

A PROJECT REPORT ON

BUILDING THE OPENMCU (v3.46.11) FOR LINUX(CentOS 6)

For



By

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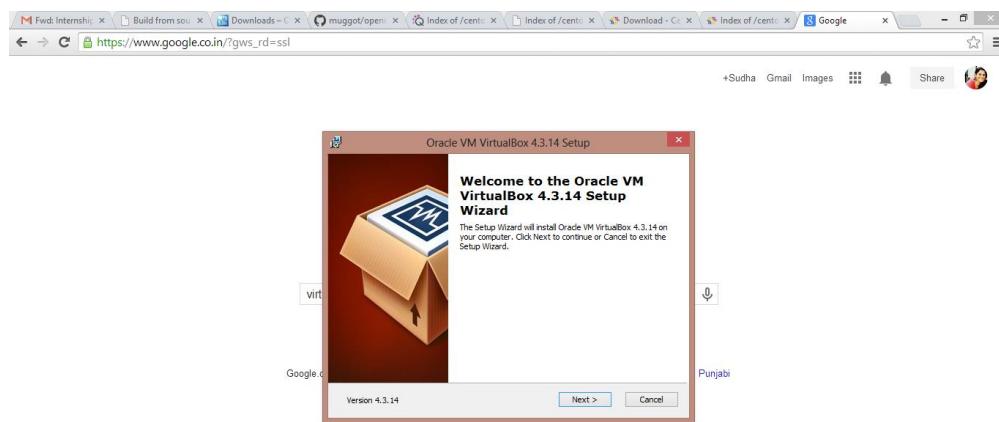
TEST ENVIRONMENT

VIRTUAL BOX SETUP

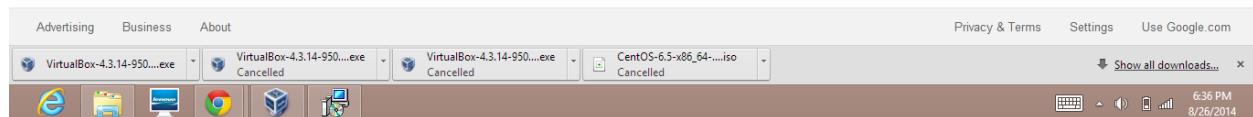
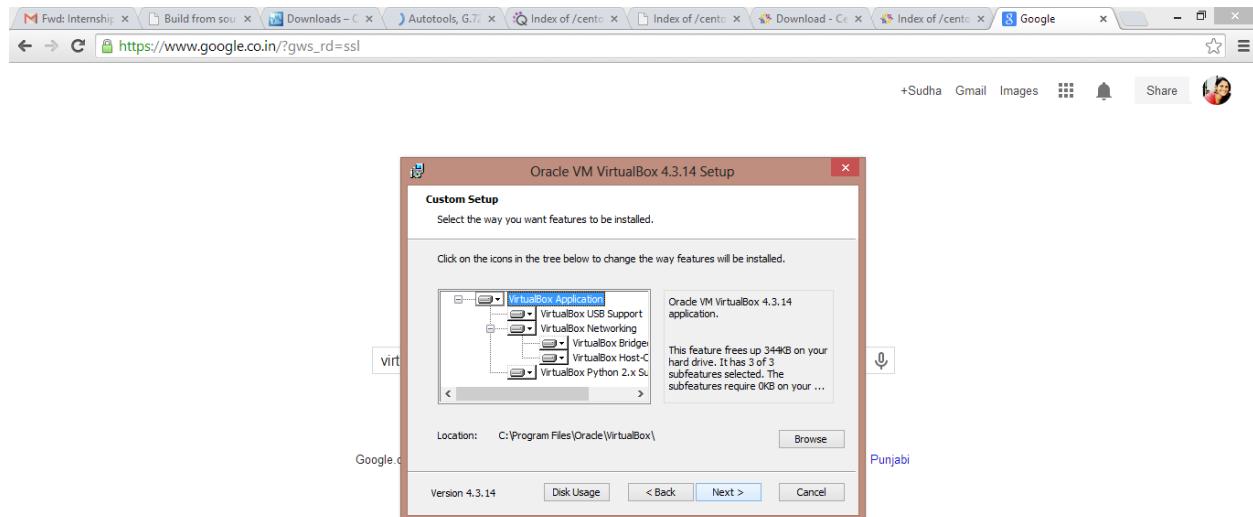
Virtual Box is a software tool for deploying and running virtual machines inside laptop/desktop computer. The virtual box is downloaded from [www.virtualbox.org](https://www.virtualbox.org/wiki/Downloads). From this link, the highlighted option is chosen.



Installation is done after downloading the file. The installation wizard appears. ORACLE VM virtual box 4.3.14 is the respective version.

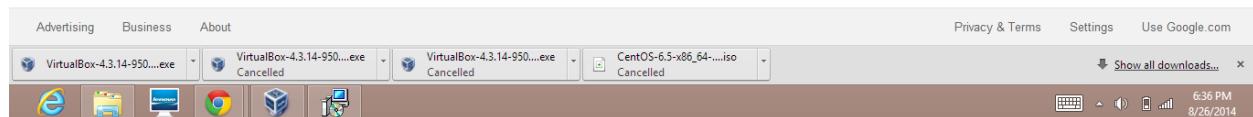
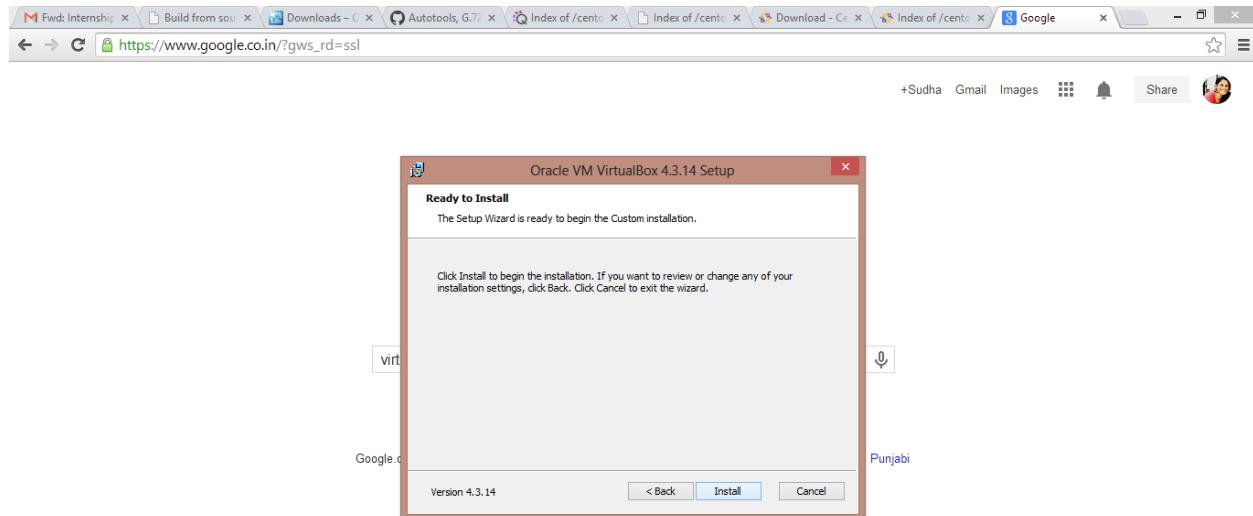


Click on the NEXT button which leads to the next step, where the desired path is given.

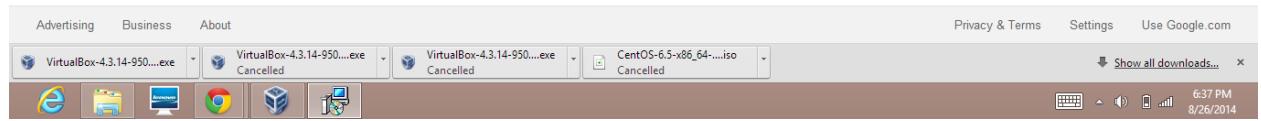
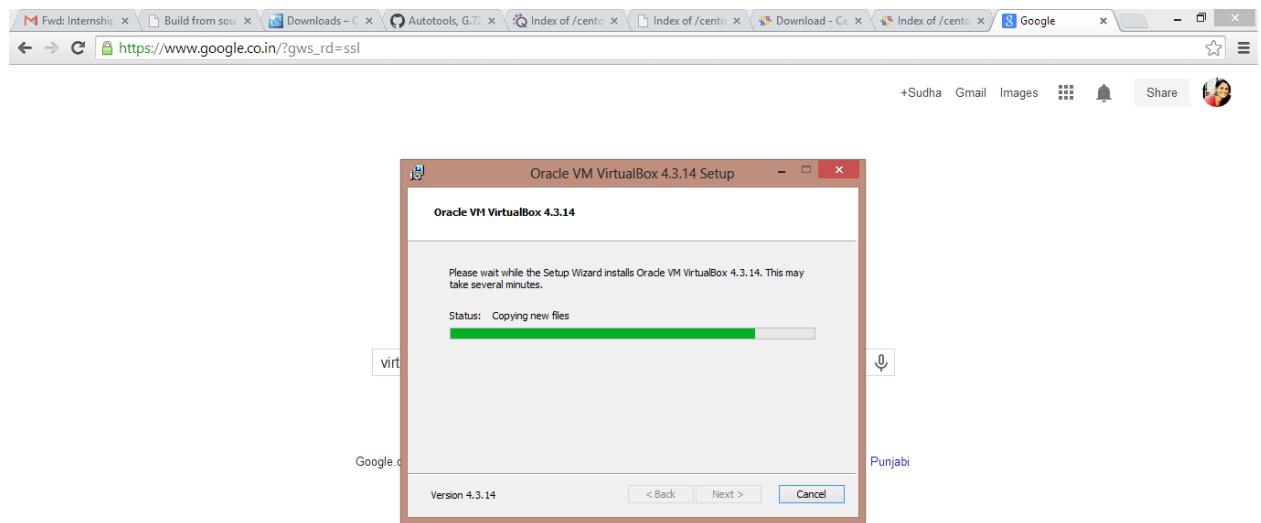


Once the location is selected the software is ready to be installed.

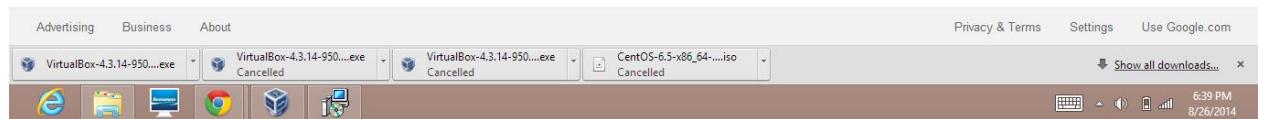
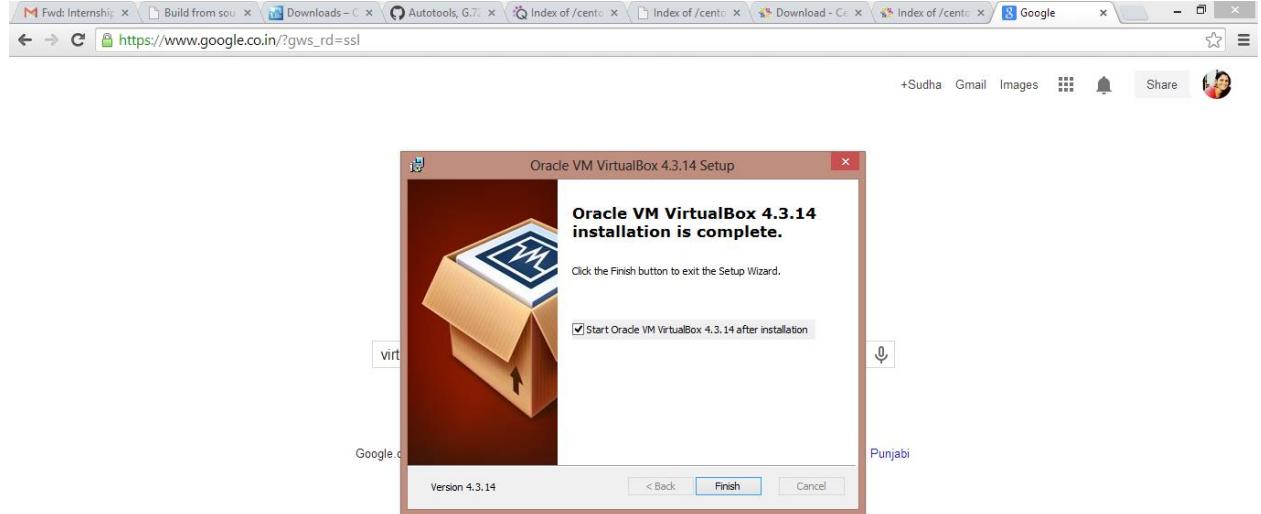
Following dialog box depicts the installation procedure. Click install.



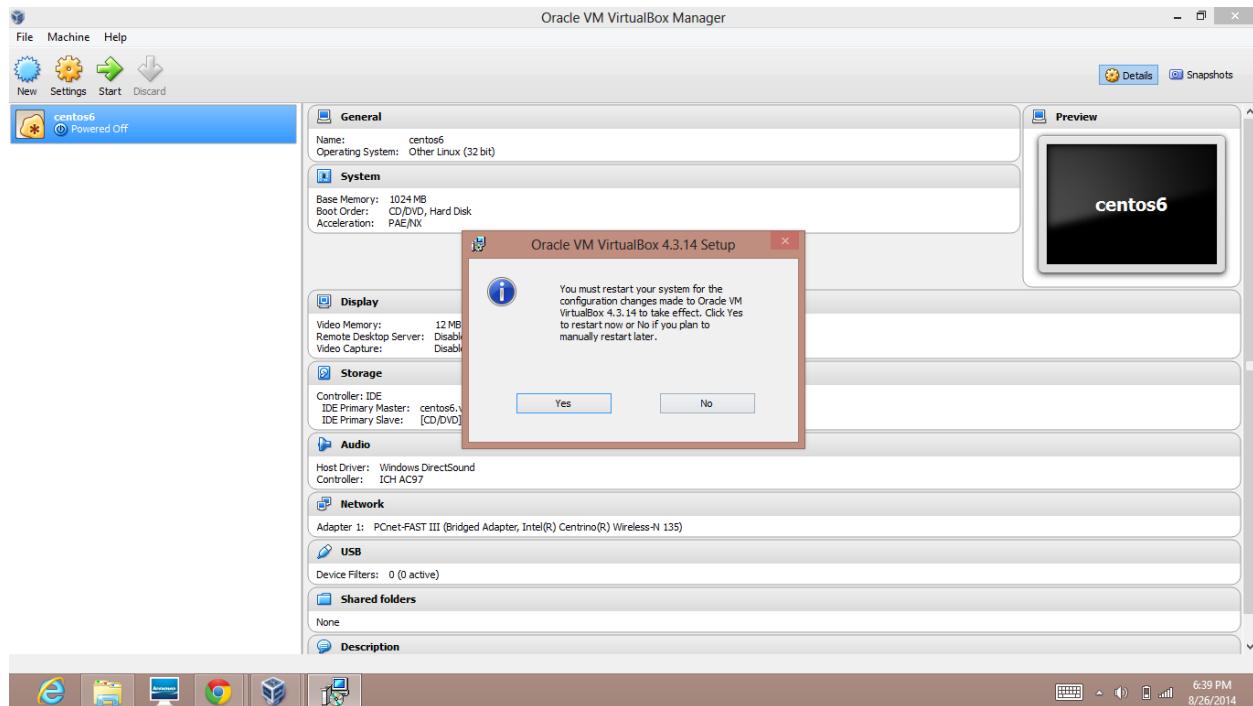
Please wait until the files get copied.



Click Finish button.



Choose Yes button when the following dialog box appears and the system will restart.



The virtual box is installed successfully. In order to use it, an operating system needs to be installed. Centos -6.5 is the desired operating system.

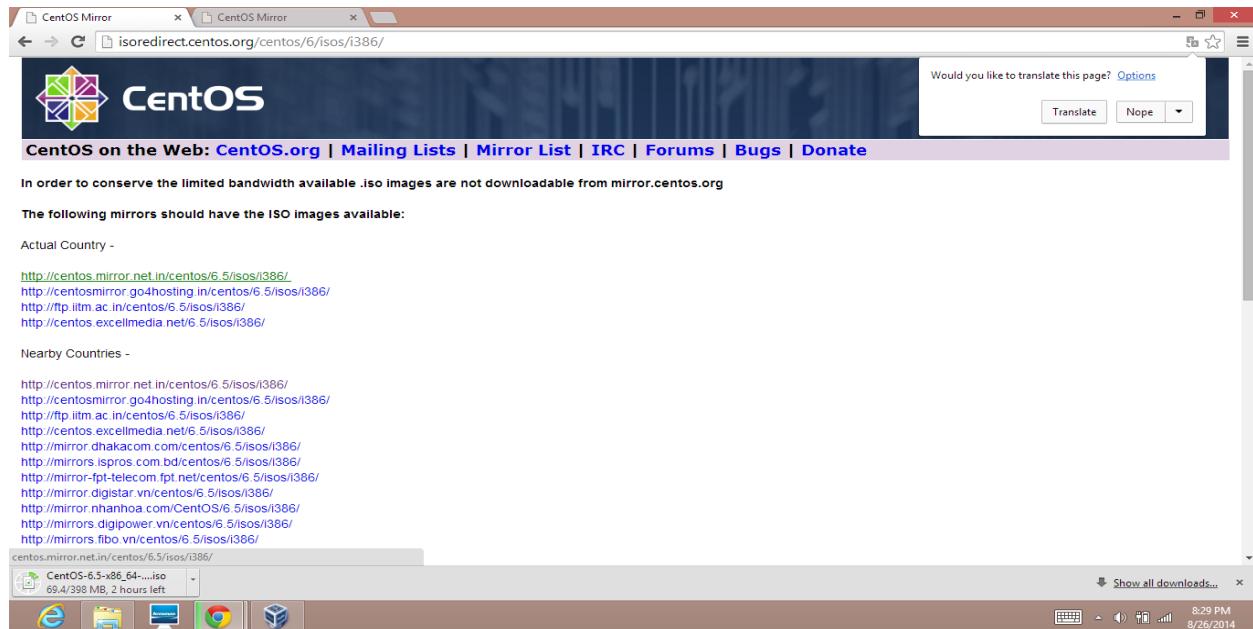
CentOS-6.5 DOWNLOAD

The ISO file of the OS is downloaded from the following link.

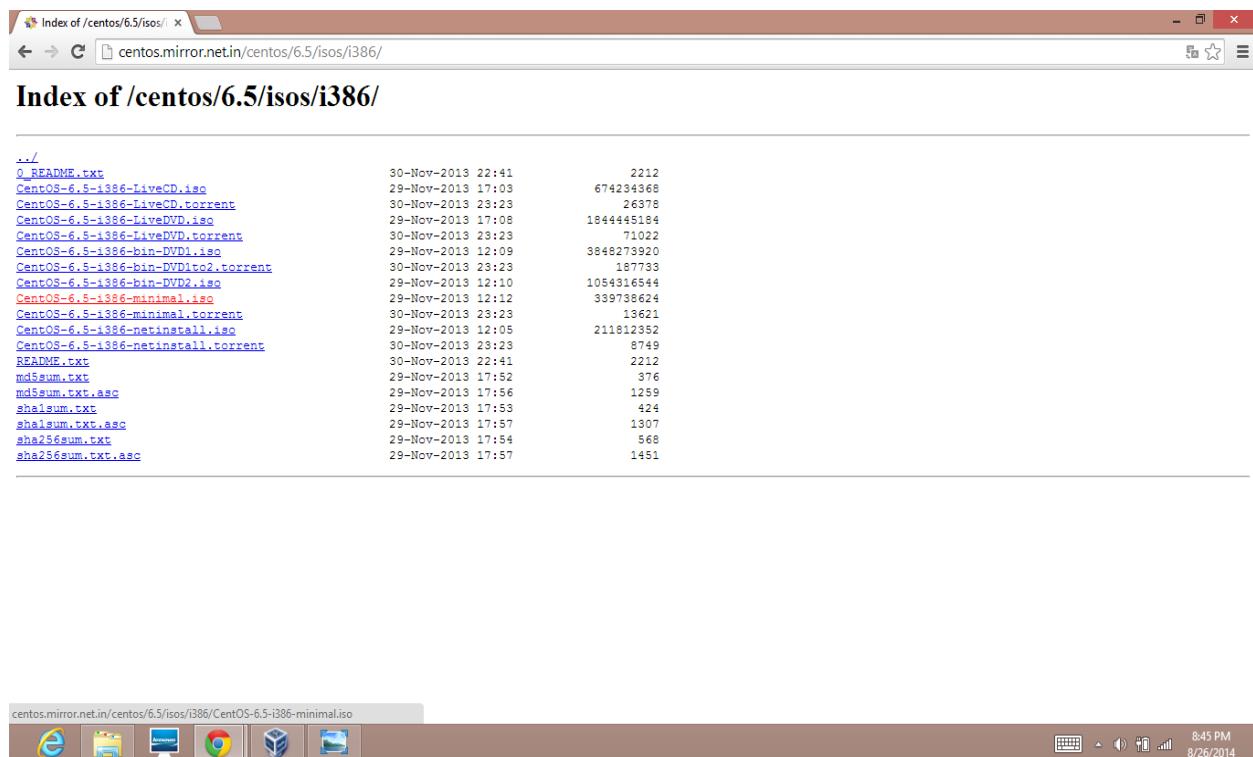
A screenshot of a web browser displaying the CentOS ISO download page. The URL in the address bar is "wiki.centos.org/Download". The page title is "Download CentOS ISO images". It contains two informational boxes: one about donations and another encouraging the use of mirrors. Below these are tables for CentOS 7, 6, 5, and 4. The CentOS 4 table includes a note about the install media being CentOS 4.8. The tables provide links for CD/DVD ISO Images, Packages, Release Email, Release Notes, and End-Of-Life dates. A download progress bar at the bottom indicates "CentOS-6.5-x86_64.iso" is being downloaded at 69.1/398 MB, with 2 hours left. The taskbar at the bottom shows the download progress and the date/time as 8:29 PM 8/26/2014.

Click " i386" under the version centOS6. This is optimal for a 32 bit operating system. The following page will appear.

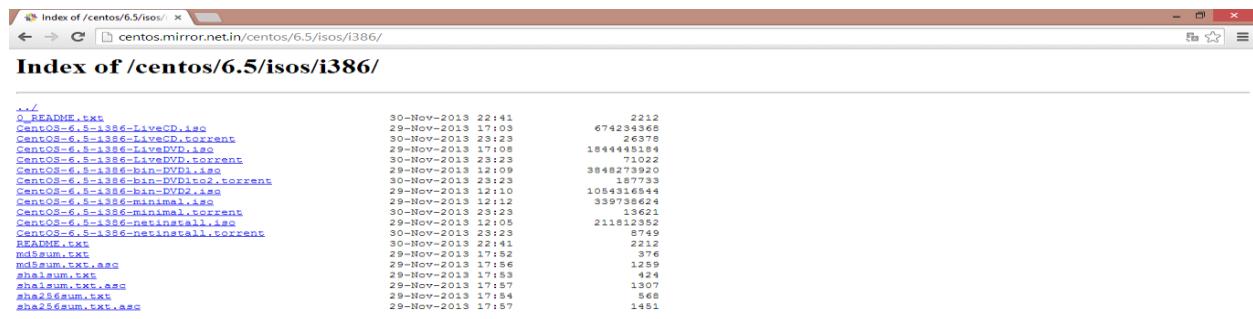
Select <http://centos.mirror.net.in/centos/6.5/isos/i386/>



The [CentOS-6.5-i386-minimal.iso](#) option is chosen.



