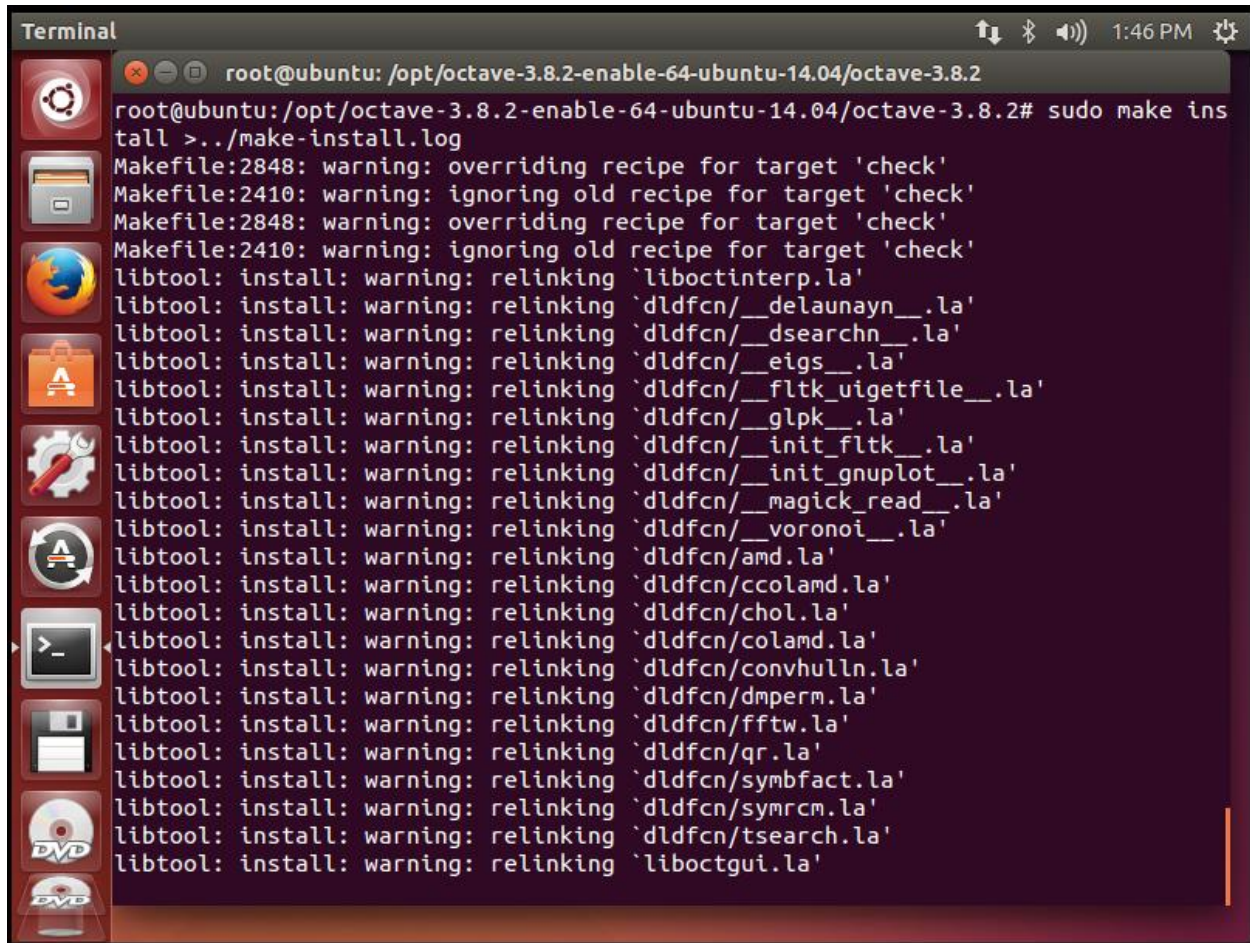
245 (of 833) .m files have no tests.