The iso file will be downloaded.



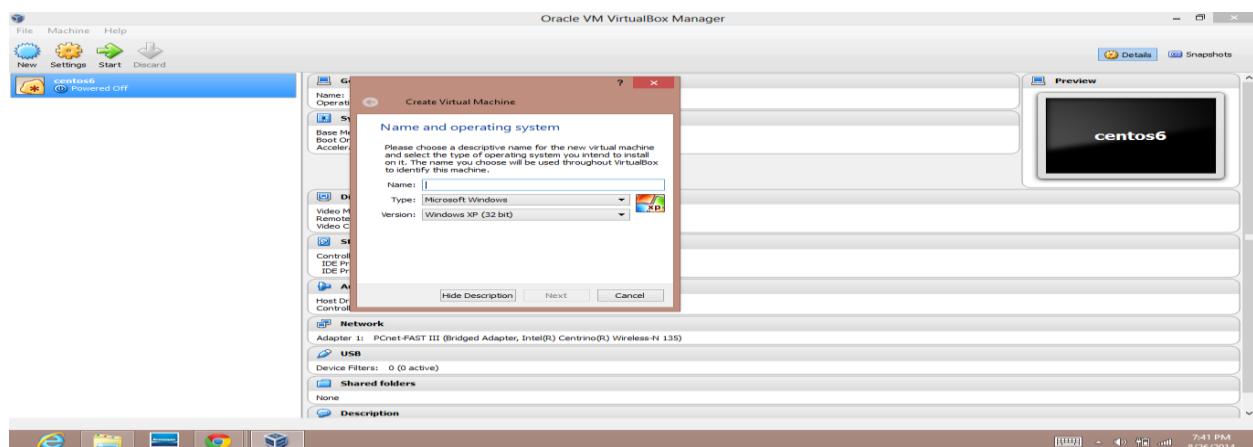
Index of /centos/6.5/isos/i386/

File	Last Modified	Size
CentOS-6.5-i386-LiveCD.iso	30-Nov-2013 22:41	2212
CentOS-6.5-i386-LiveCD.torrent	29-Nov-2013 17:03	674234368
CentOS-6.5-i386-minimal.iso	30-Nov-2013 23:23	26378
CentOS-6.5-i386-minimal.torrent	29-Nov-2013 23:23	184446144
CentOS-6.5-i386-minimal1.iso	30-Nov-2013 23:23	71022
CentOS-6.5-i386-minimal1.torrent	29-Nov-2013 12:09	3848273920
CentOS-6.5-i386-bin-DVD1.iso	30-Nov-2013 23:23	187733
CentOS-6.5-i386-bin-DVD1c2.torrent	29-Nov-2013 12:10	105433644
CentOS-6.5-i386-minimal1.iso	29-Nov-2013 12:12	339738624
CentOS-6.5-i386-minimal.torrent	30-Nov-2013 23:23	13621
CentOS-6.5-i386-netinstall1.iso	29-Nov-2013 12:05	211812352
CentOS-6.5-i386-netinstall1.torrent	30-Nov-2013 23:23	819
ERADME.txt	30-Nov-2013 22:41	2212
md5sum.txt	29-Nov-2013 17:52	376
sha1sum.txt.asc	29-Nov-2013 17:56	1259
sha256sum.txt	29-Nov-2013 17:56	144
sha256sum.txt.asc	29-Nov-2013 17:57	1307
sha256sum.txtc.asc	29-Nov-2013 17:54	568
sha256sum.txtc.asc	29-Nov-2013 17:57	1451

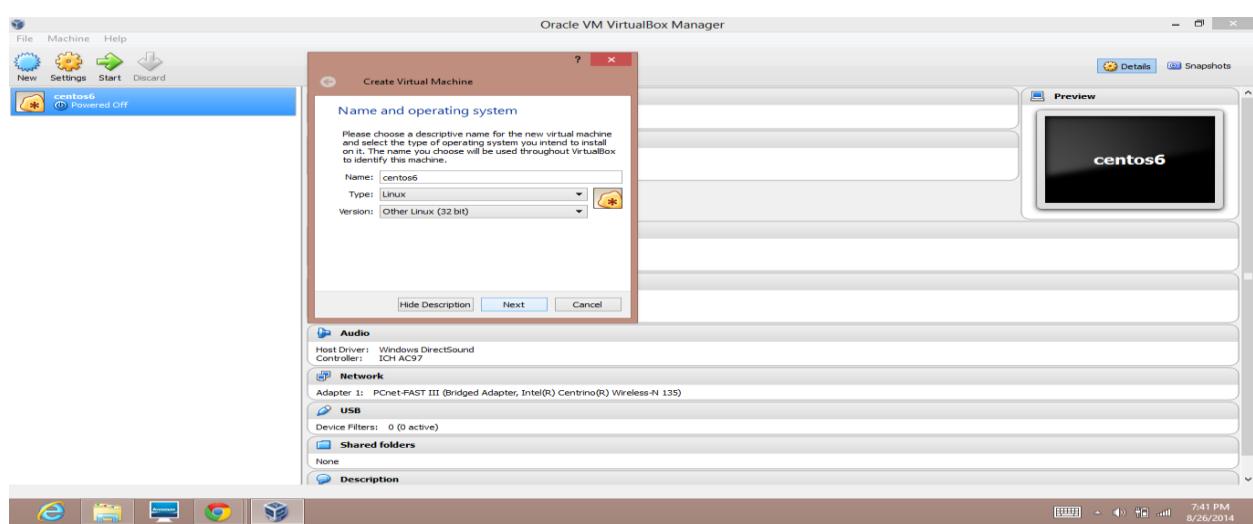


CentOS-6.5-i386-minimal.iso Starting... Show all downloads... 8:46 PM 8/26/2014

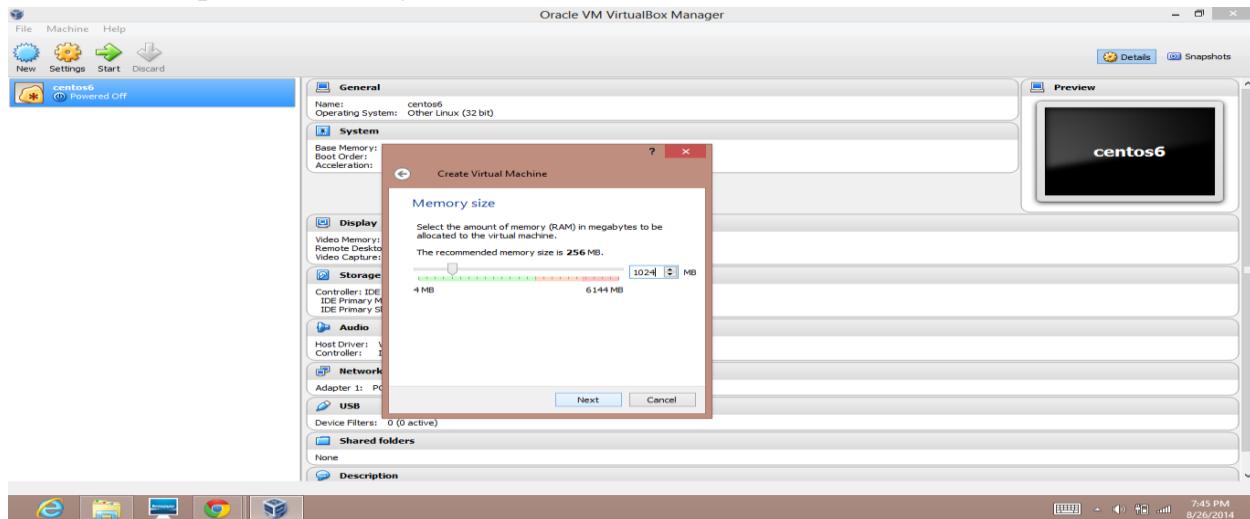
Select NEW and enter the name, type and version. We have given centos6 as title.



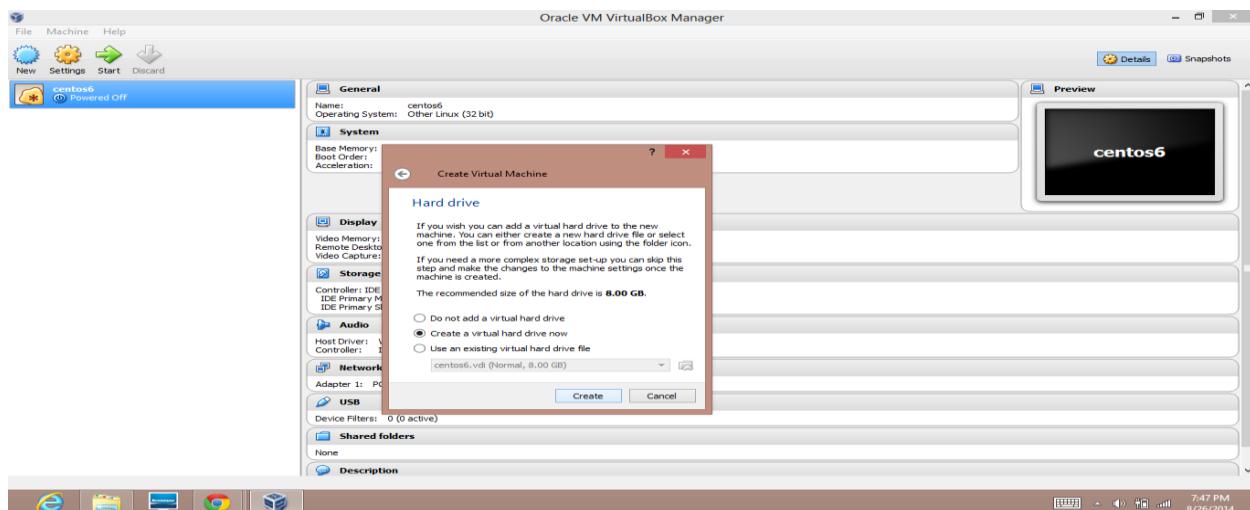
The type of file chosen is LINUX and the version is other (32-bit).



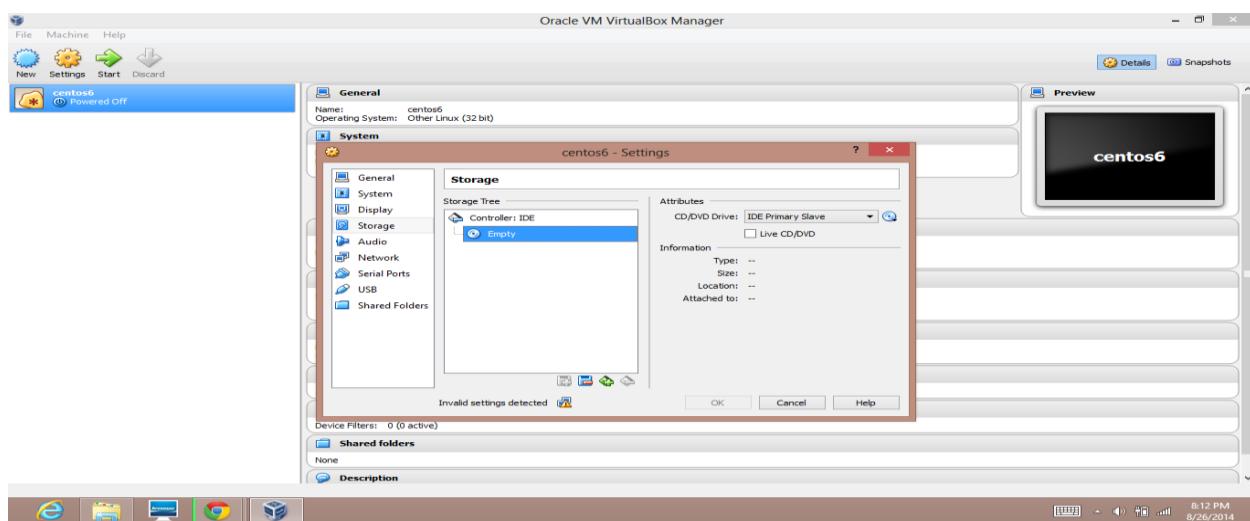
Select the required memory size, 1024 MB.



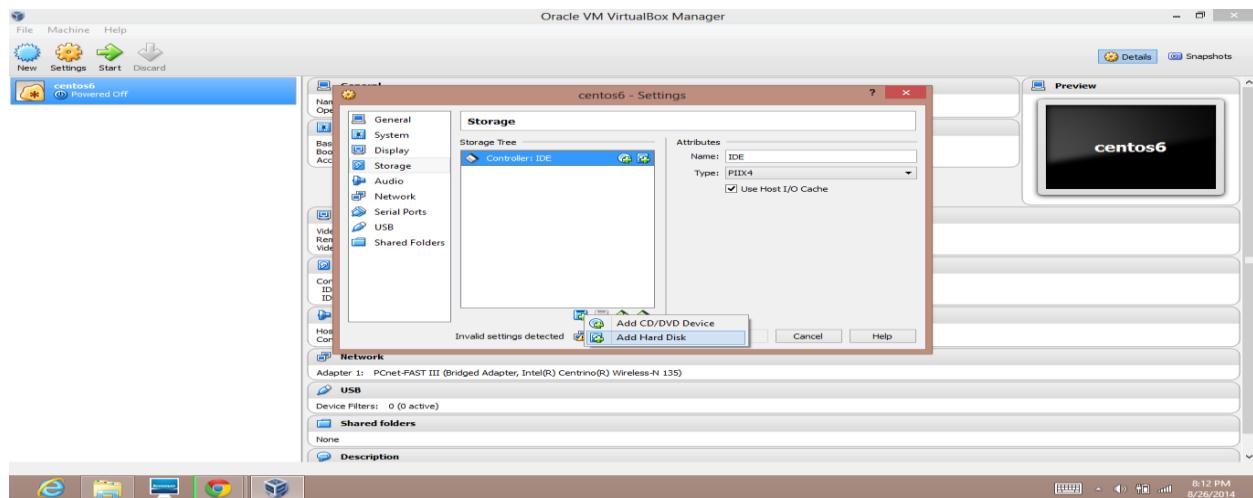
Click “create a virtual hard drive” option and click on create button.



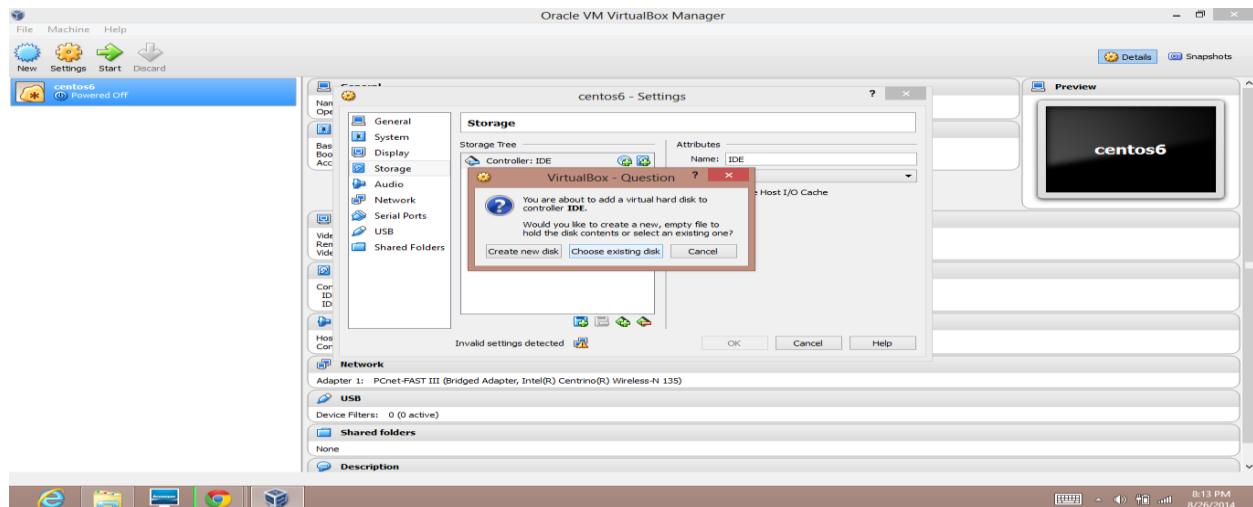
Now select the storage option



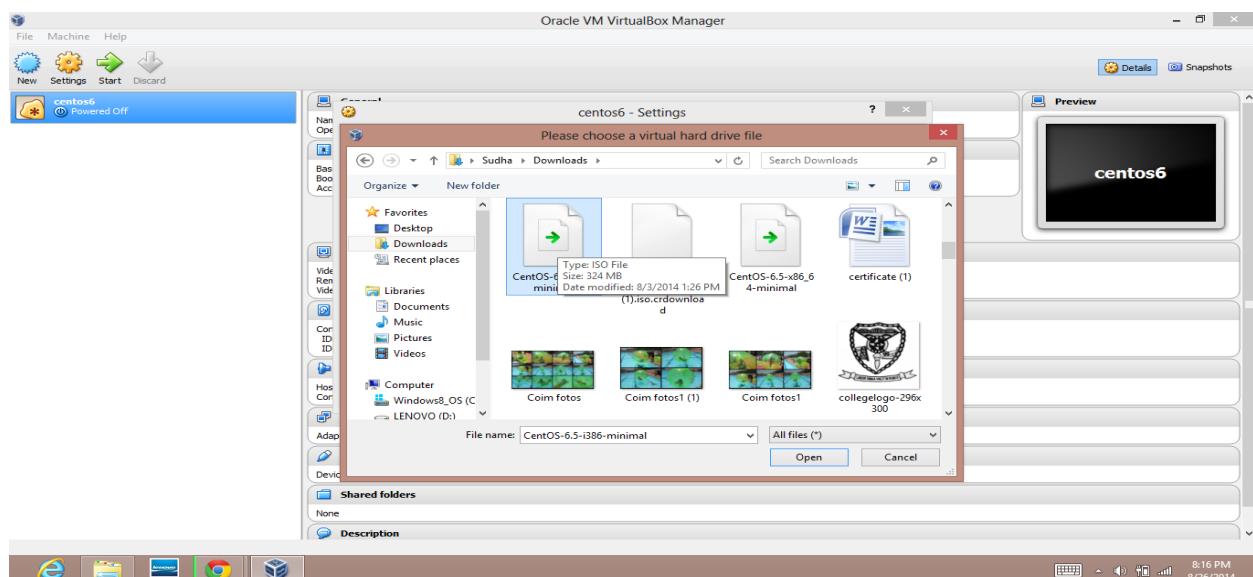
Click the blue button with plus symbol and select "add hard disk" option.



Virtual Box question dialog box appears, click "choose existing disk" button.

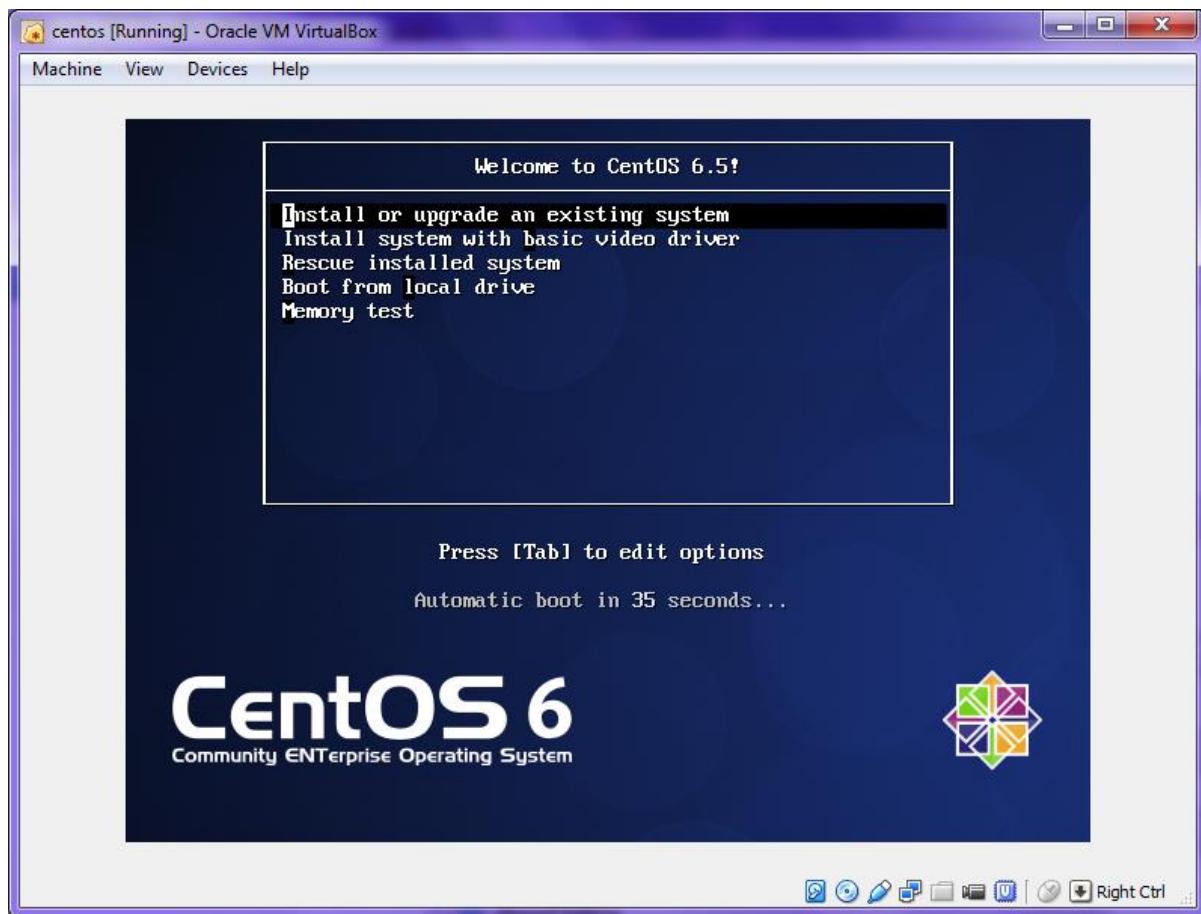


Browse and select the downloaded centos-6.5.iso file and click open.