Please help improve Octave by contributing tests for
these files (see the list in the file fntests.log).

make[1]: Leaving directory '/opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2/test'
root@ubuntu:/opt/octave-3.8.2-enable-64-ubuntu-14.04#
```

Additional Steps - Optional

cd octave-3.8.2 ; sudo make install > ../make-install.log



```
Terminal
root@ubuntu: /opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2
root@ubuntu:/opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2# sudo make install > ../make-install.log
Makefile:2848: warning: overriding recipe for target 'check'
Makefile:2410: warning: ignoring old recipe for target 'check'
Makefile:2848: warning: overriding recipe for target 'check'
Makefile:2410: warning: ignoring old recipe for target 'check'
libtool: install: warning: relinking `liboctinterp.la'
libtool: install: warning: relinking `dldfcn/__delaunayn__.la'
libtool: install: warning: relinking `dldfcn/__dsearchn__.la'
libtool: install: warning: relinking `dldfcn/__eigs__.la'
libtool: install: warning: relinking `dldfcn/__fltk_uigetfile__.la'
libtool: install: warning: relinking `dldfcn/__glpk__.la'
libtool: install: warning: relinking `dldfcn/__init_fltk__.la'
libtool: install: warning: relinking `dldfcn/__init_gnuplot__.la'
libtool: install: warning: relinking `dldfcn/__magick_read__.la'
libtool: install: warning: relinking `dldfcn/__voronoi__.la'
libtool: install: warning: relinking `dldfcn/amd.la'
libtool: install: warning: relinking `dldfcn/ccolamd.la'
libtool: install: warning: relinking `dldfcn/chol.la'
libtool: install: warning: relinking `dldfcn/colamd.la'
libtool: install: warning: relinking `dldfcn/convhulln.la'
libtool: install: warning: relinking `dldfcn/dmperm.la'
libtool: install: warning: relinking `dldfcn/fftw.la'
libtool: install: warning: relinking `dldfcn/qr.la'
libtool: install: warning: relinking `dldfcn/symbfact.la'
libtool: install: warning: relinking `dldfcn/symrcm.la'