CentOS-6.5 INSTALLATION

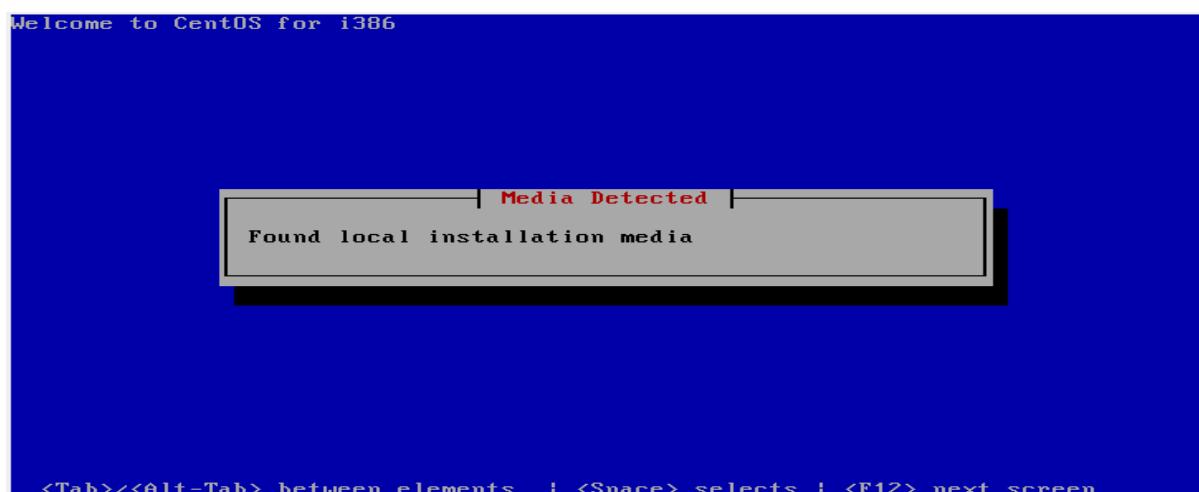
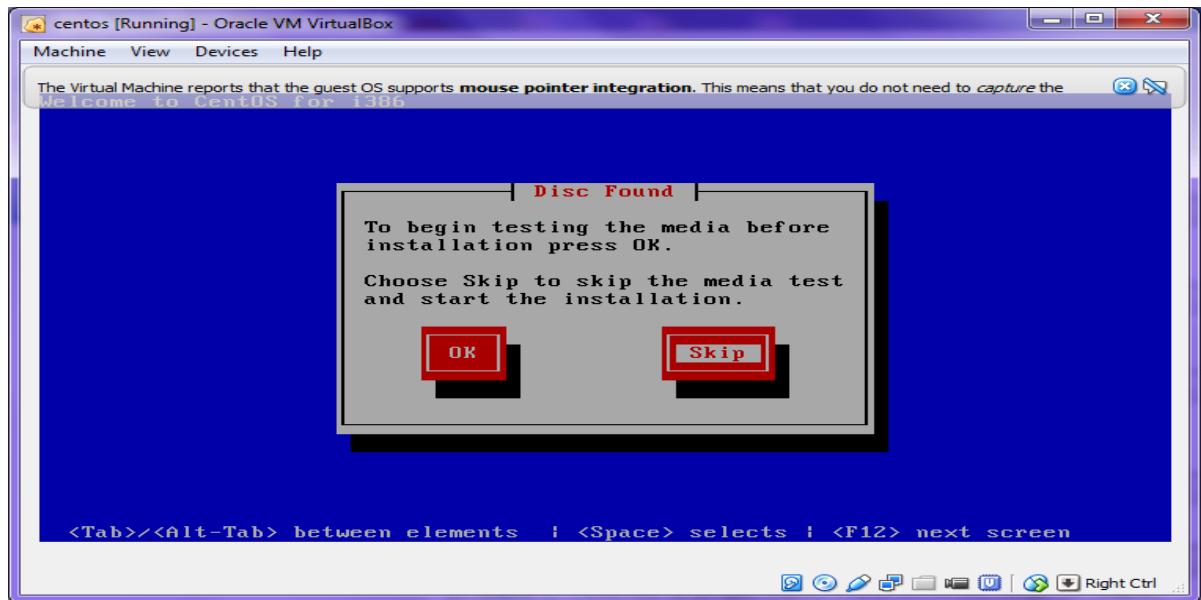
Click start button. Allow the System to automatically boot after 60 seconds



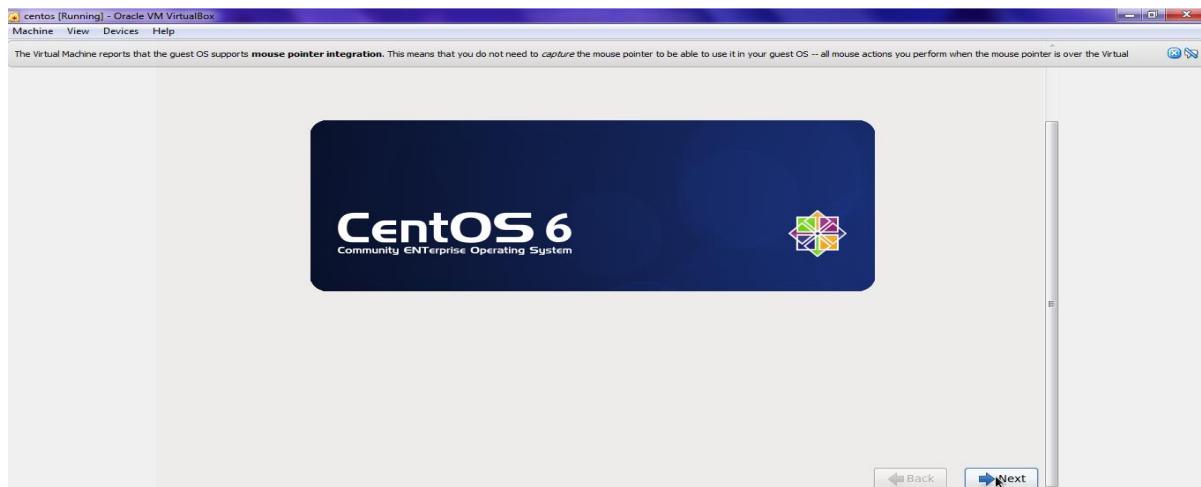
```
usbhid: v2.6:USB HID core driver
GRE over IPv4 demultiplexor driver
TCP cubic registered
Initializing XFRM netlink socket
NET: Registered protocol family 17
Using IPI No-Shortcut mode
input: ImExPS/2 Generic Explorer Mouse as /devices/platform/i8042/serio1/input/input4
registered taskstats version 1
rtc_cmos rtc_cmos: setting system clock to 2014-09-02 09:13:51 UTC (1409649231)
Initializing network drop monitor service
Freeing unused kernel memory: 524k freed
Write protecting the kernel text: 4508k
Write protecting the kernel read-only data: 1980k

Greetings.
anaconda installer init version 13.21.215 starting
mounting /proc filesystem... done
creating /dev filesystem... done
starting udev...done
mounting /dev/pts (unix98 pty) filesystem... done
mounting /sys filesystem... done
trying to remount root filesystem read write... done
mounting /tmp as tmpfs... done
```

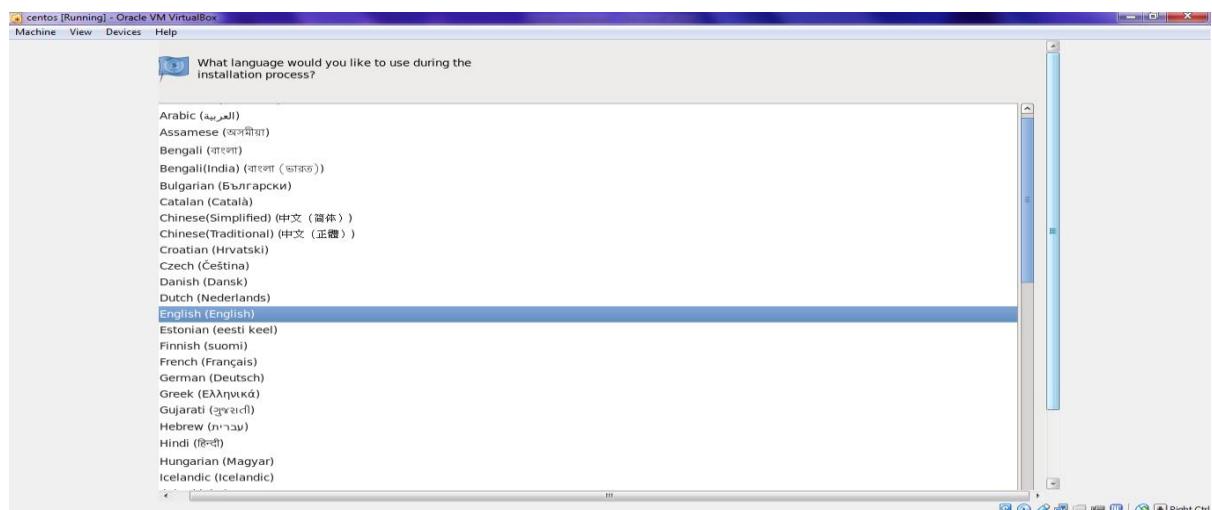
Choose "Skip" to skip media test and start installation



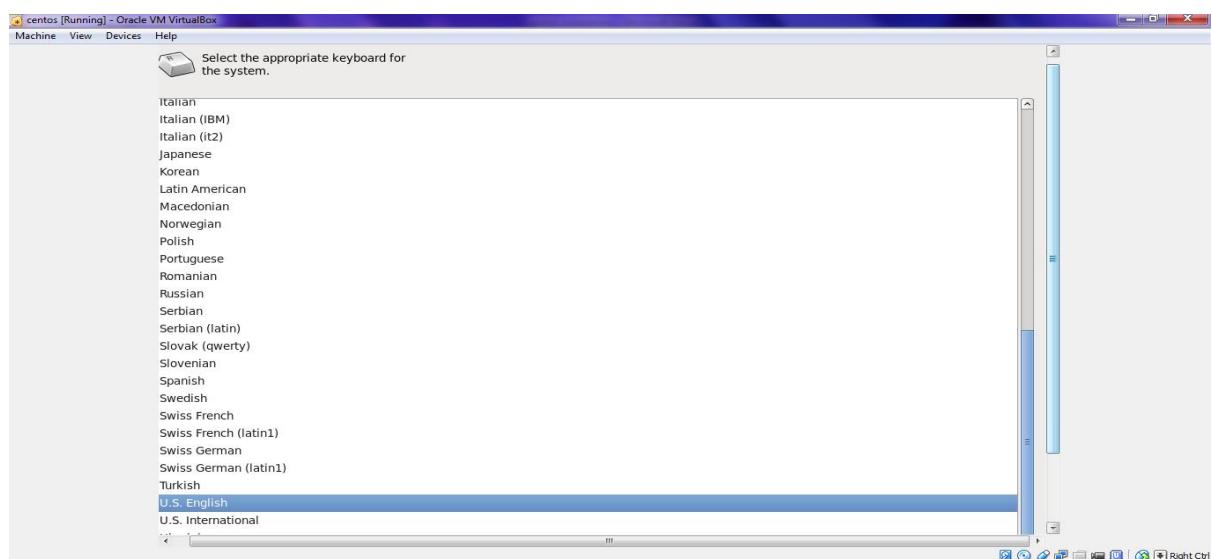
Click next after each step in installation process. (Scroll down to see the button at the bottom of the screen)



Choose the language to be used during installation



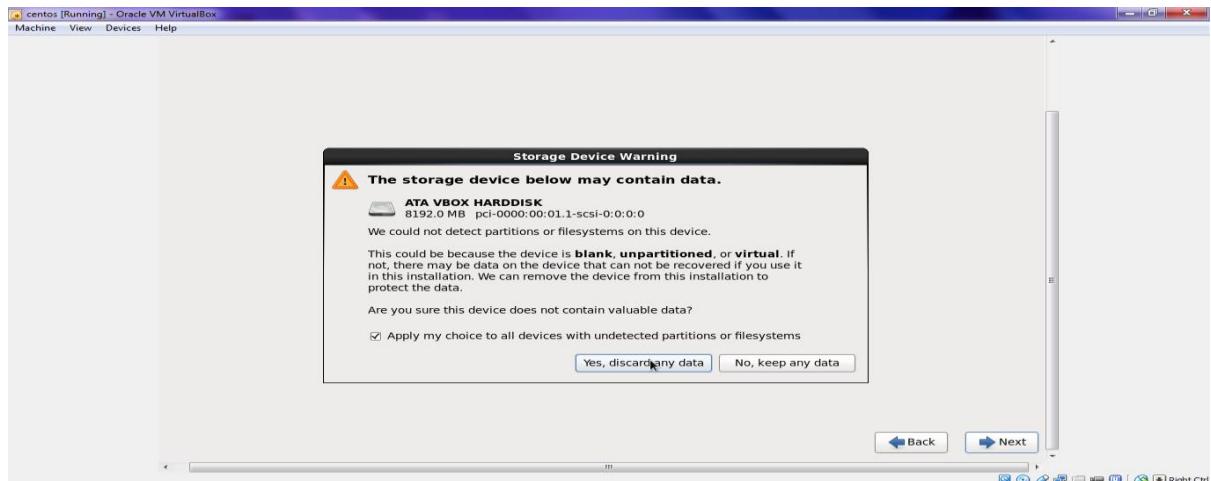
Select the appropriate keyboard system



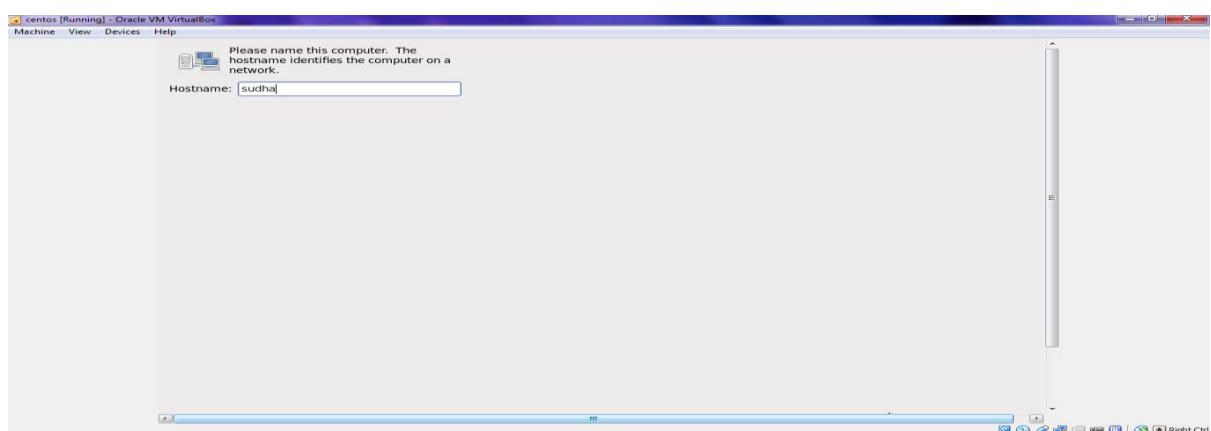
Select Basic Storage Devices



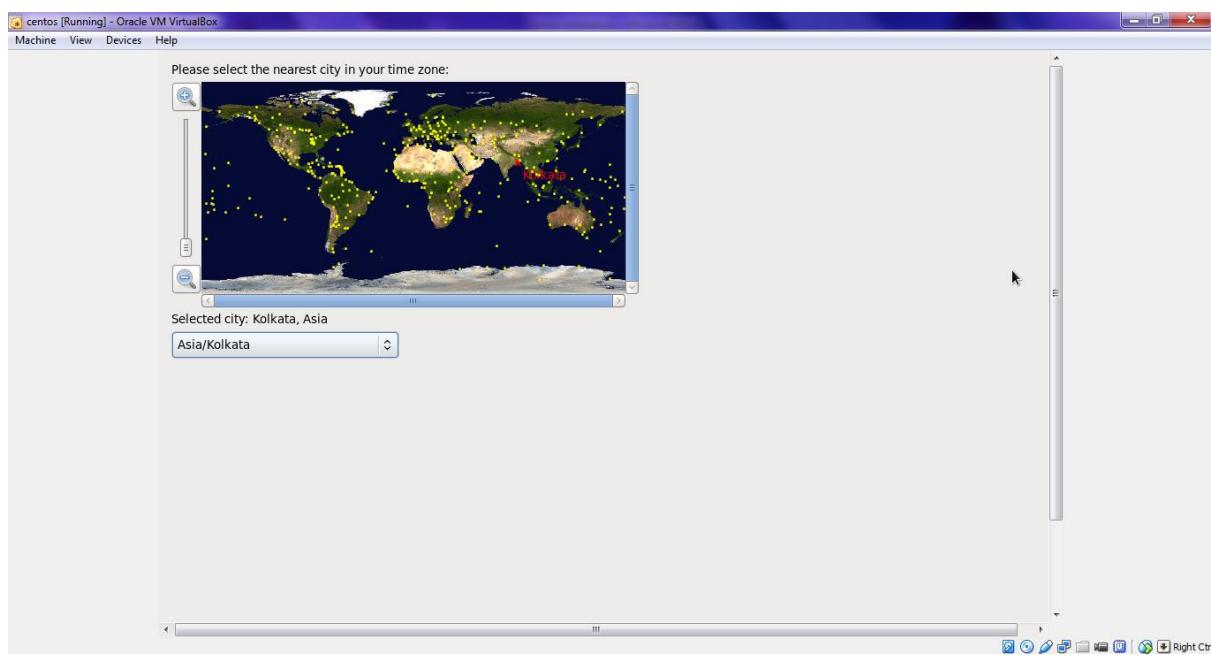
Discard data in the Storage Device



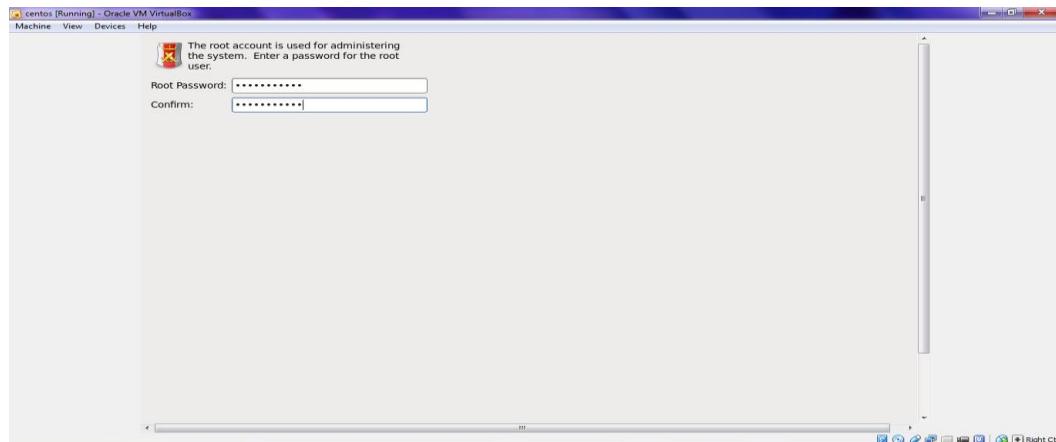
Create a hostname to identify the computer in a network



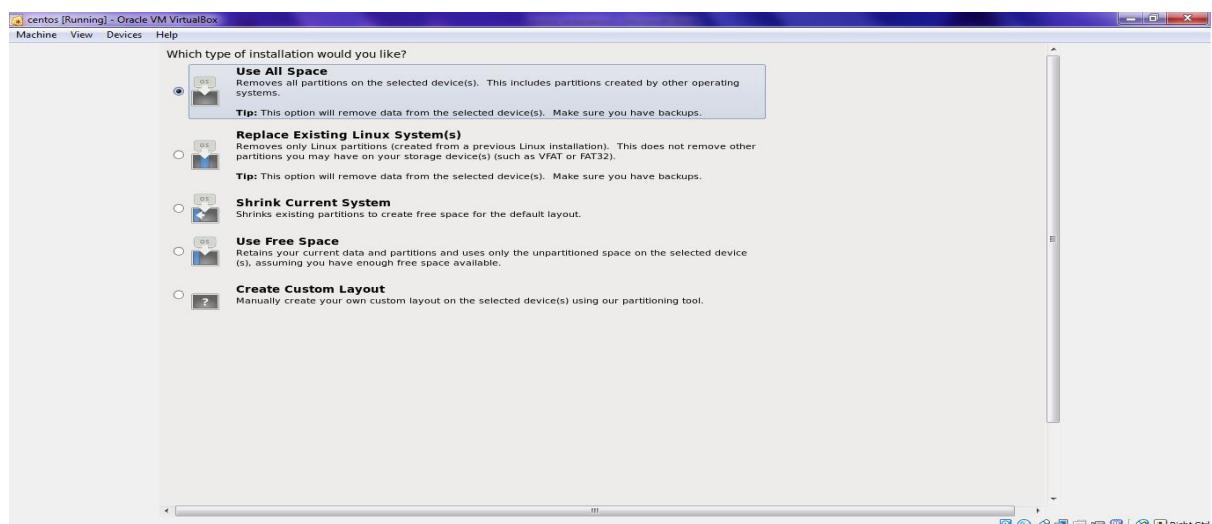
Select the appropriate time zone



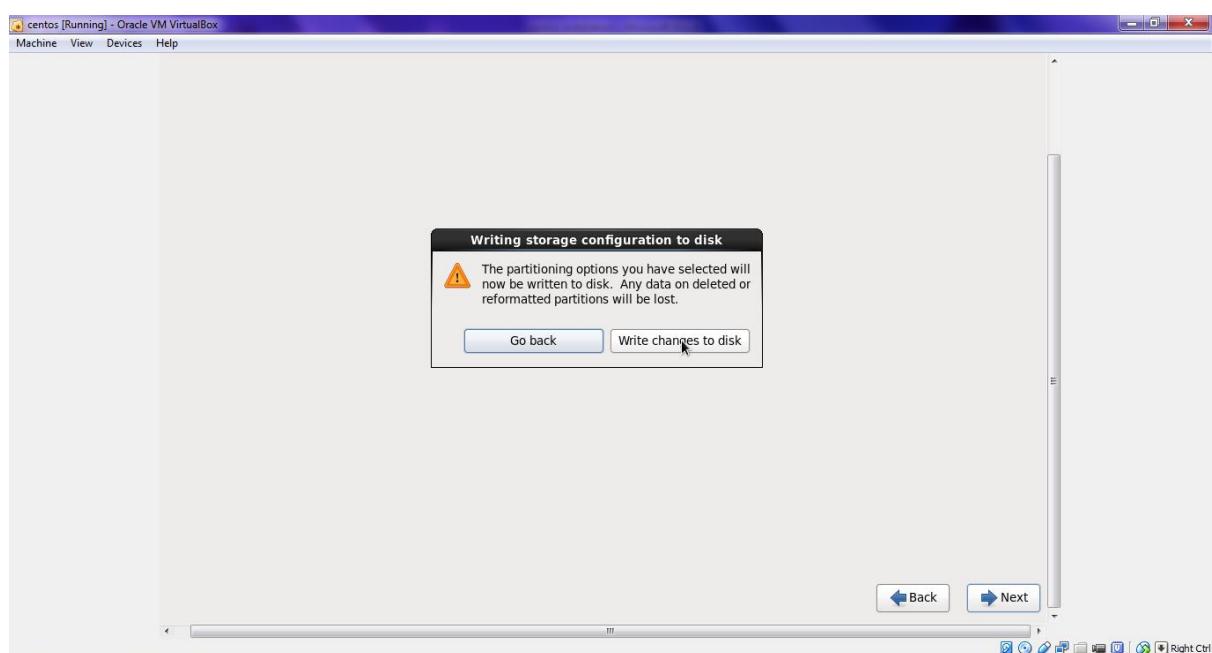
Choose a password for the root account



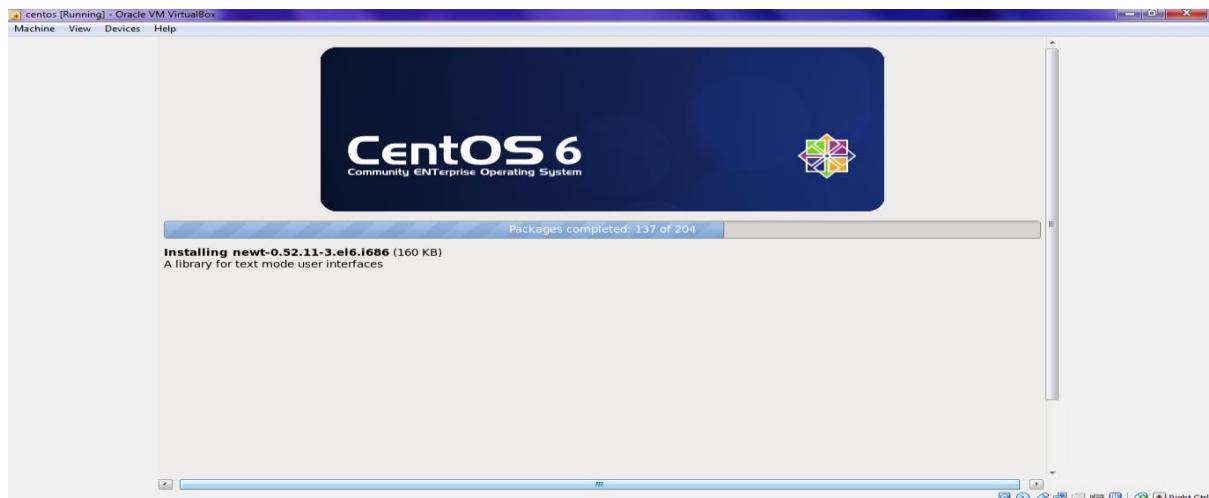
Click on the option “Use All Space” and click next



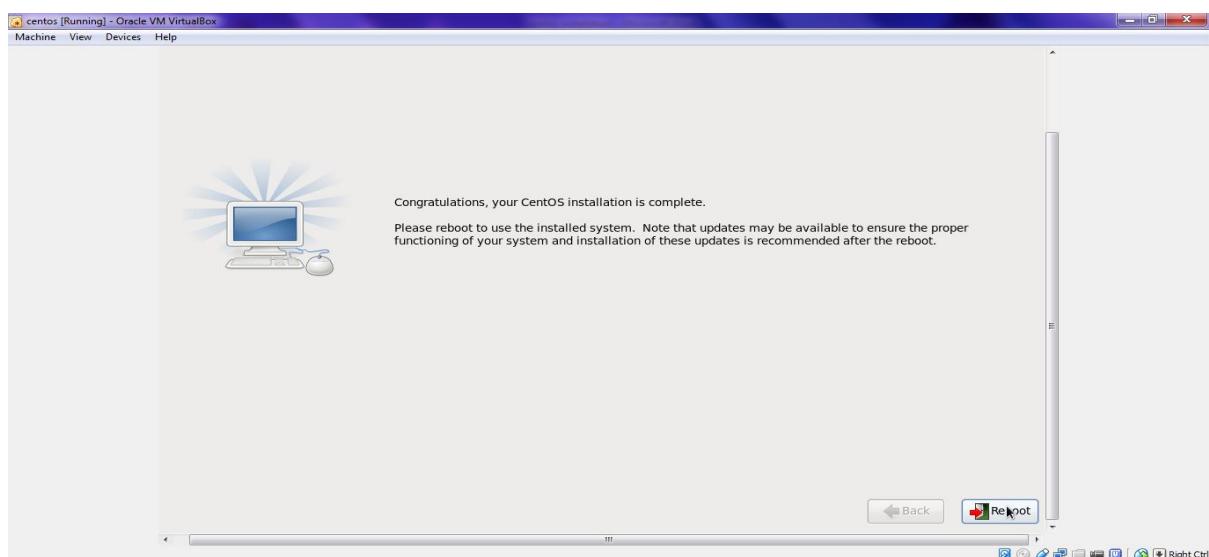
Write changes to the disk



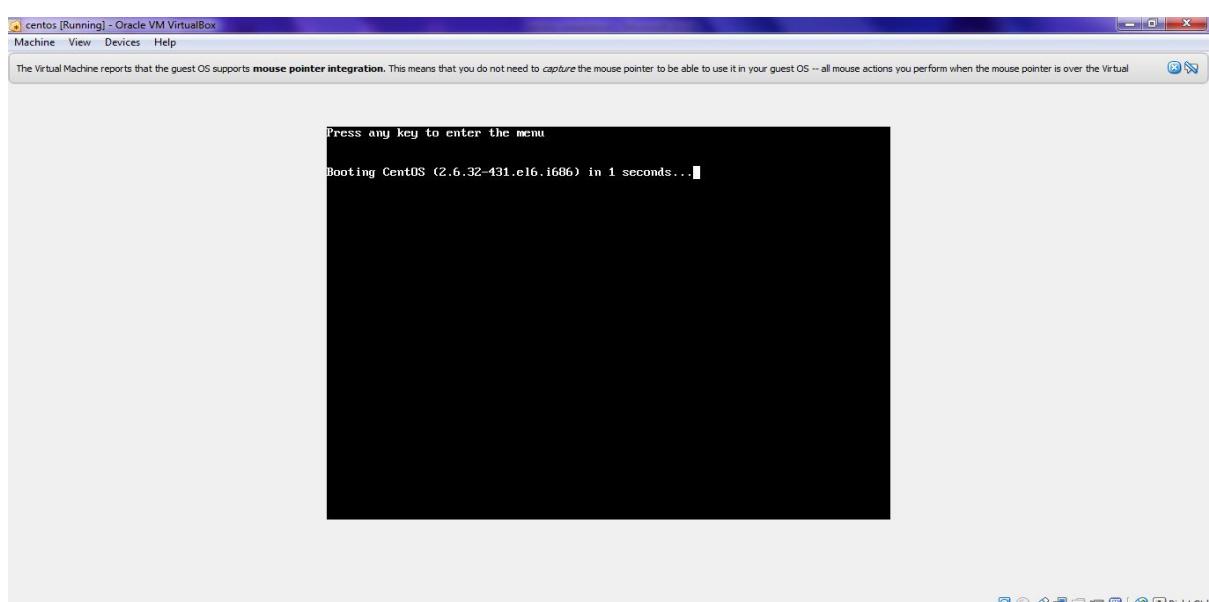
Wait for installation of packages to complete



Reboot the system upon completion of installation



CentOS-6.5 has been installed in Virtual Box.

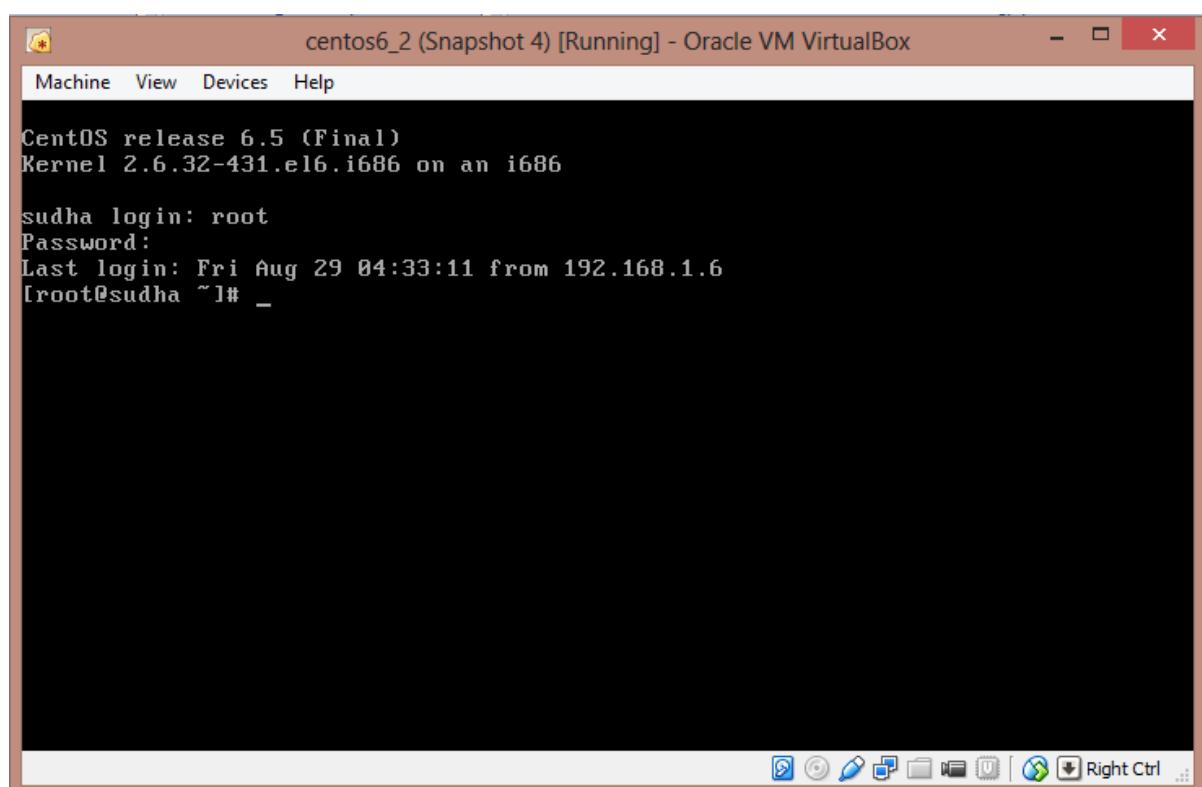
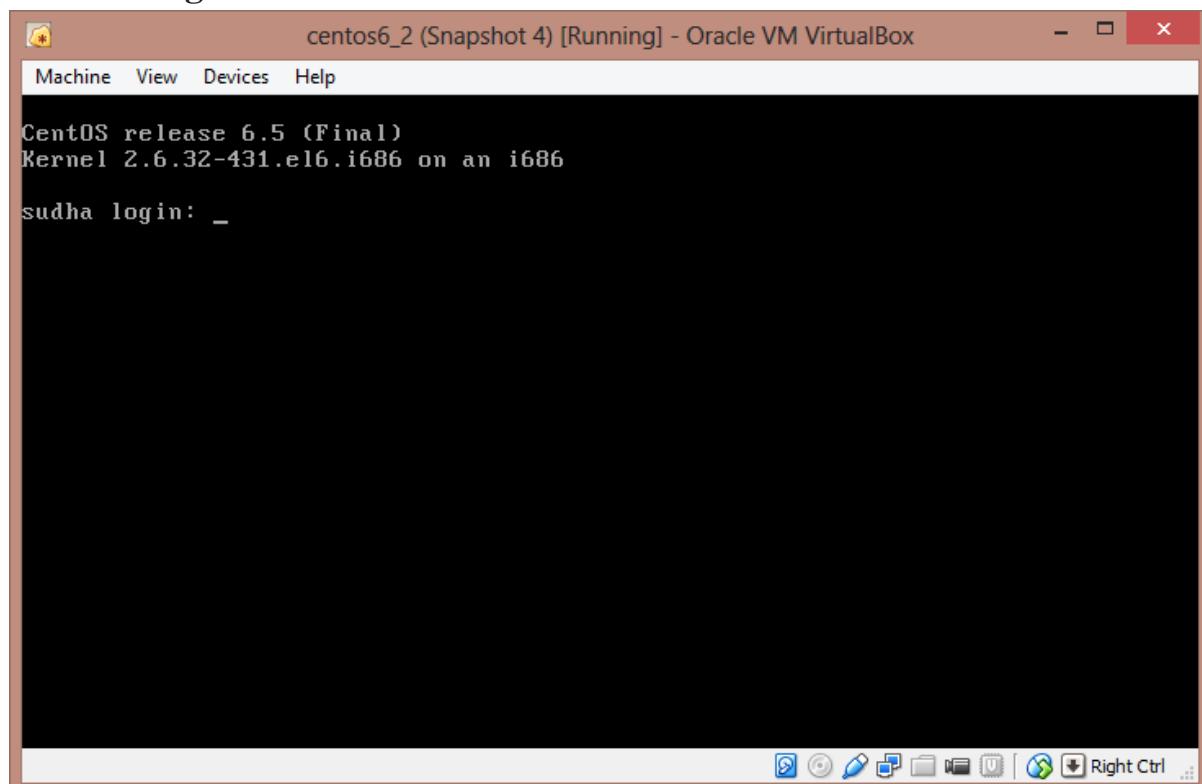


COMPILING DEPENDENCY FILES

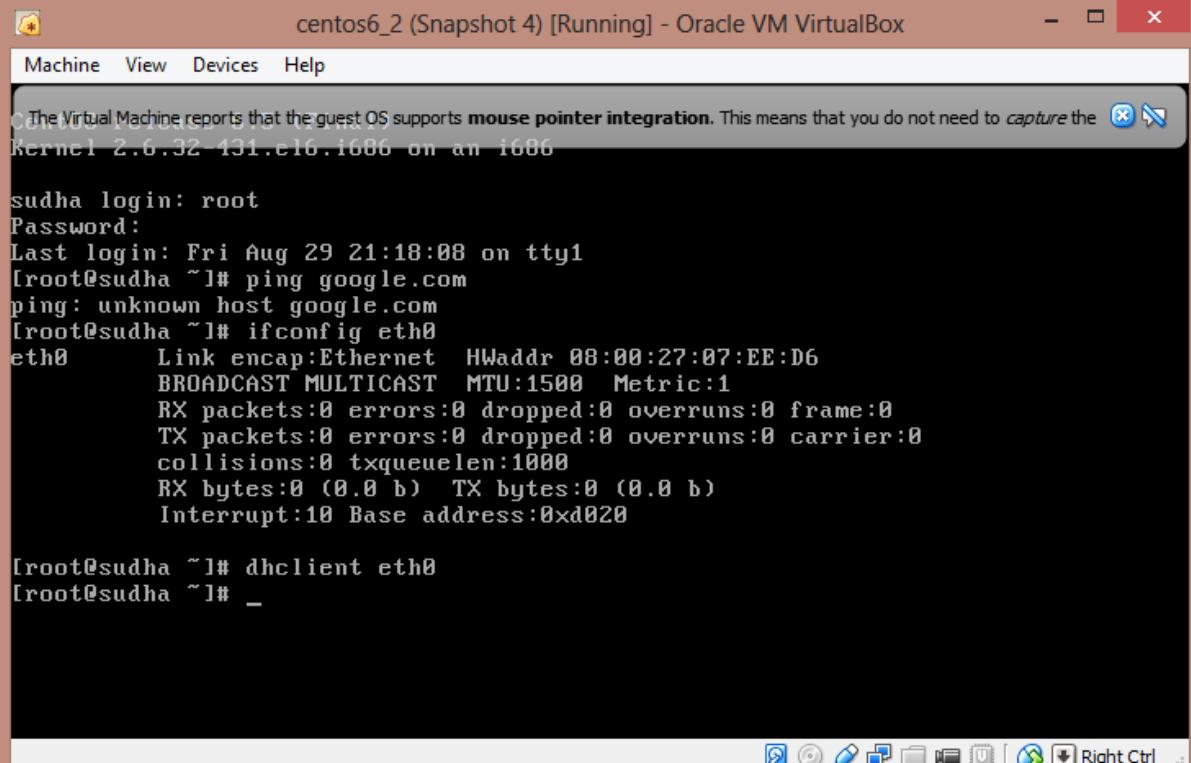
Click start. The virtual machine will start running.

Type the login id and password.

CentOS Login



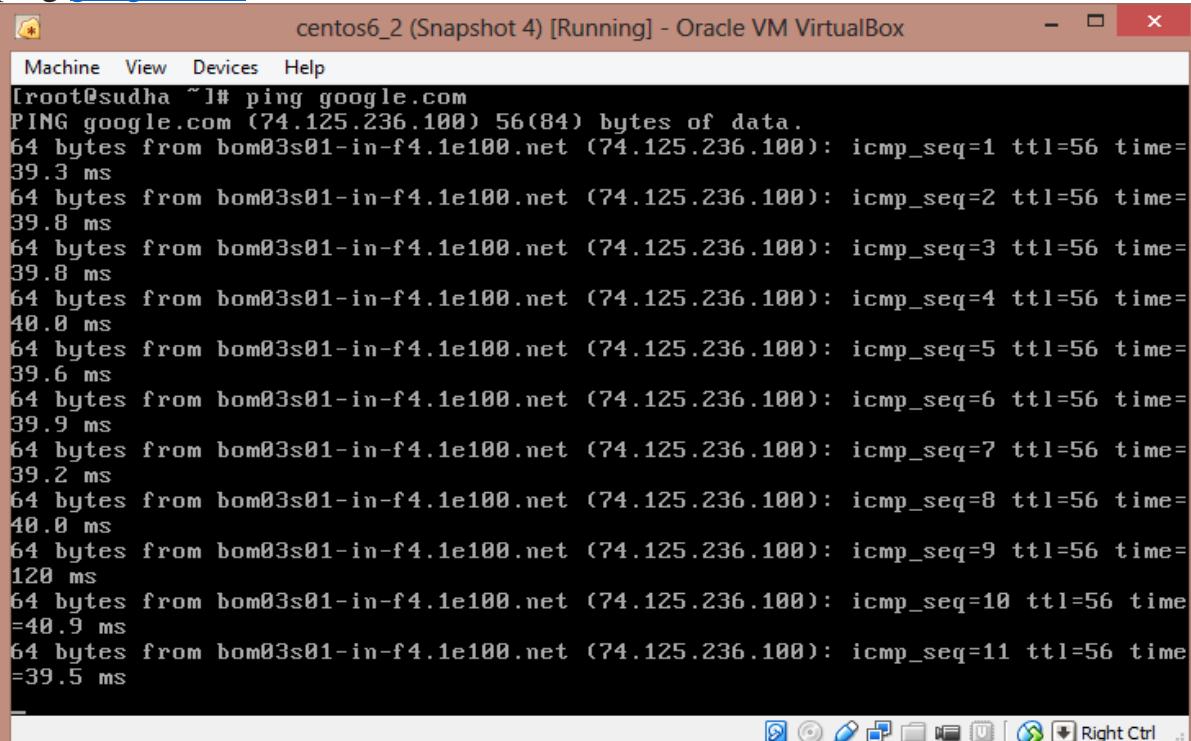
In order to display the current network configuration information, type ifconfig eth0 and for configuring one or more network interfaces, type dhclient eth0



```
sudha login: root
Password:
Last login: Fri Aug 29 21:18:08 on tty1
[root@sudha ~]# ping google.com
ping: unknown host google.com
[root@sudha ~]# ifconfig eth0
eth0      Link encap:Ethernet HWaddr 08:00:27:07:EE:D6
          BROADCAST MULTICAST  MTU:1500 Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:0 (0.0 b)  TX bytes:0 (0.0 b)
          Interrupt:10 Base address:0xd020

[root@sudha ~]# dhclient eth0
[root@sudha ~]# _
```

In order to test the ability of the source computer to reach a specified destination computer, type
[ping google.com](http://google.com)



```
[root@sudha ~]# ping google.com
PING google.com (74.125.236.100) 56(84) bytes of data.
64 bytes from bom03s01-in-f4.1e100.net (74.125.236.100): icmp_seq=1 ttl=56 time=39.3 ms
64 bytes from bom03s01-in-f4.1e100.net (74.125.236.100): icmp_seq=2 ttl=56 time=39.8 ms
64 bytes from bom03s01-in-f4.1e100.net (74.125.236.100): icmp_seq=3 ttl=56 time=39.8 ms
64 bytes from bom03s01-in-f4.1e100.net (74.125.236.100): icmp_seq=4 ttl=56 time=40.0 ms
64 bytes from bom03s01-in-f4.1e100.net (74.125.236.100): icmp_seq=5 ttl=56 time=39.6 ms
64 bytes from bom03s01-in-f4.1e100.net (74.125.236.100): icmp_seq=6 ttl=56 time=39.9 ms
64 bytes from bom03s01-in-f4.1e100.net (74.125.236.100): icmp_seq=7 ttl=56 time=39.2 ms
64 bytes from bom03s01-in-f4.1e100.net (74.125.236.100): icmp_seq=8 ttl=56 time=40.0 ms
64 bytes from bom03s01-in-f4.1e100.net (74.125.236.100): icmp_seq=9 ttl=56 time=120 ms
64 bytes from bom03s01-in-f4.1e100.net (74.125.236.100): icmp_seq=10 ttl=56 time=40.9 ms
64 bytes from bom03s01-in-f4.1e100.net (74.125.236.100): icmp_seq=11 ttl=56 time=39.5 ms
```

Press **ctrl+c** to terminate.