libtool: install: warning: relinking `dldfcn/tsearch.la'
libtool: install: warning: relinking `liboctgui.la'
```



```
Terminal
root@ubuntu: /opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2

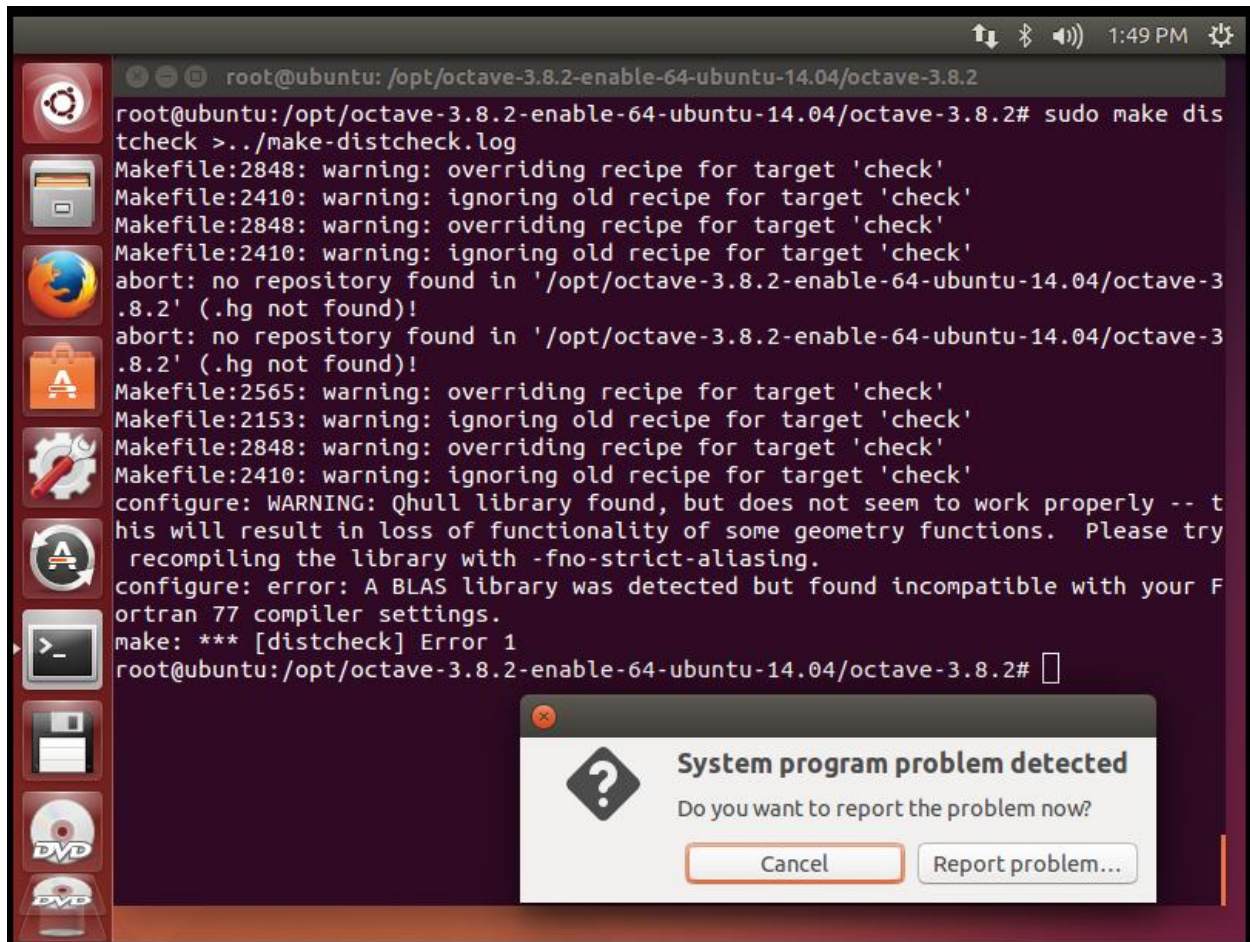
libtool: install: warning: relinking `dldfcn/__magick_read__.la'
libtool: install: warning: relinking `dldfcn/__voronoi__.la'
libtool: install: warning: relinking `dldfcn/amd.la'
libtool: install: warning: relinking `dldfcn/ccolamd.la'
libtool: install: warning: relinking `dldfcn/chol.la'
libtool: install: warning: relinking `dldfcn/colamd.la'
libtool: install: warning: relinking `dldfcn/convhulln.la'
libtool: install: warning: relinking `dldfcn/dmperm.la'
libtool: install: warning: relinking `dldfcn/fftw.la'
libtool: install: warning: relinking `dldfcn/qr.la'
libtool: install: warning: relinking `dldfcn/symbfact.la'
libtool: install: warning: relinking `dldfcn/symrcm.la'
libtool: install: warning: relinking `dldfcn/tsearch.la'
libtool: install: warning: relinking `liboctgui.la'
Makefile:2848: warning: overriding recipe for target 'check'
Makefile:2410: warning: ignoring old recipe for target 'check'
Makefile:2848: warning: overriding recipe for target 'check'
Makefile:2410: warning: ignoring old recipe for target 'check'
Makefile:2565: warning: overriding recipe for target 'check'
Makefile:2153: warning: ignoring old recipe for target 'check'
Makefile:2565: warning: overriding recipe for target 'check'
Makefile:2153: warning: ignoring old recipe for target 'check'
Makefile:2565: warning: overriding recipe for target 'check'
Makefile:2153: warning: ignoring old recipe for target 'check'
Makefile:2848: warning: overriding recipe for target 'check'
Makefile:2410: warning: ignoring old recipe for target 'check'
Makefile:2848: warning: overriding recipe for target 'check'
Makefile:2410: warning: ignoring old recipe for target 'check'
root@ubuntu:/opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2#
```


sudo make dist > ../make-dist.log

```
Terminal
root@ubuntu: /opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2
root@ubuntu:/opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2# sudo make dist > ../make-dist.log
Makefile:2848: warning: overriding recipe for target 'check'
Makefile:2410: warning: ignoring old recipe for target 'check'
Makefile:2848: warning: overriding recipe for target 'check'
Makefile:2410: warning: ignoring old recipe for target 'check'
abort: no repository found in '/opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2' (.hg not found)!
abort: no repository found in '/opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2' (.hg not found)!
```

```
Terminal
root@ubuntu: /opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2
root@ubuntu:/opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2# sudo make dist > ../make-dist.log
Makefile:2848: warning: overriding recipe for target 'check'
Makefile:2410: warning: ignoring old recipe for target 'check'
Makefile:2848: warning: overriding recipe for target 'check'
Makefile:2410: warning: ignoring old recipe for target 'check'
abort: no repository found in '/opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2' (.hg not found)!
abort: no repository found in '/opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2' (.hg not found)!
Makefile:2565: warning: overriding recipe for target 'check'
Makefile:2153: warning: ignoring old recipe for target 'check'
Makefile:2848: warning: overriding recipe for target 'check'
Makefile:2410: warning: ignoring old recipe for target 'check'
root@ubuntu:/opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2# ls *.gz
octave-3.8.2.tar.gz
root@ubuntu:/opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2#
```

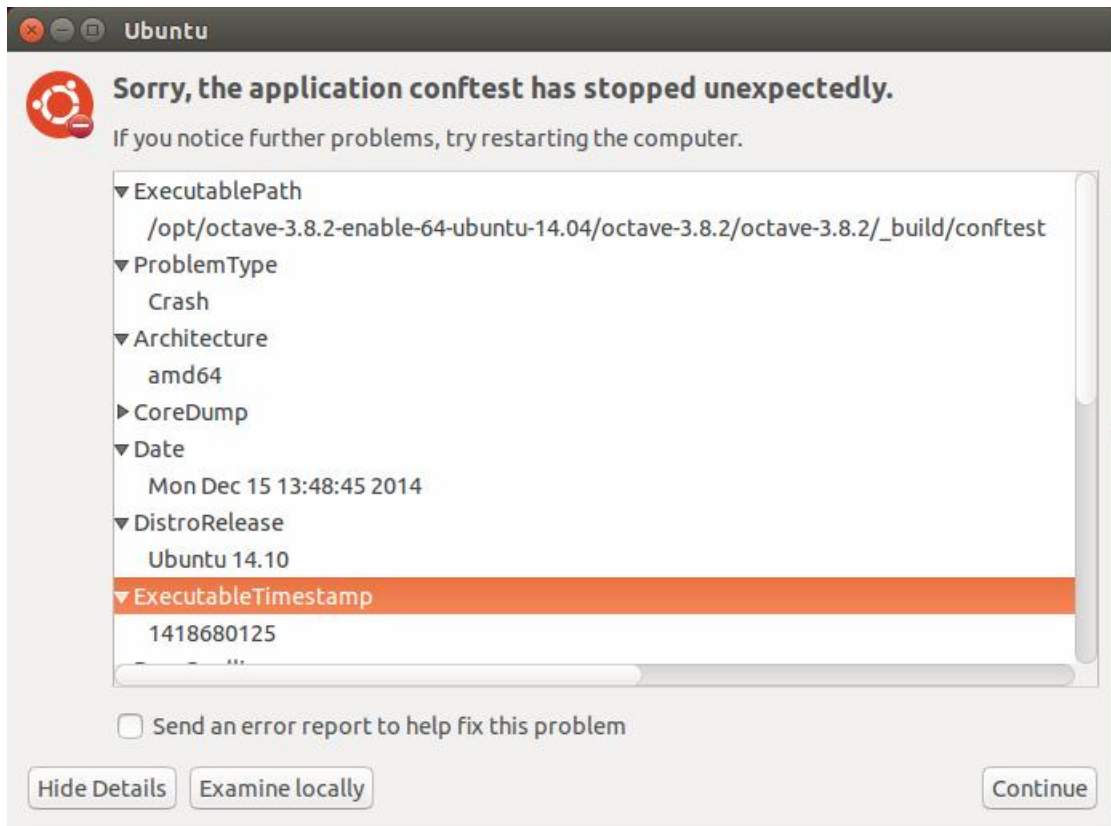
udo make distcheck > ../make-distcheck.log



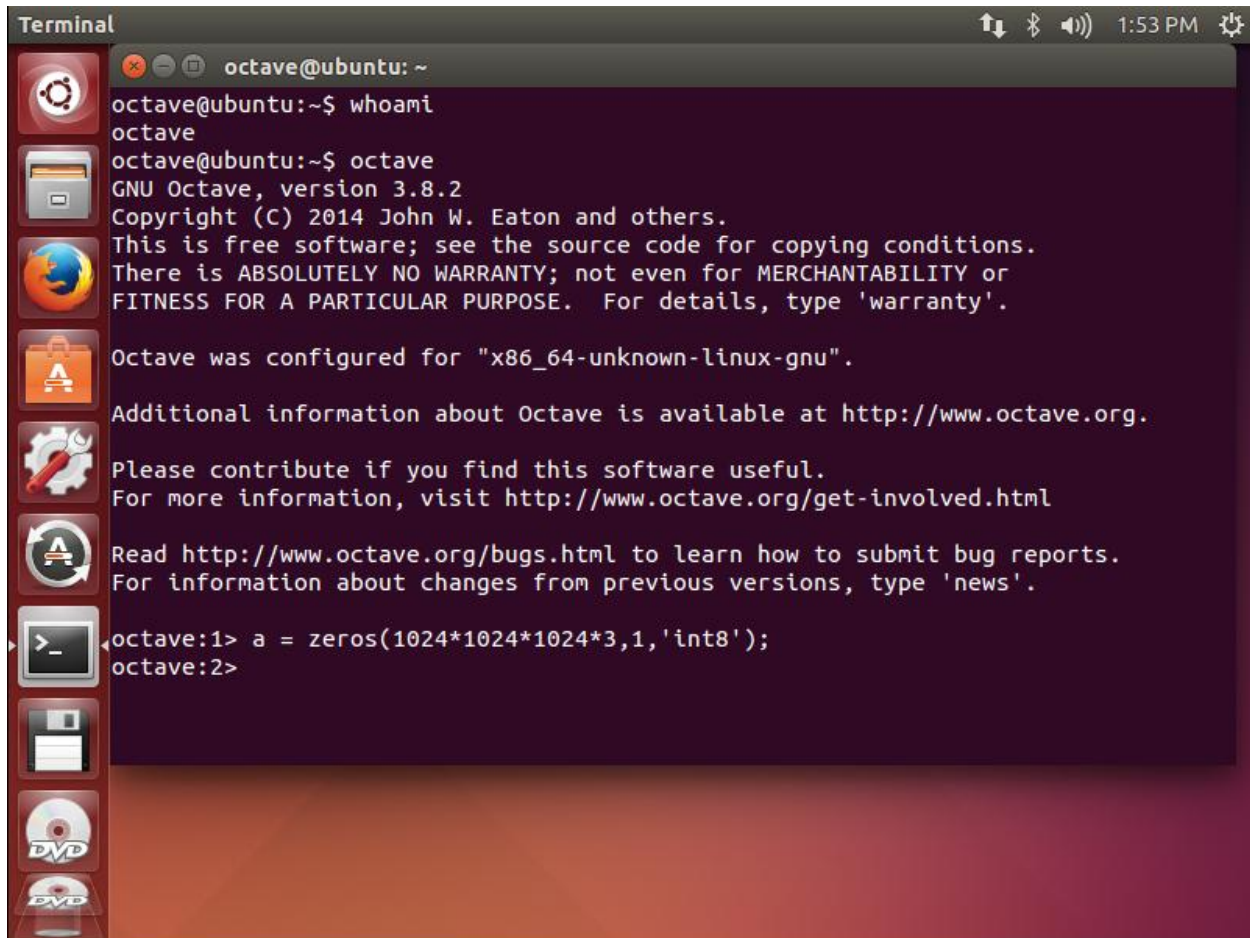
```
root@ubuntu: /opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2
root@ubuntu:/opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2# sudo make distcheck > ../make-distcheck.log
Makefile:2848: warning: overriding recipe for target 'check'
Makefile:2410: warning: ignoring old recipe for target 'check'
Makefile:2848: warning: overriding recipe for target 'check'
Makefile:2410: warning: ignoring old recipe for target 'check'