INSTALLATION OF PACKAGES

yum install kernel-devel

```
Total download size: 8.7 M
Installed size: 24 M
Is this ok [y/N]: y
Downloading Packages:
kernel-devel-2.6.32-431.23.3.el6.i686.rpm           | 8.7 MB   03:28
warning: rpmts_HdrFromFdno: Header V3 RSA/SHA1 Signature, key ID c105b9de: NOKEY
Retrieving key from file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-6
Importing GPG key 0xC105B9DE:
  Userid : CentOS-6 Key (CentOS 6 Official Signing Key) <centos-6-key@centos.org>
  Package: centos-release-6-5.el6.centos.11.1.i686 (@anaconda-CentOS-201311271240
.i386/6.5)
    From  : /etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-6
Is this ok [y/N]: y
Running rpm_check_debug
Running Transaction Test
Transaction Test Succeeded
Running Transaction
  Installing : kernel-devel-2.6.32-431.23.3.el6.i686               1/1
  Verifying  : kernel-devel-2.6.32-431.23.3.el6.i686               1/1

Installed:
  kernel-devel.i686 0:2.6.32-431.23.3.el6

Complete!
[root@localhost ~]# _
```

yum install gcc

```
gcc          i686      4.4.7-4.el6        base       8.2 M
Installing for dependencies:
cloog-ppl     i686      0.15.7-1.2.el6      base      93 k
cpp          i686      4.4.7-4.el6        base      3.4 M
glibc-devel   i686      2.12-1.132.el6_5.2  updates   978 k
glibc-headers i686      2.12-1.132.el6_5.2  updates   617 k
kernel-headers i686      2.6.32-431.23.3.el6  updates   2.9 M
libgomp      i686      4.4.7-4.el6        base      121 k
mpfr         i686      2.4.1-6.el6        base      153 k
ppl          i686      0.10.2-11.el6      base      1.3 M
Updating for dependencies:
glibc         i686      2.12-1.132.el6_5.2  updates   4.3 M
glibc-common  i686      2.12-1.132.el6_5.2  updates   14 M

Transaction Summary
=====
Install      9 Package(s)
Upgrade      2 Package(s)

Total download size: 36 M
Is this ok [y/N]: y
Downloading Packages:
(1/11): cloog-ppl-0.15.7-1.2.el6.i686.rpm           | 93 kB   00:00
(2/11): cpp-4.4.7-4.el6.i686.rpm                     | 3.4 MB   00:13
(3/11): gcc-4.4.7-4.el (13%) 18% [==                1 213 kB/s 1 1.5 MB  00:31 ETA
```

```
yum install gcc-c++
```

```
Total download size: 5.9 M
Installed size: 18 M
Is this ok [y/N]: y
Downloading Packages:
(1/2): gcc-c++-4.4.7-4.el6.i686.rpm           | 4.3 MB     01:10
(2/2): libstdc++-devel-4.4.7-4.el6.i686.rpm    | 1.6 MB     00:27
                                                               ----- 
Total                                         61 kB/s | 5.9 MB   01:38

Running rpm_check_debug
Running Transaction Test
Transaction Test Succeeded
Running Transaction
  Installing : libstdc++-devel-4.4.7-4.el6.i686      1/2
  Installing : gcc-c++-4.4.7-4.el6.i686                2/2
  Verifying  : gcc-c++-4.4.7-4.el6.i686                1/2
  Verifying  : libstdc++-devel-4.4.7-4.el6.i686      2/2

Installed:
  gcc-c++.i686 0:4.4.7-4.el6

Dependency Installed:
  libstdc++-devel.i686 0:4.4.7-4.el6

Complete!
[root@localhost ~]# _
```

```
yum install make
```

```
Running Transaction Test
Transaction Test Succeeded
Running Transaction
  Installing : libstdc++-devel-4.4.7-4.el6.i686      1/2
  Installing : gcc-c++-4.4.7-4.el6.i686                2/2
  Verifying  : gcc-c++-4.4.7-4.el6.i686                1/2
  Verifying  : libstdc++-devel-4.4.7-4.el6.i686      2/2

Installed:
  gcc-c++.i686 0:4.4.7-4.el6

Dependency Installed:
  libstdc++-devel.i686 0:4.4.7-4.el6

Complete!
[root@localhost ~]# yum install make
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
 * base: mirror.nbrc.ac.in
 * extras: mirror.nbrc.ac.in
 * updates: mirror.nbrc.ac.in
Setting up Install Process
Package 1:make-3.81-20.el6.i686 already installed and latest version
Nothing to do
[root@localhost ~]# _
```

```
yum install flex
```

```
=====
Installing:
  flex           i686          2.5.35-8.el6      base       279 k

Transaction Summary
=====
Install      1 Package(s)

Total download size: 279 k
Installed size: 706 k
Is this ok [y/N]: y
Downloading Packages:
flex-2.5.35-8.el6.i686.rpm          | 279 kB     00:01
Running rpm_check_debug
Running Transaction Test
Transaction Test Succeeded
Running Transaction
  Installing : flex-2.5.35-8.el6.i686          1/1
  Verifying  : flex-2.5.35-8.el6.i686          1/1

Installed:
  flex.i686 0:2.5.35-8.el6

Complete!
[root@sudha workspace]# _
```

```
yum install bison
```

```
=====
Installing:
  bison          i686          2.4.1-5.el6      base       626 k

Transaction Summary
=====
Install      1 Package(s)

Total download size: 626 k
Installed size: 2.0 M
Is this ok [y/N]: y
Downloading Packages:
bison-2.4.1-5.el6.i686.rpm          | 626 kB     00:01
Running rpm_check_debug
Running Transaction Test
Transaction Test Succeeded
Running Transaction
  Installing : bison-2.4.1-5.el6.i686          1/1
  Verifying  : bison-2.4.1-5.el6.i686          1/1

Installed:
  bison.i686 0:2.4.1-5.el6

Complete!
[root@sudha workspace]# _
```

```
yum install autoconf
```

```
Loading mirror speeds from cached hostfile
 * base: centos.aol.in
 * extras: centos.aol.in
 * updates: centos.aol.in
Setting up Install Process
Resolving Dependencies
--> Running transaction check
--> Package autoconf.noarch 0:2.63-5.1.el6 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package           Arch      Version       Repository   Size
=====
Installing:
autoconf          noarch    2.63-5.1.el6   base        781 k

Transaction Summary
=====
Install     1 Package(s)

Total download size: 781 k
Installed size: 2.5 M
Is this ok [y/N]: _

=====
Installing:
autoconf          noarch    2.63-5.1.el6   base        781 k

Transaction Summary
=====
Install     1 Package(s)

Total download size: 781 k
Installed size: 2.5 M
Is this ok [y/N]: y
Downloading Packages:
autoconf-2.63-5.1.el6.noarch.rpm          | 781 kB     00:02
Running rpm_check_debug
Running Transaction Test
Transaction Test Succeeded
Running Transaction
  Installing : autoconf-2.63-5.1.el6.noarch          1/1
  Verifying  : autoconf-2.63-5.1.el6.noarch          1/1

Installed:
autoconf.noarch 0:2.63-5.1.el6

Complete!
[root@sudha workspace]# _
```

```
yum install auto-make
```

```
Loading mirror speeds from cached hostfile
 * base: centos.aol.in
 * extras: centos.aol.in
 * updates: centos.aol.in
Setting up Install Process
Resolving Dependencies
--> Running transaction check
--> Package automake.noarch 0:1.11.1-4.el6 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package           Arch      Version       Repository   Size
=====
Installing:
automake          noarch    1.11.1-4.el6   base        550 k

Transaction Summary
=====
Install     1 Package(s)

Total download size: 550 k
Installed size: 1.5 M
Is this ok [y/N]: _
```

```
=====
Installing:
automake          noarch    1.11.1-4.el6   base        550 k

Transaction Summary
=====
Install     1 Package(s)

Total download size: 550 k
Installed size: 1.5 M
Is this ok [y/N]: y
Downloading Packages:
automake-1.11.1-4.el6.noarch.rpm          | 550 kB     00:03
Running rpm_check_debug
Running Transaction Test
Transaction Test Succeeded
Running Transaction
  Installing : automake-1.11.1-4.el6.noarch          1/1
  Verifying  : automake-1.11.1-4.el6.noarch          1/1

Installed:
  automake.noarch 0:1.11.1-4.el6

Complete!
[root@sudha workspace]# _
```

pkg-config

```
[root@sudha workspace]# yum install pkg-config
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
 * base: centos.aol.in
 * extras: centos.aol.in
 * updates: centos.aol.in
Setting up Install Process
No package pkg-config available.
Error: Nothing to do
[root@sudha workspace]# wget http://pkgconfig.freedesktop.org/releases/pkg-config-0.28.tar.gz
--2014-08-10 14:53:58--  http://pkgconfig.freedesktop.org/releases/pkg-config-0.28.tar.gz
Resolving pkgconfig.freedesktop.org... 131.252.210.176
Connecting to pkgconfig.freedesktop.org:131.252.210.176:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 1931203 (1.8M) [application/x-gzip]
Saving to: "pkg-config-0.28.tar.gz"

100%[=====] 1,931,203      244K/s   in 11s

2014-08-10 14:54:10 (176 KB/s) - "pkg-config-0.28.tar.gz" saved [1931203/1931203]

[root@sudha workspace]# _
```

```
pkg-config-0.28/glib/glib/gthread-win32.c
pkg-config-0.28/glib/glib/gthread-posix.c
pkg-config-0.28/glib/glib/glib-object.h
pkg-config-0.28/glib/glib/glib-unix.h
pkg-config-0.28/glib/glib/gstrfuncs.c
pkg-config-0.28/glib/glib/gasyncqueue.h
pkg-config-0.28/glib/glib/gwin32.c
pkg-config-0.28/glib/glib/gconstructor.h
pkg-config-0.28/glib/glib/gallocac.h
pkg-config-0.28/glib/glib/glib.rc.in
pkg-config-0.28/glib/glib/gbase64.c
pkg-config-0.28/glib/compile
pkg-config-0.28/glib/m4macros/
pkg-config-0.28/glib/m4macros/libtool.m4
pkg-config-0.28/glib/m4macros/ltoptions.m4
pkg-config-0.28/glib/m4macros/Makefile.am
pkg-config-0.28/glib/m4macros/ltversion.m4
pkg-config-0.28/glib/m4macros/glib-2.0.m4
pkg-config-0.28/glib/m4macros/glib-gettext.m4
pkg-config-0.28/glib/m4macros/lt~obsolete.m4
pkg-config-0.28/glib/m4macros/Makefile.in
pkg-config-0.28/glib/m4macros/gsettings.m4
pkg-config-0.28/glib/m4macros/ltsugar.m4
pkg-config-0.28/ChangeLog
[root@sudha workspace]# _
```

```
yum install rpm-build
```

```
Installing : elfutils-libs-0.152-1.el6.i686 4/7
Installing : elfutils-0.152-1.el6.i686 5/7
Installing : unzip-6.0-1.el6.i686 6/7
Installing : rpm-build-4.8.0-37.el6.i686 7/7
Verifying : unzip-6.0-1.el6.i686 1/7
Verifying : elfutils-0.152-1.el6.i686 2/7
Verifying : elfutils-libs-0.152-1.el6.i686 3/7
Verifying : xz-lzma-compat-4.999.9-0.3.beta.20091007git.el6.i686 4/7
Verifying : gdb-7.2-64.el6_5.2.i686 5/7
Verifying : rpm-build-4.8.0-37.el6.i686 6/7
Verifying : xz-4.999.9-0.3.beta.20091007git.el6.i686 7/7

Installed:
  rpm-build.i686 0:4.8.0-37.el6

Dependency Installed:
  elfutils.i686 0:0.152-1.el6
  elfutils-libs.i686 0:0.152-1.el6
  gdb.i686 0:7.2-64.el6_5.2
  unzip.i686 0:6.0-1.el6
  xz.i686 0:4.999.9-0.3.beta.20091007git.el6
  xz-lzma-compat.i686 0:4.999.9-0.3.beta.20091007git.el6

Complete!
[root@localhost ~]# _
```

```
yum install libstdc++
```

```
Verifying : rpm-build-4.8.0-37.el6.i686 6/7
Verifying : xz-4.999.9-0.3.beta.20091007git.el6.i686 7/7

Installed:
  rpm-build.i686 0:4.8.0-37.el6

Dependency Installed:
  elfutils.i686 0:0.152-1.el6
  elfutils-libs.i686 0:0.152-1.el6
  gdb.i686 0:7.2-64.el6_5.2
  unzip.i686 0:6.0-1.el6
  xz.i686 0:4.999.9-0.3.beta.20091007git.el6
  xz-lzma-compat.i686 0:4.999.9-0.3.beta.20091007git.el6

Complete!
[root@localhost ~]# yum install libstdc++
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
 * base: mirror.nbrc.ac.in
 * extras: mirror.nbrc.ac.in
 * updates: mirror.nbrc.ac.in
Setting up Install Process
Package libstdc++-4.4.7-4.el6.i686 already installed and latest version
Nothing to do
[root@localhost ~]# _
```

```
yum install patch
```

```
=====
Installing:
patch           i686        2.6-6.el6      base       96 k
Transaction Summary
=====
Install      1 Package(s)

Total download size: 96 k
Installed size: 183 k
Is this ok [y/N]: y
Downloading Packages:
patch-2.6-6.el6.i686.rpm          | 96 kB     00:00
Running rpm_check_debug
Running Transaction Test
Transaction Test Succeeded
Running Transaction
  Installing : patch-2.6-6.el6.i686          1/1
  Verifying  : patch-2.6-6.el6.i686          1/1

Installed:
  patch.i686 0:2.6-6.el6

Complete!
[root@localhost ~]# _
```

```
yum install git
```

```
Verifying : 1:perl-Module-Pluggable-3.90-136.el6.i686          3/10
Verifying : perl-Git-1.7.1-3.el6_4.1.noarch                  4/10
Verifying : rsync-3.0.6-9.el6_4.1.i686                      5/10
Verifying : git-1.7.1-3.el6_4.1.i686                      6/10
Verifying : 3:perl-version-0.77-136.el6.i686                7/10
Verifying : 4:perl-libs-5.10.1-136.el6.i686                8/10
Verifying : 4:perl-5.10.1-136.el6.i686                  9/10
Verifying : 1:perl-Pod-Escapes-1.04-136.el6.i686          10/10

Installed:
  git.i686 0:1.7.1-3.el6_4.1

Dependency Installed:
  perl.i686 4:5.10.1-136.el6
  perl-Error.noarch 1:0.17015-4.el6
  perl-Git.noarch 0:1.7.1-3.el6_4.1
  perl-Module-Pluggable.i686 1:3.90-136.el6
  perl-Pod-Escapes.i686 1:1.04-136.el6
  perl-Pod-Simple.i686 1:3.13-136.el6
  perl-libs.i686 4:5.10.1-136.el6
  perl-version.i686 3:0.77-136.el6
  rsync.i686 0:3.0.6-9.el6_4.1

Complete!
[root@localhost ~]# _
```

```
pwd  
mkdir new  
cd new
```

```
[root@sudha ~]# pwd  
/root  
[root@sudha ~]# mkdir new_workspace  
mkdir: cannot create directory `new_workspace': File exists  
[root@sudha ~]# mkdir new  
[root@sudha ~]# cd new
```

DOWNLOADING AND EXTRACTING DEPENDENCY FILES

```
yum install wget
```

```
Determining fastest mirrors  
* base: centos.aol.in  
* extras: centos.aol.in  
* updates: centos.aol.in  
Setting up Install Process  
Resolving Dependencies  
--> Running transaction check  
---> Package wget.i686 0:1.12-1.11.el6_5 will be installed  
---> Finished Dependency Resolution  
  
Dependencies Resolved  
  
=====  
 Package      Arch      Version           Repository      Size  
=====  
Installing:  
  wget        i686     1.12-1.11.el6_5       updates      482 k  
  
Transaction Summary  
=====  
Install       1 Package(s)  
  
Total download size: 482 k  
Installed size: 1.8 M  
Is this ok [y/N]: _
```

```
wget http://www.tortall.net/projects/yasm/releases/yasm-1.2.0.tar.gz  
tar xvzf ./yasm-1.2.0.tar.gz
```

```
[root@sudha new]# wget http://www.tortall.net/projects/yasm/releases/yasm-1.2.0.  
tar.gz  
--2014-08-28 21:09:45-- http://www.tortall.net/projects/yasm/releases/yasm-1.2.  
0.tar.gz  
Resolving www.tortall.net... 69.55.226.36  
Connecting to www.tortall.net|69.55.226.36|:80... connected.  
HTTP request sent, awaiting response... 200 OK  
Length: 1436502 (1.4M) [application/octet-stream]  
Saving to: "yasm-1.2.0.tar.gz"  
  
100%[=====]  
  
2014-08-28 21:10:06 (71.8 KB/s) - "yasm-1.2.0.tar.gz" saved [1436502/1436502]  
  
[root@sudha new]#
```

```
[root@sudha new]# tar xvfz ./yasm-1.2.0.tar.gz
yasm-1.2.0/
yasm-1.2.0/libyasm/
yasm-1.2.0/libyasm/bitvect.h
yasm-1.2.0/libyasm/section.h
yasm-1.2.0/libyasm/mergesort.c
yasm-1.2.0/libyasm/strcasecmp.c
yasm-1.2.0/libyasm/value.c
yasm-1.2.0/libyasm/errwarn.h
yasm-1.2.0/libyasm/bc-incbin.c
yasm-1.2.0/libyasm/insn.h
yasm-1.2.0/libyasm/xmalloc.c
yasm-1.2.0/libyasm/symrec.h
yasm-1.2.0/libyasm/inttree.c
yasm-1.2.0/libyasm/linemap.c
yasm-1.2.0/libyasm/tests/
yasm-1.2.0/libyasm/tests/value-samesym.asm
yasm-1.2.0/libyasm/tests/timesunder.asm
yasm-1.2.0/libyasm/tests/opt-align2.hex
yasm-1.2.0/libyasm/tests/externdef.hex
yasm-1.2.0/libyasm/tests/timesunder.hex
yasm-1.2.0/libyasm/tests/opt-struc.asm
yasm-1.2.0/libyasm/tests/splitpath_test.c
yasm-1.2.0/libyasm/tests/times-res.asm
yasm-1.2.0/libyasm/tests/expr-fold-level.asm
yasm-1.2.0/libyasm/tests/strucsize.hex
yasm-1.2.0/libyasm/tests/value-mask.hex
yasm-1.2.0/libyasm/tests/opt-circular3-err.errwarn
yasm-1.2.0/libyasm/tests/opt-struc.hex
yasm-1.2.0/libyasm/tests/absloop-err.errwarn
yasm-1.2.0/libyasm/tests/value-mask.asm
yasm-1.2.0/libyasm/tests/reserve-err2.asm
yasm-1.2.0/libyasm/tests/incbin.asm
yasm-1.2.0/libyasm/tests/emptydata.hex
```

```
yasm 1.2.0/m4/longdouble.m4
yasm 1.2.0/m4/po.m4
yasm-1.2.0/m4/gettext.m4
yasm-1.2.0/m4/Maketitle.m4
yasm-1.2.0/m4/python.m4
yasm-1.2.0/m4/ulonglong.m4
yasm-1.2.0/m4/signed.m4
yasm-1.2.0/m4/sx_create_stdint_h.m4
yasm 1.2.0/m4/i18nlink.m4
yasm 1.2.0/m4/wint_t.m4
yasm-1.2.0/m4/glibc21.m4
yasm-1.2.0/m4/lib-prefix.m4
yasm-1.2.0/m4/xsize.m4
yasm-1.2.0/m4/inttypes-pri.m4
yasm-1.2.0/m4/codeset.m4
yasm 1.2.0/m4/wchar_t.m4
yasm 1.2.0/m4/uintmax_t.m4
yasm-1.2.0/m4/stdint_h.m4
yasm-1.2.0/m4/intmax.m4
yasm-1.2.0/m4/isw-posix.m4
yasm-1.2.0/m4/iconv.m4
yasm-1.2.0/m4/lomessage.m4
yasm-1.2.0/m4/nls.m4
yasm 1.2.0/m4/inttypesn.m4
yasm 1.2.0/m4/longlong.m4
yasm-1.2.0/m4/size_max.m4
yasm-1.2.0/m4/pythonhead.m4
yasm-1.2.0/m4/intvpow_h.m4
yasm-1.2.0/m4/intdiv0.m4
yasm-1.2.0/m4/printf-posix.m4
yasm-1.2.0/BSD.txt
yasm-1.2.0/out-test.sh
yasm-1.2.0/Artistic.txt
yasm-1.2.0/config/
yasm-1.2.0/config/missing
yasm-1.2.0/config/config.xpath
yasm-1.2.0/config/install-on
yasm-1.2.0/config/config.sub
yasm-1.2.0/config/depcomp
yasm-1.2.0/config/mkinstalldir
yasm-1.2.0/config/config.guess
yasm-1.2.0/yasm_objfmts.7
yasm-1.2.0/ABOUT-NLS
[root@sudha new]#
```

```
wget http://downloads.sourceforge.net/project/sofia-sip/sofia-sip/1.12.11/sofia-sip-1.12.11.tar.gz
```

```
tar xvfz ./sofia-sip-1.12.11.tar.gz
```

```
[root@sudha new]# wget http://downloads.sourceforge.net/project/sofia-sip/sofia-sip/1.12.11/sofia-sip-1.12.11.tar.gz
--2014-08-28 21:12:57--  http://downloads.sourceforge.net/project/sofia-sip/sofia-sip/1.12.11/sofia-sip-1.12.11.tar.gz
Resolving downloads.sourceforge.net... 216.34.181.59
Connecting to downloads.sourceforge.net|216.34.181.59|:80... connected.
HTTP request sent, awaiting response... 302 Found
Location: http://softlayer-sng.dl.sourceforge.net/project/sofia-sip/sofia-sip/1.12.11/sofia-sip-1.12.11.tar.gz [following]
--2014-08-28 21:12:58--  http://softlayer-sng.dl.sourceforge.net/project/sofia-sip/sofia-sip/1.12.11/sofia-sip-1.12.11.tar.gz
Resolving softlayer-sng.dl.sourceforge.net... 216.12.198.152
Connecting to softlayer-sng.dl.sourceforge.net|216.12.198.152|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 2927808 (2.8M) [application/x-gzip]
Saving to: "sofia-sip-1.12.11.tar.gz"

100%[=====] 2014-08-28 21:13:44 (64.0 KB/s) - "sofia-sip-1.12.11.tar.gz" saved [2927808/2927808]

[root@sudha new]#
```

```
[root@sudha new]# tar xvfz ./sofia-sip-1.12.11.tar.gz
sofia-sip-1.12.11/
sofia-sip-1.12.11/COPYRIGHTS
sofia-sip-1.12.11/install-sh
sofia-sip-1.12.11/COPYING
sofia-sip-1.12.11/utils/
sofia-sip-1.12.11/utils/Doxyfile.in
sofia-sip-1.12.11/utils/utils.docs
sofia-sip-1.12.11/utils/apps_utils.h
sofia-sip-1.12.11/utils/Makefile.in
sofia-sip-1.12.11/utils/sip-options.c
sofia-sip-1.12.11/utils/Makefile.am
sofia-sip-1.12.11/utils/sip-date.c
sofia-sip-1.12.11/utils/sip-dig.c
sofia-sip-1.12.11/utils/ChangeLog
sofia-sip-1.12.11/depcomp
sofia-sip-1.12.11/rules/
sofia-sip-1.12.11/rules/valcheck.am
sofia-sip-1.12.11/rules/recursivve.am
sofia-sip-1.12.11/rules/silent.am
sofia-sip-1.12.11/rules/sofia.am
sofia-sip-1.12.11/rules/lcov.am
sofia-sip-1.12.11/RELEASE
sofia-sip-1.12.11/packages/
sofia-sip-1.12.11/packages/sofia-sip-ua-glib.pc.in
sofia-sip-1.12.11/packages/sofia-sip-1.12.11.spec
sofia-sip-1.12.11/packages/Makefile.in
sofia-sip-1.12.11/packages/sofia-sip.spec.in
sofia-sip-1.12.11/packages/sofia-sip-ua.pc.in
sofia-sip-1.12.11/packages/Makefile.am
sofia-sip-1.12.11/packages/ChangeLog
sofia-sip-1.12.11/config.guess
sofia-sip-1.12.11/scripts/
sofia-sip-1.12.11/scripts/lcov-report
sofia-sip-1.12.11/scripts/uncovered
sofia-sip-1.12.11/scripts/hide_emails.sh
sofia-sip-1.12.11/m4/
sofia-sip-1.12.11/m4/libtool.m4
sofia-sip-1.12.11/m4/sac-tport.m4
sofia-sip-1.12.11/m4/sac-openssl.m4
sofia-sip-1.12.11/m4/ltsugar.m4
```

```
 wget http://webm.googlecode.com/files/libvpx-v1.1.0.tar.bz2
```

```
tar xvzf ./libvpx-v1.1.0.tar.bz2
```

```
[root@sudha new]# wget http://webm.googlecode.com/files/libvpx-v1.1.0.tar.bz2
--2014-08-28 21:17:56--  http://webm.googlecode.com/files/libvpx-v1.1.0.tar.bz2
Resolving webm.googlecode.com... 74.125.130.82, 2404:6800:4003:c01::52
Connecting to webm.googlecode.com|74.125.130.82|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 1653485 (1.6M) [application/x-bzip2]
Saving to: "libvpx-v1.1.0.tar.bz2"

100%[=====] 2014-08-28 21:18:19 (71.6 KB/s) - "libvpx-v1.1.0.tar.bz2" saved [1653485/1653485]

[root@sudha new]#
```

```
[root@sudha new]# tar xvzf ./libvpx-v1.1.0.tar.bz2
libvpx-v1.1.0/
libvpx-v1.1.0/.gitattributes
libvpx-v1.1.0/.gitignore
libvpx-v1.1.0/.mailmap
libvpx-v1.1.0/AUTHORS
libvpx-v1.1.0/CHANGELOG
libvpx-v1.1.0/LICENSE
libvpx-v1.1.0/PATENTS
libvpx-v1.1.0/README
libvpx-v1.1.0/args.c
libvpx-v1.1.0/args.h
libvpx-v1.1.0/build/
libvpx-v1.1.0/build/.gitattributes
libvpx-v1.1.0/build/.gitignore
libvpx-v1.1.0/build/make/
libvpx-v1.1.0/build/make/Android.mk
libvpx-v1.1.0/build/make/Makefile
libvpx-v1.1.0/build/make/ads2gas.pl
libvpx-v1.1.0/build/make/ads2gas.apple.pl
libvpx-v1.1.0/build/make/armlink_adapter.sh
libvpx-v1.1.0/build/make/configure.sh
libvpx-v1.1.0/build/make/gen_asm_deps.sh
libvpx-v1.1.0/build/make/gen_msvs_def.sh
libvpx-v1.1.0/build/make/gen_msvs_proj.sh
libvpx-v1.1.0/build/make/gen_msvs_sln.sh
libvpx-v1.1.0/build/make/obj_int_extract.c
libvpx-v1.1.0/build/make/rtcd.sh
libvpx-v1.1.0/build/make/version.sh
libvpx-v1.1.0/build/x86-msvs/
libvpx-v1.1.0/build/x86-msvs/obj_int_extract.bat
libvpx-v1.1.0/build/x86-msvs/yasm.rules
libvpx-v1.1.0/configure
libvpx-v1.1.0/docs.mk
libvpx-v1.1.0/example_xma.c
libvpx-v1.1.0/examples.mk
libvpx-v1.1.0/examples/
libvpx-v1.1.0/examples/decode_to_md5.txt
libvpx-v1.1.0/examples/decode_with_drops.txt
libvpx-v1.1.0/examples/decode_with_partial_drops.txt
libvpx-v1.1.0/examples/decoder_tmpl.c
```

```
libvpx-v1.1.0/vpx_scale/arm/
libvpx-v1.1.0/vpx_scale/arm/neon/
libvpx-v1.1.0/vpx_scale/arm/neon/vp8_vpxyv12_copy_y_neon.asm
libvpx-v1.1.0/vpx_scale/arm/neon/vp8_vpxyv12_copyframe_func_neon.asm
libvpx-v1.1.0/vpx_scale/arm/neon/vp8_vpxyv12_copysrcframe_func_neon.asm
libvpx-v1.1.0/vpx_scale/arm/neon/vp8_vpxyv12_extendframeborders_neon.asm
libvpx-v1.1.0/vpx_scale/arm/neon/yv12extend_arm.c
libvpx-v1.1.0/vpx_scale/generic/
libvpx-v1.1.0/vpx_scale/generic/bicubic_scaler.c
libvpx-v1.1.0/vpx_scale/generic/gen_scalers.c
libvpx-v1.1.0/vpx_scale/generic/vpxscale.c
libvpx-v1.1.0/vpx_scale/generic/yv12config.c
libvpx-v1.1.0/vpx_scale/generic/yv12extend.c
libvpx-v1.1.0/vpx_scale/generic/yv12extend_generic.h
libvpx-v1.1.0/vpx_scale/include/
libvpx-v1.1.0/vpx_scale/include/generic/
libvpx-v1.1.0/vpx_scale/include/generic/vpxscale_arbitrary.h
libvpx-v1.1.0/vpx_scale/include/generic/vpxscale_deprecated.h
libvpx-v1.1.0/vpx_scale/scale_mode.h
libvpx-v1.1.0/vpx_scale/vpx_scale.mk
libvpx-v1.1.0/vpx_scale/vpxscale.h
libvpx-v1.1.0/vpx_scale/win32/
libvpx-v1.1.0/vpx_scale/win32/scaleopt.c
libvpx-v1.1.0/vpx_scale/win32/scalesystemdependent.c
libvpx-v1.1.0/vpx_scale/yv12config.h
libvpx-v1.1.0/vpxdec.c
libvpx-v1.1.0/vpxenc.c
libvpx-v1.1.0/y4minput.c
libvpx-v1.1.0/y4minput.h
[root@sudha new]#
```

```
git clone git://git.videolan.org/x264.git ./x264
wget http://ffmpeg.org/releases/ffmpeg-0.10.4.tar.gz
tar xvfz ./ffmpeg-0.10.4.tar.gz
```

```
[root@sudha new]# git clone git://git.videolan.org/x264.git ./x264
Initialized empty Git repository in /root/new/x264/.git/
remote: Counting objects: 17729, done.
remote: Compressing objects: 100% (3143/3143), done.
remote: Total 17729 (delta 14606), reused 17664 (delta 14544)
Receiving objects: 100% (17729/17729), 4.11 MiB | 53 KiB/s, done.
Resolving deltas: 100% (14606/14606), done.
```

```
[root@sudha new]# wget http://ffmpeg.org/releases/ffmpeg-0.10.4.tar.gz
--2014-08-30 02:04:57--  http://ffmpeg.org/releases/ffmpeg-0.10.4.tar.gz
Resolving ffmpeg.org... 192.190.173.45
Connecting to ffmpeg.org|192.190.173.45|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 7050202 (6.7M) [application/x-gzip]
Saving to: "ffmpeg-0.10.4.tar.gz"

100%[=====] 7,050,202      57.6K/s   in 1m 55s

2014-08-30 02:06:53 (60.0 KB/s) - "ffmpeg-0.10.4.tar.gz" saved [7050202/7050202]
[root@sudha new]#
```

```
ffmpeg-0.10.4/doc/general.texi
ffmpeg-0.10.4/doc/muxers.texi
ffmpeg-0.10.4/doc/soc.txt
ffmpeg-0.10.4/doc/ffprobe.texi
ffmpeg-0.10.4/doc/ffmpeg.texi
ffmpeg-0.10.4/doc/ffserver.texi
ffmpeg-0.10.4/doc/ffserver.conf
ffmpeg-0.10.4/doc/protocols.texi
ffmpeg-0.10.4/doc/texi2pod.pl
ffmpeg-0.10.4/doc/libavfilter.texi
ffmpeg-0.10.4/doc/platform.texi
ffmpeg-0.10.4/doc/issue_tracker.txt
ffmpeg-0.10.4/doc/multithreading.txt
ffmpeg-0.10.4/doc/indevs.texi
ffmpeg-0.10.4/doc/build_system.txt
ffmpeg-0.10.4/doc/rate_distortion.txt
ffmpeg-0.10.4/doc/optimization.txt
ffmpeg-0.10.4/doc/metadata.texi
ffmpeg-0.10.4/doc/snow.txt
ffmpeg-0.10.4/doc/outdevs.texi
ffmpeg-0.10.4/doc/avutil.txt
ffmpeg-0.10.4/doc/ffprobe.xsd
ffmpeg-0.10.4/doc/swresample.txt
ffmpeg-0.10.4/doc/encoders.texi
ffmpeg-0.10.4/doc/git-howto.texi
ffmpeg-0.10.4/doc/filters.texi
ffmpeg-0.10.4/doc/decoders.texi
ffmpeg-0.10.4/version.sh
ffmpeg-0.10.4/common.mak
ffmpeg-0.10.4/COPYING.GPLv2
[root@sudha new]#
```