abort: no repository found in '/opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2' (.hg not found)!
abort: no repository found in '/opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2' (.hg not found)!
Makefile:2565: warning: overriding recipe for target 'check'
Makefile:2153: warning: ignoring old recipe for target 'check'
Makefile:2848: warning: overriding recipe for target 'check'
Makefile:2410: warning: ignoring old recipe for target 'check'
configure: WARNING: Qhull library found, but does not seem to work properly -- this will result in loss of functionality of some geometry functions. Please try recompiling the library with -fno-strict-aliasing.
configure: error: A BLAS library was detected but found incompatible with your Fortran 77 compiler settings.
make: *** [distcheck] Error 1
root@ubuntu:/opt/octave-3.8.2-enable-64-ubuntu-14.04/octave-3.8.2#
```

System program problem detected
Do you want to report the problem now?

Cancel Report problem...



Octave – test as non-root user:

A terminal window titled "Terminal" with a dark background and a light-colored title bar. The title bar shows the text "octave@ubuntu: ~" and system icons on the right. The terminal displays the output of the "whoami" and "octave" commands, followed by the Octave startup banner. The banner includes copyright information, a disclaimer, and links to the Octave website. The user then enters a command to create a large array of zeros.

```
octave@ubuntu:~$ whoami
octave
octave@ubuntu:~$ octave
GNU Octave, version 3.8.2
Copyright (C) 2014 John W. Eaton and others.
This is free software; see the source code for copying conditions.
There is ABSOLUTELY NO WARRANTY; not even for MERCHANTABILITY or
FITNESS FOR A PARTICULAR PURPOSE.  For details, type 'warranty'.

Octave was configured for "x86_64-unknown-linux-gnu".

Additional information about Octave is available at http://www.octave.org.

Please contribute if you find this software useful.
For more information, visit http://www.octave.org/get-involved.html

Read http://www.octave.org/bugs.html to learn how to submit bug reports.
For information about changes from previous versions, type 'news'.

octave:1> a = zeros(1024*1024*1024*3,1,'int8');
octave:2>
```