CONFIGURING DEPENDENCY FILES

```
git clone git://github.com/muggot/openmcu.git ./openmcu-ru
cd ./openmcu-ru && git branch -r
git checkout 3.46
cd ..
cd yasm-1.2.0/
```

```
[root@sudha new]# git clone git://github.com/muggot/openmcu.git ./openmcu-ru
Initialized empty Git repository in /root/new/openmcu-ru/.git/
remote: Counting objects: 11856, done.
remote: Total 11856 (delta 0), reused 0 (delta 0)
Receiving objects: 100% (11856/11856), 24.68 MiB | 58 KiB/s, done.
Resolving deltas: 100% (7141/7141), done.
[root@sudha new]# cd ./openmcu-ru && git branch -r
origin/3.46
origin/3.48
origin/HEAD -> origin/master
origin/freemcu
origin/master
origin/openmcu-ru_3.0.45
origin/openmcu-ru_43
origin/openmcu-ru_44
[root@sudha openmcu-ru]# git checkout 3.46
Branch 3.46 set up to track remote branch 3.46 from origin.
Switched to a new branch '3.46'
[root@sudha openmcu-ru]# cd yasm-1.2.0/
-bash: yasm-1.2.0/: No such file or directory
[root@sudha openmcu-ru]# cd ..
[root@sudha new]# cd yasm-1.2.0/
[root@sudha yasm-1.2.0]#
```

```
./configure
```

```
[root@sudha yasm-1.2.0]# ./configure
checking for a BSD-compatible install... /usr/bin/install -c
checking whether build environment is sane... yes
checking for a thread-safe mkdir -p... /bin/mkdir -p
checking for gawk...
checking whether make sets $(MAKE)... yes
checking whether to enable maintainer-specific portions of Makefiles... no
checking for style of include used by make... GNU
checking for gcc... gcc
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 gcc accepts -g... yes
checking for gcc option to accept ISO C89... none needed
checking dependency style of gcc... gcc3
checking how to run the C preprocessor... gcc -E
checking for gcc option to accept ISO C99... -std=gnu99
checking for gcc -std=gnu99 option to accept ISO Standard C... (cached) -std=gnu99
checking whether ln -s works... yes
checking for ar... ar
checking for ranlib... ranlib
checking for xmlto... no
configure: WARNING: xmlto not found, manpages will not be rebuilt.
checking if malloc debugging is wanted... no
checking for grep that handles long lines and -e... /bin/grep
checking for egrep... /bin/grep -E
checking for ANSI C header files... yes
checking for sys/types.h... yes
checking for sys/stat.h... yes
checking for stdlib.h... yes
checking for string.h... yes
checking for memory.h... yes
checking for strings.h... yes
checking for GNU C Library... yes
configure: Checking for Python
checking for a Python interpreter with version >= 2.4... python
checking for python... /usr/bin/python
checking for python version... 2.6
checking for python platform... linux2
checking for python script directory... ${prefix}/lib/python2.6/site-packages
checking for python extension module directory... ${exec_prefix}/lib/python2.6/site-packages
configure: creating ./config.status
config.status: creating Makefile
config.status: creating po/Makefile.in
config.status: creating config.h
config.status: executing depfiles commands
config.status: executing libyasm-stdint.h commands
config.status: creating libyasm-stdint.h : _YASM_LIBYASM_STDINT_H
config.status: executing po-directories commands
config.status: creating po/POTFILES
config.status: creating po/Makefile
```

make clean

```
[root@sudha yasm-1.2.0]# make clean
Making clean in po
make[1]: Entering directory '/root/new/yasm-1.2.0/po'
rm -f *.insert-header
rm -f remove-potdate.sed
rm -f stamp-poI
rm -f core.core.* yasm.po yasm.lpo yasm.2po *.new.po
rm -fr *.o
make[1]: Leaving directory '/root/new/yasm-1.2.0/po'
Making clean in .
make[1]: Entering directory '/root/new/yasm-1.2.0'
test -z "yasm ytasM vsyasm" || rm -f yasm ytasM vsyasm
test -z "test_hd bitvect_test floatnum_test leb128_test splitpath_test combpath_test uncstring_test" || rm -f test_hd bitvect_test floatnum_test leb128_test splitpath_t
est combpath_test uncstring_test
test -z "configure.lineno x86insn_nasm.c x86insn_gas.c x86cpu.c x86regtmod.c lc3bid.c gas-token.c nasm-token.c nasm-macros.c nasm-version.c version.mac win64-nasm.c wi
n64-gas.c module.c license.c" || rm -f configure.lineno x86insn_nasm.c x86insn_gas.c x86cpu.c x86regtmod.c lc3bid.c gas-token.c nasm-token.c nasm-macros.c nasm-version
.c version.mac win64-nasm.c win64-gas.c module.c license.c
test -z "libyasm.a" || rm -f libyasm.a
test -z "genstring re2c genmacro genperf genversion genmodule" || rm -f genstring re2c genmacro genperf genversion genmodule
rm -f *.o
make[1]: Leaving directory '/root/new/yasm-1.2.0'
[root@sudha yasm-1.2.0]#
```

make && make install

```
[root@sudha yasm-1.2.0]# make && make install
gcc -std=gnu99 -I. \
    -c -o genperf.o `test -f tools/genperf/genperf.c || echo './`tools/genperf/genperf.c
gcc -std=gnu99 -I. \
    -c -o gp-perfect.o `test -f tools/genperf/perfect.c || echo './`tools/genperf/perfect.c
gcc -std=gnu99 -I. \
    -c -o gp-phash.o `test -f libyasm/phash.c || echo './`libyasm/phash.c
gcc -std=gnu99 -I. \
    -c -o gp-xmalloc.o `test -f libyasm/xmalloc.c || echo './`libyasm/xmalloc.c
gcc -std=gnu99 -I. \
    -c -o gp-xstrdup.o `test -f libyasm/xstrdup.c || echo './`libyasm/xstrdup.c
gcc -std=gnu99 -o genperf genperf.o gp-perfect.o gp-phash.o gp-xmalloc.o gp-xstrdup.o
./genperf x86insn_nasm.gperf x86insn_nasm.c
found distinct (A,B) on attempt 19
built perfect hash table of size 512
./genperf x86insn_gas.gperf x86insn_gas.c
found distinct (A,B) on attempt 1640
built perfect hash table of size 512
gcc -std=gnu99 -I. \
    -c -o re2c-main.o `test -f tools/re2c/main.c || echo './`tools/re2c/main.c
gcc -std=gnu99 -I. \
    -c -o re2c-code.o `test -f tools/re2c/code.c || echo './`tools/re2c/code.c
gcc -std=gnu99 -I. \
    -c -o re2c-dfa.o `test -f tools/re2c/dfa.c || echo './`tools/re2c/dfa.c
gcc -std=gnu99 -I. \
    -c -o re2c-parser.o `test -f tools/re2c/parser.c || echo './`tools/re2c/parser.c
gcc -std=gnu99 -I. \
    -c -o re2c-actions.o `test -f tools/re2c/actions.c || echo './`tools/re2c/actions.c
gcc -std=gnu99 -I. \
    -c -o re2c-scanner.o `test -f tools/re2c/scanner.c || echo './`tools/re2c/scanner.c
gcc -std=gnu99 -I. \
    -c -o re2c-mbo_getopt.o `test -f tools/re2c/mbo_getopt.c || echo './`tools/re2c/mbo_getopt.c
gcc -std=gnu99 -I. \
    -c -o re2c-substr.o `test -f tools/re2c/substr.c || echo './`tools/re2c/substr.c
gcc -std=gnu99 -I. \
    -c -o re2c-translate.o `test -f tools/re2c/translate.c || echo './`tools/re2c/translate.c
gcc -std=gnu99 -o re2c re2c-main.o re2c-code.o re2c-dfa.o re2c-parser.o re2c-actions.o re2c-scanner.o re2
./re2c -b -o gas-token.c ./modules/parsers/gas/gas-token.re
./re2c -b -o nasm-token.c ./modules/parsers/nasm/nasm-token.re
gcc -std=gnu99 -I. \
    -c -o genmacro.o `test -f tools/genmacro/genmacro.c || echo './`tools/genmacro/genmacro.c
gcc -std=gnu99 -o genmacro genmacro.o
./genmacro nasm-macros.c nasm_standard_mac ./modules/parsers/nasm/nasm-std.mac
```

```

make install-exec-hook
make[4]: Entering directory `/root/new/yasm-1.2.0'
make[4]: Nothing to be done for `install-exec-hook'.
make[4]: Leaving directory `/root/new/yasm-1.2.0'
test -z "/usr/local/include" || /bin/mkdir -p "/usr/local/include"
/usr/bin/install -c -m 644 libyasm.h '/usr/local/include'
test -z "/usr/local/share/man/man1" || /bin mkdir -p "/usr/local/share/man/man1"
/usr/bin/install -c -m 644 yasm.1 '/usr/local/share/man/man1'
test -z "/usr/local/share/man/man7" || /bin/mkdir -p "/usr/local/share/man/man7"
/usr/bin/install -c -m 644 yasm arch.7 yasm_parsers.7 yasm_dbgfmts.7 yasm_cobjfmts.7
test -z "/usr/local/include/libyasm" || /bin/mkdir -p "/usr/local/include/libyasm"
/usr/bin/install -c -m 644 libyasm/arch.h libyasm/assocdat.h libyasm/bitvect.h libyasm/rwasm.h libyasm/expr.h libyasm/file.h libyasm/floatnum.h libyasm/hamt.h libyasm/instr.5.h libyasm/module.h libyasm/objfmt.h libyasm/parser.h libyasm/phash.h libyasm/preprocessor/include/libyasm'
test -z "/usr/local/include" || /bin/mkdir -p "/usr/local/include"
/usr/bin/install -c -m 644 libyasm-stdint.h '/usr/local/include'
make[3]: Leaving directory `/root/new/yasm-1.2.0'
make[2]: Leaving directory `/root/new/yasm-1.2.0'
make[1]: Leaving directory `/root/new/yasm-1.2.0'

```

cd ..

cd sofia-sip-1.12.11/

./configure

```

[root@sudha yasm-1.2.0]# cd ..
[root@sudha new]# cd sofia-sip-1.12.11/
[root@sudha sofia-sip-1.12.11]# ./configure
checking build system type... i686-pc-linux-gnu
checking host system type... i686-pc-linux-gnu
checking target system type... i686-pc-linux-gnu
checking cached information... ok
checking for a BSD-compatible install... /usr/bin/install -c
checking whether build environment is sane... yes
checking for gawk... gawk
checking whether make sets $(MAKE)... yes
checking whether to enable maintainer-specific portions of Makefiles... no
checking for style of include used by make... GNU
checking for gcc... gcc
checking for gcc... (cached) gcc
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 gcc accepts -g... yes
checking for gcc option to accept ISO C89... none needed
checking dependency style of gcc... gcc3
checking how to run the C preprocessor... gcc -E
checking for grep that handles long lines and -e... /bin/grep
checking for egrep... /bin/grep -E
checking for ANSI C header files... yes
checking for sys/types.h... yes
checking for sys/stat.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 unistd.h... yes
checking minix/config.h usability... no
checking minix/config.h presence... no
checking for minix/config.h... no
checking whether it is safe to define __EXTENSIONS__... yes
checking how to run the C preprocessor... gcc -E
checking for etags... echo

```

```

config.status: creating libsofia-sip-ua/soa/Doxyfile
config.status: creating libsofia-sip-ua/soa/Makefile
config.status: creating libsofia-sip-ua/sresolv/Doxyfile
config.status: creating libsofia-sip-ua/sresolv/Makefile
config.status: creating libsofia-sip-ua/stun/Doxyfile
config.status: creating libsofia-sip-ua/stun/Makefile
config.status: creating libsofia-sip-ua/su/Doxyfile
config.status: creating libsofia-sip-ua/su/Makefile
config.status: creating libsofia-sip-ua/tport/Doxyfile
config.status: creating libsofia-sip-ua/tport/Makefile
config.status: creating libsofia-sip-ua/url/Doxyfile
config.status: creating libsofia-sip-ua/url/Makefile
config.status: creating libsofia-sip-ua/features/sofia-sip/sofia_features.h
config.status: creating s2check/Makefile
config.status: creating libsofia-sip-ua-glib/Makefile
config.status: creating libsofia-sip-ua-glib/su-glib/Makefile
config.status: creating libsofia-sip-ua-glib/su-glib/Doxyfile
config.status: creating utils/Makefile
config.status: creating utils/Doxyfile
config.status: creating tests/Makefile
config.status: creating win32/Makefile
config.status: creating win32/config.h
config.status: creating open_c/Makefile
config.status: creating open_c/config.h
config.status: creating packages/sofia-sip-1.12.11.spec
config.status: creating config.h
config.status: creating libsofia-sip-ua/su/sofia-sip/su_configure.h
config.status: executing depfiles commands
config.status: executing libtool commands
config.status: executing version commands
[root@sudha sofia-sip-1.12.11]#

```

make clean && make && make install

```

[root@sudha sofia-sip-1.12.11]# make clean && make && make install
Making clean in tests
make[1]: Entering directory `/root/new/sofia-sip-1.12.11/tests'
test -z "libtestnua.a libtestproxy.a libtestnat.a" || rm -f libtestnua.a libtestproxy.a libtestnat.a
rm -f test_nua test_nua
test -z "tmp_sippasswd.???????" || rm -f tmp_sippasswd.??????
rm -rf .libs _libs
rm -rf ..\lcov\pwd|sed "s'`\cd ..;pwd`'``"
find . -name "*.gcda" | xargs rm -f || true
rm -f *.o
test -z "*.\bb *.bbg *.da *.gcov *.gcda *.gcno" || rm -f *.bb *.bbg *.da *.gcov *.gcda *.gcno
rm -f *.lo
make[1]: Leaving directory `/root/new/sofia-sip-1.12.11/tests'
Making clean in packages
make[1]: Entering directory `/root/new/sofia-sip-1.12.11/packages'
rm -rf .libs _libs
test -z "*.\bb *.bbg *.da *.gcov *.gcda *.gcno" || rm -f *.bb *.bbg *.da *.gcov *.gcda *.gcno
rm -f *.lo
make[1]: Leaving directory `/root/new/sofia-sip-1.12.11/packages'
Making clean in utils
make[1]: Entering directory `/root/new/sofia-sip-1.12.11/utils'
rm -f sip-options sip-options
rm -f sip-date sip-date
rm -f sip-dig sip-dig
rm -rf .libs _libs
rm -rf ..\lcov\pwd|sed "s'`\cd ..;pwd`'``"
find . -name "*.gcda" | xargs rm -f || true
rm -f *.o
test -z "*.\bb *.bbg *.da *.gcov *.gcda *.gcno" || rm -f *.bb *.bbg *.da *.gcov *.gcda *.gcno
rm -f *.lo
make[1]: Leaving directory `/root/new/sofia-sip-1.12.11/utils'
Making clean in libsofia-sip-ua
make[1]: Entering directory `/root/new/sofia-sip-1.12.11/libsofia-sip-ua'
Making clean in nua
make[2]: Entering directory `/root/new/sofia-sip-1.12.11/libsofia-sip-ua/nua'
rm -rf .libs _libs

```

```

make[4]: Entering directory `/root/new/sofia-sip-1.12.11/libsofia-sip-ua/http'
  LTCOMPILE http_parser.lo
  LTCOMPILE http_header.lo
  LTCOMPILE http_basic.lo
  LTCOMPILE http_extra.lo
  LTCOMPILE http_inlined.lo
  LTCOMPILER http_status.lo
  LTCOMPILER http_tag_class.lo
  LTCOMPILER http_tag.lo
  LTCOMPILER http_parser_table.lo
  LTCOMPILER http_tag_ref.lo
  LINK libhttp.la
make[4]: Leaving directory `/root/new/sofia-sip-1.12.11/libsofia-sip-ua/http'
make[3]: Leaving directory `/root/new/sofia-sip-1.12.11/libsofia-sip-ua/http'
Making all in stun
make[3]: Entering directory `/root/new/sofia-sip-1.12.11/libsofia-sip-ua/stun'
make all-am
make[4]: Entering directory `/root/new/sofia-sip-1.12.11/libsofia-sip-ua/stun'
  LTCOMPILE stun.lo
  LTCOMPILER stun_common.lo
  LTCOMPILER stun_dns.lo
  LTCOMPILER stun_mini.lo
  LTCOMPILER stun_tag.lo
  LTCOMPILER stun_tag_ref.lo
  LINK libstun.la
  COMPILE stunc.o
  LINK stunc

```

```

make[1]: Entering directory `/root/new/sofia-sip-1.12.11/tests'
make[2]: Entering directory `/root/new/sofia-sip-1.12.11/tests'
make[2]: Nothing to be done for `install-exec-am'.
make[2]: Nothing to be done for `install-data-am'.
make[2]: Leaving directory `/root/new/sofia-sip-1.12.11/tests'
make[1]: Leaving directory `/root/new/sofia-sip-1.12.11/tests'
make[1]: Entering directory `/root/new/sofia-sip-1.12.11'
mkdir -p man/man1 2> /dev/null
touch man/man1/sip-date.1 man/man1/sip-options.1 man/man1/localinfo.1 man/man1/addrinfo.1 man/man1/stunc.
make[2]: Entering directory `/root/new/sofia-sip-1.12.11'
make[2]: Nothing to be done for `install-exec-am'.
test -z "/usr/local/share/man/man1" || mkdir -p -- "/usr/local/share/man/man1"
/usr/bin/install -c -m 644 './man/man1/sip-date.1' '/usr/local/share/man/man1/sip-date.1'
/usr/bin/install -c -m 644 './man/man1/sip-options.1' '/usr/local/share/man/man1/sip-options.1'
/usr/bin/install -c -m 644 './man/man1/localinfo.1' '/usr/local/share/man/man1/localinfo.1'
/usr/bin/install -c -m 644 './man/man1/addrinfo.1' '/usr/local/share/man/man1/addrinfo.1'
/usr/bin/install -c -m 644 './man/man1/stunc.1' '/usr/local/share/man/man1/stunc.1'
/usr/bin/install -c -m 644 './man/man1/sip-dig.1' '/usr/local/share/man/man1/sip-dig.1'
make[2]: Leaving directory `/root/new/sofia-sip-1.12.11'
make[1]: Leaving directory `/root/new/sofia-sip-1.12.11'
[root@sudha sofia-sip-1.12.11]#

```

cd ..

cd libvpx-v1.1.0/

./configure --enable-shared

```

[root@sudha opus-1.1]# cd ..
[root@sudha new]# cd libvpx-v1.1.0/
[root@sudha libvpx-v1.1.0]# ./configure --enable-shared
Configuring selected codecs
  enabling vp8_encoder
  enabling vp8_decoder
Configuring for target 'x86-linux-gcc'
  enabling x86
  enabling pic
  enabling runtime_cpu_detect
  enabling mmx
  enabling sse
  enabling sse2
  enabling sse3
  enabling ssse3
  enabling sse4_1
  using yasm
  enabling postproc
Creating makefiles for x86-linux-gcc libs
Creating makefiles for x86-linux-gcc examples
Creating makefiles for x86-linux-gcc docs
[root@sudha libvpx-v1.1.0]#

```

make clean && make && make install

```
[root@sudha libvpx-v1.1.0]# make clean && make && make install
rm -f vpx/src/vpx_decoder.c.o vpx/src/vpx_encoder.c.o vpx/src/vpx_codec.c.o vpx/src/vpx_image.c.o vpx_mem.v12config.c.o vpx_scale/generic/yv12extend.c.o vpx_scale/generic/gen_scalers.c.o vp8/common/alloccommon.c.o
mon/debugmodes.c.o vp8/common/dequantize.c.o vp8/common/entropy.c.o vp8/common/entropymode.c.o vp8/common
common/findnearmv.c.o vp8/common/generic/systemdependent.c.o vp8/common/idct_blk.c.o vp8/common/idctllm.c.o
pfilter_filters.c.o vp8/common/mbpitch.c.o vp8/common/modecont.c.o vp8/common/quant_common.c.o vp8/common
4x4.c.o vp8/common/sad_c.c.o vp8/common/setupintrarecon.c.o vp8/common/swappyv12buffer.c.o vp8/common/vari
.o vp8/common/x86/vp8_asm_stubs.c.o vp8/common/x86/loopfilter_x86.c.o vp8/common/mfqe.c.o vp8/common/postp
e_mmx.c.o vp8/common/x86/idct_blk_sse2.c.o vp8/common/x86/recon_wrapper_sse2.c.o vp8/common/x86/variance_
roc_x86.c.o vp8/vp8_cx_iface.c.o vp8/encoder/asm_enc_offsets.c.o vp8/encoder/bitstream.c.o vp8/encoder/b
encoder/encodeintra.c.o vp8/encoder/encodemv.c.o vp8/encoder/ethreading.c.o vp8/
kahead.c.o vp8/encoder/mcomp.c.o vp8/encoder/modecosts.c.o vp8/encoder/onyx_if.c.o vp8/encoder/pickinter.
antize.c.o vp8/encoder/ratectrl.c.o vp8/encoder/rdopt.c.o vp8/encoder/segmentation.c.o vp8/encoder/tokeni
.c.o vp8/encoder/x86/vp8_enc_stubs_mmx.c.o vp8/encoder/x86/vp8_enc_stubs_sse2.c.o vp8/common/alloccommon.c.
on/debugmodes.c.o vp8/common/dequantize.c.o vp8/common/entropy.c.o vp8/common/entropymode.c.o vp8/common/
common/findnearmv.c.o vp8/common/generic/systemdependent.c.o vp8/common/idct_blk.c.o vp8/common/idctllm.c.o
filter_filters.c.o vp8/common/mbpitch.c.o vp8/common/modecont.c.o vp8/common/quant_common.c.o vp8/common/
x4x4.c.o vp8/common/sad_c.c.o vp8/common/setupintrarecon.c.o vp8/common/swappyv12buffer.c.o vp8/common/vari
.o vp8/common/x86/vp8_asm_stubs.c.o vp8/common/x86/loopfilter_x86.c.o vp8/common/mfqe.c.o vp8/common/postp
e_mmx.c.o vp8/common/x86/idct_blk_sse2.c.o vp8/common/x86/recon_wrapper_sse2.c.o vp8/common/x86/variance_
roc_x86.c.o vp8/common/alloccommon.c.o vp8/common/asm_com_offsets.c.o vp8/common/blockd.c.o vp8/common/deb
8/common/entropymode.c.o vp8/common/entropymv.c.o vp8/common/extend.c.o vp8/common/filter.c.o vp8/common/
n/idct_blk.c.o vp8/common/idctllm.c.o vp8/common/rtdc.c.o vp8/common/loopfilter.c.o vp8/common/loopfilter
/common/quant_common.c.o vp8/common/reconinter.c.o vp8/common/reconintra.c.o vp8/common/reconintra4x4.c.o
/swappyv12buffer.c.o vp8/common/variance_c.c.o vp8/common/treecoder.c.o vp8/common/x86/filter_x86.c.o vp8/
vp8/common/mfqe.c.o vp8/common/postproc.c.o vp8/common/x86/idct_blk_mmx.c.o vp8/common/x86/variance_mmx.c
r_sse2.c.o vp8/common/x86/variance_sse2.c.o vp8/common/x86/variance_ssse3.c.o vp8/common/x86/postproc_x86

[DEP] vp8/common/alloccommon.c.d
[DEP] vp8/encoder/x86/vp8_enc_stubs_sse2.c.d
[DEP] vp8/encoder/x86/vp8_enc_stubs_mmx.c.d
[DEP] vp8/encoder/temporal_filter.c.d
[DEP] vp8/encoder/treewriter.c.d
[DEP] vp8/encoder/tokenize.c.d
[DEP] vp8/encoder/segmentation.c.d
[DEP] vp8/encoder/rdopt.c.d
[DEP] vp8/encoder/ratectrl.c.d
[DEP] vp8/encoder/quantize.c.d
[DEP] vp8/encoder/psnr.c.d
[DEP] vp8/encoder/picklpf.c.d
[DEP] vp8/encoder/pickinter.c.d
[DEP] vp8/encoder/onyx_if.c.d
[DEP] vp8/encoder/modecosts.c.d
[DEP] vp8/encoder/mcomp.c.d
[DEP] vp8/encoder/lookahead.c.d
[DEP] vp8/encoder/denoising.c.d
[DEP] vp8/encoder/firstpass.c.d
[DEP] vp8/encoder/ethreading.c.d
[DEP] vp8/encoder/encodemv.c.d
[DEP] vp8/encoder/encodemv.c.d
[DEP] vp8/encoder/encodeintra.c.d
[DEP] vp8/encoder/encodeframe.c.d

[AS] vp8/common/x86/mfqe_sse2.asm.o
[AS] vp8/common/x86/postproc_sse2.asm.o
[AS] vp8/encoder/x86/dct_mmx.asm.o
[AS] vp8/encoder/x86/subtract_mmx.asm.o
[AS] vp8/encoder/x86/dct_sse2.asm.o
[AS] vp8/encoder/x86/fwalsh_sse2.asm.o
[AS] vp8/encoder/x86/quantize_sse2.asm.o
[AS] vp8/encoder/x86/subtract_sse2.asm.o
[AS] vp8/encoder/x86/temporal_filter_apply_sse2.asm.o
[AS] vp8/encoder/x86/quantize_ssse3.asm.o
[AS] vp8/encoder/x86/quantize_sse4.asm.o
[AS] vp8/encoder/x86/quantize_mmx.asm.o
[AS] vp8/encoder/x86/encodeopt.asm.o
[AS] vpx_ports/emms.asm.o
[AS] vpx_ports/x86_abi_support.asm.o
[AR] libvpx_g.a
[STRIP] libvpx.a < libvpx_g.a
[CREATE] libvpx.ver
[LD] libvpx.so.1.1.0
[LN] libvpx.so
[LN] libvpx.so.1
[LN] libvpx.so.1.1
[CREATE] vpx.pc
[EXAMPLE] vp8cx_set_ref.c
[DEP] vp8cx_set_ref.c.d
```

```

[LD] vp8_scalable_patterns
[CC] simple_decoder.c.o
[LD] simple_decoder
[CC] postproc.c.o
[LD] postproc
[CC] decode_to_md5.c.o
[LD] decode_to_mds
[CC] simple_encoder.c.o
[LD] simple_encoder
[CC] twopass_encoder.c.o
[LD] twopass_encoder
[CC] force_keyframe.c.o
[LD] force_keyframe
[CC] decode_with_drops.c.o
[LD] decode_with_drops
[CC] error_resilient.c.o
[LD] error_resilient
[CC] vp8_set_maps.c.o
[LD] vp8_set_maps
[CC] vp8cx_set_ref.c.o
[LD] vp8cx_set_ref
make[1]: Nothing to be done for 'all'.
[INSTALL] /usr/local/lib/libvpx.a
[INSTALL] /usr/local/lib/libvpx.so.1.1.0
[LN]      /usr/local/lib/libvpx.so
[INSTALL] /usr/local/lib/pkgconfig/vpx.pc
[INSTALL] /usr/local/bin/vpxdec
[INSTALL] /usr/local/bin/vpxenc
[INSTALL] /usr/local/bin/vp8 scalable patterns

```

cd ..

cd x264/

./configure --enable-shared

```

[root@sudha libvpx-v1.1.0]# cd ..
[root@sudha new]# cd x264/
[root@sudha x264]# ./configure --enable-shared
Warning: AV_PIX_FMT_FLAG_RGB is missing from libavutil, update for swscale support
platform: X86
system: LINUX
cli: yes
libx264: internal
shared: yes
static: no
asm: yes
interlaced: yes
avs: avxsynth
lavfi: no
ffms: no
mp4: no
gpl: yes
thread: posix
opencl: yes
filters: crop select_every
debug: no
gprof: no
strip: no
PIC: no
bit depth: 8
chroma format: all

You can run 'make' or 'make fprofiled' now.
[root@sudha x264]#

```

make clean && make && make install

```
[root@sudha x264]# make clean && make && make install
rm -f common/mc.o common/predict.o common/pixel.o common/macroblock.o common/frame.o
tangle.o common/set.o common/quant.o common/deblock.o common/vlc.o common/mvpred.o com
encoder/macroblock.o encoder/cabac.o encoder/cavlc.o encoder/encoder.o encoder/lookah
encoder/slicetype-cl.o common/x86/const-a.o common/x86/cabac-a.o common/x86/dct-a.o c
mmon/x86/predict-a.o common/x86/quant-a.o common/x86/cpu-a.o common/x86/dct-32.o commo
input/timecode.o input/raw.o input/y4m.o output/raw.o output/matroska.o output/matros
eo.o filters/video/source.o filters/video/internal.o filters/video/resize.o filters/vi
/crop.o filters/video/depth.o input/avs.o input/thread.o libx264.so.142 *.a *.lib *
rm -f checkasm checkasm.exe tools/checkasm.o tools/checkasm-a.o common/oclobj.h x264
rm -f common/mc.gcda common/predict.gcda common/pixel.gcda common/macroblock.gcda comm
common/osdep.gcda common/rectangle.gcda common/set.gcda common/quant.gcda common/debl
gcda encoder/me.gcda encoder/ratecontrol.gcda encoder/set.gcda encoder/macroblock.gcda
common/threadpool.gcda common/x86/mc-c.gcda common/x86/predict-c.gcda common/opencl.o
/raw.gcda input/y4m.gcda output/raw.gcda output/matroska.gcda output/matroska_ebml.gcd
eo.gcda filters/video/source.gcda filters/video/internal.gcda filters/video/resize.gc
ery.gcda filters/video/crop.gcda filters/video/depth.gcda input/avs.gcda input/thread.
common/frame.gcno common/dct.gcno common/cpu.gcno common/cabac.gcno common/common.gcno
eblock.gcno common/vlc.gcno common/mvpred.gcno common/bitstream.gcno encoder/analyse.o
```

cd ..

cd ffmpeg-0.10.4/

./configure --enable-shared

```
[root@sudha new]# cd ffmpeg-0.10.4/
[root@sudha ffmpeg-0.10.4]# ./configure --enable-shared
install prefix          /usr/local
source path              .
C compiler               gcc
ARCH                     x86 (generic)
big-endian                no
runtime cpu detection     no
yasm                      yes
MMX enabled                yes
MMX2 enabled                yes
3DNow! enabled                yes
3DNow! extended enabled    yes
SSE enabled                  yes
SSSE3 enabled                yes
AVX enabled                  yes
CMOV enabled                 no
CMOV is fast                 no
EBX available                yes
EBP available                yes
debug symbols                yes
strip symbols                yes
optimize for size            no
optimizations                 yes
static                      yes
shared                      yes
postprocessing support       no
new filter support            yes
network support                yes
threading support             pthreads
safe bitstream reader         yes
SDL support                   no
```

```

Enabled filters:
abuffer           earwax          pan
abuffersink       fade            pixdescsrc
aconvert          fieldorder      rgbtessrc
aevalsrc          fifo            scale
aformat           format          select
amerge            gradfun         setdar
amovie            hflip           setpts
anull             life            setsar
anullsink         lut             settb
anullsrc          lutrgb          showinfo
aresample         lutyuv          silencedetect
ashowinfo         mandelbrot     slicify
asplit            movie           split
astreamsync       negate          swapuv
buffersink        noformat        testsrc
cellauto          null            thumbnail
color             nullsink        transpose
copy              nullsrc         unsharp
crop              overlay         vflip
deshake           pad             volume
drawbox

Enabled bsfs:
aac_adtstoasc    mjpeg2jpeg     mp3_header_decompress
chomp            mjpega_dump_header noise
dump_extradata   mov2textsub   remove_extradata
h264_mp4toannexb mp3_header_compress text2movsub
imx_dump_header

Enabled indevs:
dv1394           lavfi          v4l
fbdev            oss            v4l2

Enabled outdevs:
oss

License: LGPL version 2.1 or later
Creating config.mak and config.h...
[root@sudha ffmpeg-0.10.4]#

```

make clean && make && make install

```

[root@sudha ffmpeg-0.10.4]# make clean && make && make install
CC      libavdevice/alldevices.o
CC      libavdevice/avdevice.o
CC      libavdevice/dv1394.o
CC      libavdevice/fbdev.o
CC      libavdevice/lavfi.o
CC      libavdevice/oss_audio.o
CC      libavdevice/v4l.o
libavdevice/v4l.c: In function 'grab_read_header':
libavdevice/v4l.c:90: warning: 'time_base' is deprecated (declared at ./libavformat/avformat.h:350)
libavdevice/v4l.c:91: warning: 'time_base' is deprecated (declared at ./libavformat/avformat.h:350)
libavdevice/v4l.c:94: warning: 'time_base' is deprecated (declared at ./libavformat/avformat.h:350)
libavdevice/v4l.c:96: warning: 'width' is deprecated (declared at ./libavformat/avformat.h:353)
libavdevice/v4l.c:97: warning: 'height' is deprecated (declared at ./libavformat/avformat.h:354)
libavdevice/v4l.c:134: warning: 'pix_fmt' is deprecated (declared at ./libavformat/avformat.h:355)
CC      libavdevice/v4l2.o
AR      libavdevice/libavdevice.a
CC      libavfilter/af_aconvert.o

```

```
cd ..  
cd openmcu-ru/  
ls /usr/local/lib  
ls /usr/local/bin
```

```
[root@sudha libyuv]# cd ..  
[root@sudha new]# cd openmcu-ru/  
[root@sudha openmcu-ru]# ls /usr/local/lib  
libavcodec.a      libavdevice.so.53.4.100 libavformat.so.53     libopus.la      libsofia-sip-ua.so.0    libswscale.so    libvpx.so.1.1.0  
libavcodec.so     libavfilter.a       libavformat.so.53.32.100 libopus.so     libsofia-sip-ua.so.0.6.0 libswscale.so.2    libx264.so  
libavcodec.so.53   libavfilter.so     libavutil.a       libopus.so.0   libswresample.a    libswscale.so.2.1.100 libx264.so.142  
libavcodec.so.53.61.100 libavfilter.so.2   libavutil.so     libopus.so.0.5.0 libswresample.so    libvpx.a        libyasm.a  
libavdevice.a     libavfilter.so.2.61.100 libavutil.so.51    libsofia-sip-ua.a libswresample.so.0 libvpx.so       pkgconfig  
libavdevice.so    libavformat.a     libavutil.so.51.35.100 libsofia-sip-ua.la libswresample.so.0.6.100 libvpx.so.1    ptlib  
libavdevice.so.53 libavformat.so     libopus.a       libsofia-sip-ua.so libswscale.a     libvpx.so.1.1  
[root@sudha openmcu-ru]# ls /usr/local/bin  
addrinfo  ffprobe  localinfo  sip-date  sip-options  vp8_scalable_patterns      vpxdec  vsyasm  yasm  
ffmpege  ffservce openmcu-ru  sip-dig   stunc      vp9_spatial_scalable_encoder  vpxenc  x264   ytasm
```

```
./autogen.sh
```

```
[root@sudha openmcu-ru]# ./autogen.sh  
Generating build scripts...  
configure.ac:5: installing `./config.guess'  
configure.ac:5: installing `./config.sub'  
configure.ac:6: installing `./install-sh'  
configure.ac:6: installing `./missing'  
[root@sudha openmcu-ru]#
```

```
./configure --disable-v4l --disable-v4l2
```

```
[root@sudha openmcu-ru]# ./configure --disable-v4l --disable-v4l2  
checking build system type... i686-pc-linux-gnu  
checking host system type... i686-pc-linux-gnu  
checking target system type... i686-pc-linux-gnu  
checking for a BSD-compatible install... /usr/bin/install -c  
checking whether build environment is sane... yes  
checking for a thread-safe mkdir -p... /bin/mkdir -p  
checking for gawk... gawk  
checking whether make sets $(MAKE)... yes  
checking for g++... g++  
checking for C++ compiler default output file name... a.out  
checking whether the C++ compiler works... yes  
checking whether we are cross compiling... no  
checking for suffix of executables...  
checking for suffix of object files... o  
checking whether we are using the GNU C++ compiler... yes  
checking whether g++ accepts -g... yes  
checking for style of include used by make... GNU  
checking dependency style of g++... none  
configure: OS TYPE set to linux  
configure: OS RELEASE set to "2.6.32-431.el6.i686"
```

```

configure: creating ./config.status
config.status: creating openh323u.mak
config.status: creating Makefile
config.status: creating include/openh323builodopts.h

===== OpenMCU-ru Build Configuration =====
          OS Type   : linux-gnu
          Machine Type : i686
          Installing into prefix : /usr/local

          Subtitles   : enabled
JPEG Frame Encoder (for browser) : enabled
          External Audio Resampler : enabled - ffmpeg
          Use libyuv to resize video : disabled

          VP8 Video Plugin   : enabled
          H.264 Video Plugin : enabled
H.263/H.263P Video Plugin : enabled
          H.261 Video Plugin : enabled
          OPUS Audio Plugin : enabled
          SILK Audio Plugin : enabled
          G.722 Audio Plugin : enabled
          SPEEX Audio Plugin : enabled
          G.723.1 Audio Plugin : enabled
          iLBC Audio Plugin : enabled
          G.726 Audio Plugin : enabled
          G.729 Audio Plugin : enabled

If all settings are OK, type make and make install
=====
```

[root@sudha openmcu-ru]#

make && make install

```

[root@sudha openmcu-ru]# make && make install
make: Circular all <- all dependency dropped.
(make opt -C /root/new/openmcu-ru/ptlib)           || exit $?
make[1]: Entering directory '/root/new/openmcu-ru/ptlib'
set -e; if test -e src/ptlib/unix ; then make -C src/ptlib/unix opt; fi;
make[2]: Entering directory '/root/new/openmcu-ru/ptlib/src/ptlib/unix'
g++ -D _REENTRANT -fno-exceptions -Wall -fPIC -DPIC -DNDEBUG -I/root/new/openmcu-ru/ptlib/include -M assert.cxx >> /root/new/openmcu-ru/ptlib/lib/obj_linux_x86_r/*.dep
make[2]: Leaving directory '/root/new/openmcu-ru/ptlib/src/ptlib/unix'
make[2]: Entering directory '/root/new/openmcu-ru/ptlib/src/ptlib/unix'
g++ -D _REENTRANT -fno-exceptions -Wall -fPIC -DPIC -DNDEBUG -I/root/new/openmcu-ru/ptlib/include -Os -c .../common/vfakeio.cxx -o /root/new/openmcu-ru/ptlib/lib/obj_linux_x86_r/vfakeio.o
g++ -D _REENTRANT -fno-exceptions -Wall -fPIC -DPIC -DNDEBUG -I/root/new/openmcu-ru/ptlib/include -Os -c .../common/videoio.cxx -o /root/new/openmcu-ru/ptlib/lib/obj_linux_x86_r/videoio.o
g++ -D _REENTRANT -fno-exceptions -Wall -fPIC -DPIC -DNDEBUG -I/root/new/openmcu-ru/ptlib/include -Os -c .../common/vconvert.cxx -o /root/new/openmcu-ru/ptlib/lib/obj_linux_x86_r/vconvert.o
g++ -D _REENTRANT -fno-exceptions -Wall -fPIC -DPIC -DNDEBUG -I/root/new/openmcu-ru/ptlib/include -Os -c .../common/pvidchan.cxx -o /root/new/openmcu-ru/ptlib/lib/obj_linux_x86_r/pvidchan.o
g++ -D _REENTRANT -fno-exceptions -Wall -fPIC -DPIC -DNDEBUG -I/root/new/openmcu-ru/ptlib/include -Os -c .../common/tinyjpeg.cxx -o /root/new/openmcu-ru/ptlib/lib/obj_linux_x86_r/tinyjpeg.o
g++ -D _REENTRANT -fno-exceptions -Wall -fPIC -DPIC -DNDEBUG -I/root/new/openmcu-ru/ptlib/include -Os -c .../common/jidctflt.cxx -o /root/new/openmcu-ru/ptlib/lib/obj_linux_x86_r/jidctflt.o
g++ -D _REENTRANT -fno-exceptions -Wall -fPIC -DPIC -DNDEBUG -I/root/new/openmcu-ru/ptlib/include -Os -c .../common/shmvideo.cxx -o /root/new/openmcu-ru/ptlib/lib/obj_linux_x86_r/shmvideo.o
g++ -D _REENTRANT -fno-exceptions -Wall -fPIC -DPIC -DNDEBUG -I/root/new/openmcu-ru/ptlib/include -Os -c .../common/sound.cxx -o /root/new/openmcu-ru/ptlib/lib/obj_linux_x86_r/sound.o
g++ -D _REENTRANT -fno-exceptions -Wall -fPIC -DPIC -DNDEBUG -I/root/new/openmcu-ru/ptlib/include -Os -c .../ptclib/pdns.cxx -o /root/new/openmcu-ru/ptlib/lib/obj_linux_x86_r/pdns.o
g++ -D _REENTRANT -fno-exceptions -Wall -fPIC -DPIC -DNDEBUG -I/root/new/openmcu-ru/ptlib/include -Os -c .../ptclib/enum.cxx -o /root/new/openmcu-ru/ptlib/lib/obj_linux_x86_r/enum.o
g++ -D _REENTRANT -fno-exceptions -Wall -fPIC -DPIC -DNDEBUG -I/root/new/openmcu-ru/ptlib/include -Os -c .../ptclib/ptts.cxx -o /root/new/openmcu-ru/ptlib/lib/obj_linux_x86_r/ptts.o
g++ -D _REENTRANT -fno-exceptions -Wall -fPIC -DPIC -DNDEBUG -I/root/new/openmcu-ru/ptlib/include -Os -c .../ptclib/asner.cxx -o /root/new/openmcu-ru/ptlib/lib/obj_linux_x86_r/asner.o
g++ -D _REENTRANT -fno-exceptions -Wall -fPIC -DPIC -DNDEBUG -I/root/new/openmcu-ru/ptlib/include -Os -c .../ptclib/pasn.cxx -o /root/new/openmcu-ru/ptlib/lib/obj_linux_x86_r/pasn.o
g++ -D _REENTRANT -fno-exceptions -Wall -fPIC -DPIC -DNDEBUG -I/root/new/openmcu-ru/ptlib/include -Os -c .../ptclib/snmpclnt.cxx -o /root/new/openmcu-ru/ptlib/lib/obj_linux_x86_r/snmpclnt.o
g++ -D _REENTRANT -fno-exceptions -Wall -fPIC -DPIC -DNDEBUG -I/root/new/openmcu-ru/ptlib/include -Os -c .../ptclib/snmpserv.cxx -o /root/new/openmcu-ru/ptlib/lib/obj_linux_x86_r/snmpserv.o
g++ -D _REENTRANT -fno-exceptions -Wall -fPIC -DPIC -DNDEBUG -I/root/new/openmcu-ru/ptlib/include -Os -c .../ptclib/psnmp.cxx -o /root/new/openmcu-ru/ptlib/lib/obj_linux_x86_r/psnmp.o
g++ -D _REENTRANT -fno-exceptions -Wall -fPIC -DPIC -DNDEBUG -I/root/new/openmcu-ru/ptlib/include -Os -c .../ptclib/snmp.cxx -o /root/new/openmcu-ru/ptlib/lib/obj_linux_x86_r/snmp.o
```

```

install ./h263-1998_video_pwplugin.so /usr/local/lib/ptlib/codecs/video
make[1]: Leaving directory `/root/new/openmcu-ru/plugins/H.263-1998.3'
make[1]: Entering directory `/root/new/openmcu-ru/plugins/H.264_123'
mkdir -p /usr/local/lib/ptlib/codecs/video
install ./h264_video_pwplugin.so /usr/local/lib/ptlib/codecs/video
make[1]: Leaving directory `/root/new/openmcu-ru/plugins/H.264_123'
make[1]: Entering directory `/root/new/openmcu-ru/plugins/VP8-WebM'
mkdir -p /usr/local/lib/ptlib/codecs/video
install ./vp8_webm_video_pwplugin.so /usr/local/lib/ptlib/codecs/video
make[1]: Leaving directory `/root/new/openmcu-ru/plugins/VP8-WebM'
make[1]: Entering directory `/root/new/openmcu-ru/plugins/G722'
mkdir -p /usr/local/lib/ptlib/codecs/audio
install ./g722_audio_pwplugin.so /usr/local/lib/ptlib/codecs/audio
make[1]: Leaving directory `/root/new/openmcu-ru/plugins/G722'
make[1]: Entering directory `/root/new/openmcu-ru/plugins/G7231'
mkdir -p /usr/local/lib/ptlib/codecs/audio
cp ./g7231_audio_pwplugin.so /usr/local/lib/ptlib/codecs/audio
make[1]: Leaving directory `/root/new/openmcu-ru/plugins/G7231'
make[1]: Entering directory `/root/new/openmcu-ru/plugins/G726'
mkdir -p /usr/local/lib/ptlib/codecs/audio
cp ./g726_audio_pwplugin.so /usr/local/lib/ptlib/codecs/audio
make[1]: Leaving directory `/root/new/openmcu-ru/plugins/G726'
make[1]: Entering directory `/root/new/openmcu-ru/plugins/G729'
mkdir -p /usr/local/lib/ptlib/codecs/audio
cp ./g729_audio_pwplugin.so /usr/local/lib/ptlib/codecs/audio
make[1]: Leaving directory `/root/new/openmcu-ru/plugins/G729'
make[1]: Entering directory `/root/new/openmcu-ru/plugins/iLBC'
mkdir -p /usr/local/lib/ptlib/codecs/audio
cp ./ilbc_audio_pwplugin.so /usr/local/lib/ptlib/codecs/audio
make[1]: Leaving directory `/root/new/openmcu-ru/plugins/iLBC'
make[1]: Entering directory `/root/new/openmcu-ru/plugins/Speex'
mkdir -p /usr/local/lib/ptlib/codecs/audio
install ./speex_audio_pwplugin.so /usr/local/lib/ptlib/codecs/audio
make[1]: Leaving directory `/root/new/openmcu-ru/plugins/Speex'
make[1]: Entering directory `/root/new/openmcu-ru/plugins/SILK_B40'
mkdir -p /usr/local/lib/ptlib/codecs/audio
install ./silk_b40_audio_pwplugin.so /usr/local/lib/ptlib/codecs/audio
make[1]: Leaving directory `/root/new/openmcu-ru/plugins/SILK_B40'
make[1]: Entering directory `/root/new/openmcu-ru/plugins/OPUS'
mkdir -p /usr/local/lib/ptlib/codecs/audio
install ./opus_audio_pwplugin.so /usr/local/lib/ptlib/codecs/audio
make[1]: Leaving directory `/root/new/openmcu-ru/plugins/OPUS'
[root@sudha openmcu-ru]#

```

/usr/sbin/setenforce 0

service iptables stop

openmcu-ru -X

```

[root@sudha openmcu-ru]# /usr/sbin/setenforce 0
[root@sudha openmcu-ru]# service iptables stop
iptables: Setting chains to policy ACCEPT: filter [ OK ]
iptables: Flushing firewall rules: [ OK ]
iptables: Unloading modules: [ OK ]
[root@sudha openmcu-ru]# openmcu-ru -x
PLUGIN DIRS /usr/local/lib/ptlib
PLUGIN  Enumerating plugin directory /usr/local/lib/ptlib/
PLUGIN  Enumerating plugin directory /usr/local/lib/ptlib/codecs/
PLUGIN  Enumerating plugin directory /usr/local/lib/ptlib/codecs/video/

```

```
[root@sudha openmcu-ru]# openmcu-ru -x
PLUGIN DIRS /usr/local/lib/ptlib
PLUGIN Enumerating plugin directory /usr/local/lib/ptlib/
PLUGIN Enumerating plugin directory /usr/local/lib/ptlib/codecs/
PLUGIN Enumerating plugin directory /usr/local/lib/ptlib/codecs/video/
PLUGIN Checking /usr/local/lib/ptlib/codecs/video/h261-vic_video_pwplugin.so against suffix _pwplugin
PLUGIN Ready to load plugin /usr/local/lib/ptlib/codecs/video/h261-vic_video_pwplugin.so
PLUGIN Checking /usr/local/lib/ptlib/codecs/video/vp8_webm_video_pwplugin.so against suffix _pwplugin
PLUGIN Ready to load plugin /usr/local/lib/ptlib/codecs/video/vp8_webm_video_pwplugin.so
PLUGIN Checking /usr/local/lib/ptlib/codecs/video/h264_video_pwplugin.so against suffix _pwplugin
PLUGIN Ready to load plugin /usr/local/lib/ptlib/codecs/video/h264_video_pwplugin.so
PLUGIN Checking /usr/local/lib/ptlib/codecs/video/h263-1998_video_pwplugin.so against suffix _pwplugin
PLUGIN Ready to load plugin /usr/local/lib/ptlib/codecs/video/h263-1998_video_pwplugin.so
PLUGIN Enumerating plugin directory /usr/local/lib/ptlib/codecs/audio/
PLUGIN Checking /usr/local/lib/ptlib/codecs/audio/g7231_audio_pwplugin.so against suffix _pwplugin
PLUGIN Ready to load plugin /usr/local/lib/ptlib/codecs/audio/g7231_audio_pwplugin.so
PLUGIN Checking /usr/local/lib/ptlib/codecs/audio/g729_audio_pwplugin.so against suffix _pwplugin
PLUGIN Ready to load plugin /usr/local/lib/ptlib/codecs/audio/g729_audio_pwplugin.so
PLUGIN Checking /usr/local/lib/ptlib/codecs/audio/g726_audio_pwplugin.so against suffix _pwplugin
PLUGIN Ready to load plugin /usr/local/lib/ptlib/codecs/audio/g726_audio_pwplugin.so
PLUGIN Checking /usr/local/lib/ptlib/codecs/audio/silk_b40_audio_pwplugin.so against suffix _pwplugin
PLUGIN Ready to load plugin /usr/local/lib/ptlib/codecs/audio/silk_b40_audio_pwplugin.so

PLUGIN Checking /usr/local/lib/ptlib/codecs/audio/ilbc_audio_pwplugin.so against suffix _pwplugin
PLUGIN Ready to load plugin /usr/local/lib/ptlib/codecs/audio/ilbc_audio_pwplugin.so

H.261-CIF{sw}
H.261-QCIF{sw}
VP8-QCIF{sw}
VP8-CIF{sw}
VP8-4CIF{sw}
VP8-240P{sw}
VP8-360P{sw}
VP8-480P{sw}
VP8-720P{sw}
VP8-768P{sw}
VP8-1080P{sw}
H264 Codec Enabled
H.264-SQCIF{sw}
H.264-QCIF1{sw}
H.264-QCIF2{sw}
H.264-CIF1{sw}
H.264-CIF2{sw}
H.264-CIF3{sw}
H.264-4CIF1{sw}
H.264-4CIF2{sw}
H.264-4CIF3{sw}
H.264-SD{sw}
H.264-HD{sw}
H.264-FHD{sw}
H.263p-16CIF{sw}
H.263p-4CIF{sw}
H.263p-CIF{sw}
H.263p-QCIF{sw}
H.263p-SQCIF{sw}
H.263-16CIF{sw}
```

```

CIF2{sw}, H.264-4CIF1{sw}, H.263p-4CIF{sw}, H.263-4CIF{sw}, H.264-CIF3{sw}, H.264-CIF2{sw}, H.264-CIF1{sw}, H.263p-CIF{sw},
H.263p-QCIF{sw}, H.263-QCIF{sw}, H.264-SQCIF{sw}, H.263p-SQCIF{sw}, H.263-SQCIF{sw}, H.261-CIF{sw}, H.261-QCIF{sw},
[TRANSMIT VIDEO]= VP8-1080P{sw}, VP8-720P{sw}, VP8-480P{sw}, VP8-4CIF{sw}, VP8-CIF{sw}, VP8-QCIF{sw}, H.264-FHD{sw}, H.
4CIF2{sw}, H.264-4CIF1{sw}, H.263p-4CIF{sw}, H.263-4CIF{sw}, H.264-CIF3{sw}, H.264-CIF2{sw}, H.264-CIF1{sw}, H.263p-CIF{sw},
H.263p-QCIF{sw}, H.263-QCIF{sw}, H.264-SQCIF{sw}, H.263p-SQCIF{sw}, H.263-SQCIF{sw}, H.261-CIF{sw}, H.261-QCIF{sw},
VP8-360P{sw}, VP8-768P{sw},

```

Table:

```

SILK_B40{sw} <1>
SILK_B40_24K{sw} <2>
OPUS_48K2{sw} <3>
OPUS_48K{sw} <4>
OPUS_16K{sw} <5>
OPUS_8K{sw} <6>
G.711-uLaw-64k <7>
G.711-ALaw-64k <8>
G.7231-6.3k[e]{sw} <9>
G.729A{sw} <10>
G.729{sw} <11>
Speex_32K{sw} <12>
Speex_16K{sw} <13>
Speex_8K{sw} <14>
G.726-40k{sw} <15>
G.726-32k{sw} <16>
G.726-24k{sw} <17>
G.726-16k{sw} <18>
iLBC-13k3{sw} <19>
iLBC-15k2{sw} <20>
G.722-64k{sw} <21>
VP8-1080P{sw} <22>
VP8-720P{sw} <23>
VP8-480P{sw} <24>
VP8-4CIF{sw} <25>
VP8-CIF{sw} <26>
VP8-QCIF{sw} <27>
H.264-FHD{sw} <28>
H.264-HD{sw} <29>
H.264-SD{sw} <30>
H.264-4CIF3{sw} <31>
H.264-4CIF2{sw} <32>
H.264-4CIF1{sw} <33>
H.263p-4CIF{sw} <34>
H.263-4CIF{sw} <35>

```

```

H.264-CIF3{sw} <36>
H.264-CIF2{sw} <37>
H.264-CIF1{sw} <38>
H.263p-CIF{sw} <39>
H.263-CIF{sw} <40>
H.264-QCIF2{sw} <41>
H.264-QCIF1{sw} <42>
H.263p-QCIF{sw} <43>
H.263-QCIF{sw} <44>
H.264-SQCIF{sw} <45>
H.263p-SQCIF{sw} <46>
H.263-SQCIF{sw} <47>
H.261-CIF{sw} <48>
H.261-QCIF{sw} <49>
H.263-16CIF{sw} <50>
H.263p-16CIF{sw} <51>
VP8-240P{sw} <52>
VP8-360P{sw} <53>
VP8-768P{sw} <54>

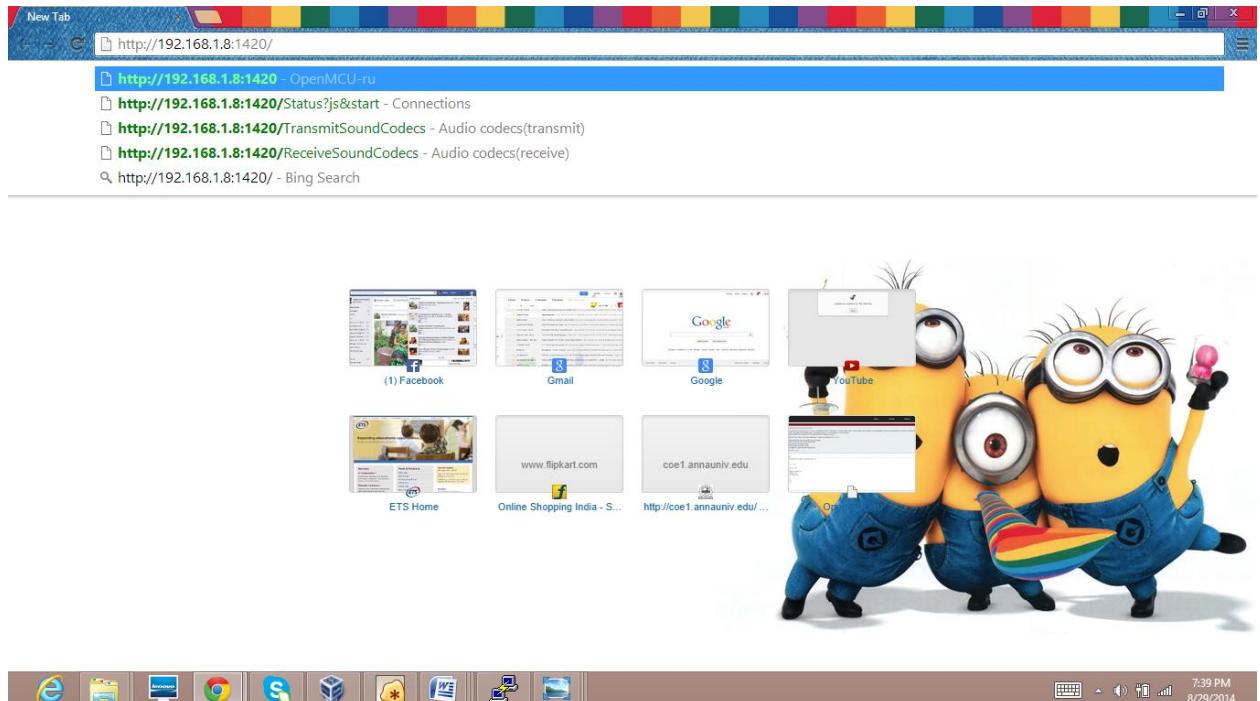
nta_agent_create: initialized hash tables
nta_agent_create: initialized transports
nta_agent_create: initialized random identifiers
nta_agent_create: initialized timer
nta_agent_create: initialized resolver
tport_destroy((nil))
tport_create(): 0xb7201d18
nta: master transport created
tport_bind_server(0xb7201d18) to */0.0.0.0 :5060
tport_bind_server(0xb7201d18): calling tport_listen for udp
tport_alloc_primary(0xb7201d18): new primary tport 0xb7202190
tport_listen(0xb7202190): listening at udp/192.168.1.8:5060
tport_bind_server(0xb7201d18): calling tport_listen for tcp
tport_alloc_primary(0xb7201d18): new primary tport 0xb72025e0
tport_listen(0xb72025e0): listening at tcp/192.168.1.8:5060
nta: bound to (0.0.0.0 :5060;transport=*)
nta: agent_init_via: SIP/2.0/udp 0.0.0.0  (*)
nta: agent_init_via: SIP/2.0/tcp 0.0.0.0  (*)
nta: Via fields initialized
nta: Contact header created

```

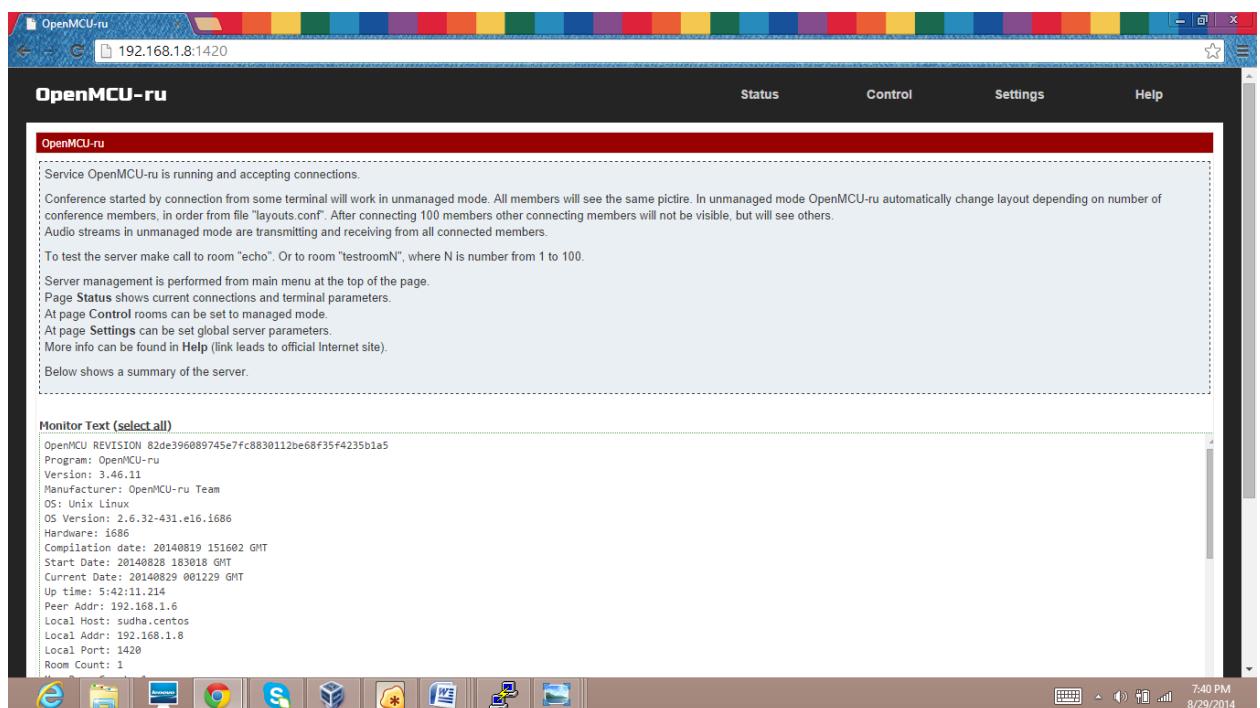
TESTING AND VERIFICATION

RUN OPENMCU 3.46

Type the host IP address followed by the port number (1420) where it has been configured and from where it can be controlled via a web interface



Press Enter



The OpenMCU-ru page is displayed

This screenshot shows the main status page of the OpenMCU-ru web interface. At the top, there's a navigation bar with tabs for Status, Control, Settings, and Help. Below the navigation bar, a message box displays the following text:

```
Service OpenMCU-ru is running and accepting connections.  
Conference started by connection from some terminal will work in unmanaged mode. All members will see the same picture. In unmanaged mode OpenMCU-ru automatically change layout depending on number of conference members, in order from file "layouts.conf". After connecting 100 members other connecting members will not be visible, but will see others.  
Audio streams in unmanaged mode are transmitting and receiving from all connected members.  
To test the server make call to room "echo". Or to room "testroomN", where N is number from 1 to 100.  
Server management is performed from main menu at the top of the page.  
Page Status shows current connections and terminal parameters.  
At page Control rooms can be set to managed mode.  
At page Settings can be set global server parameters.  
More info can be found in Help (link leads to official Internet site).  
Below shows a summary of the server.
```

Below the message box, there's a section titled "Monitor Text (select all)" which contains detailed server configuration and runtime information. The information includes:

```
OpenMCU REVISION 82de396089745e7fc8830112be68f35f4235b1a5  
Program: OpenMCU-ru  
Version: 3.46.11  
Manufacturer: OpenMCU-ru Team  
OS: Unix Linux  
OS Version: 2.6.32-431.e16.1686  
Hardware: i686  
Compilation date: 20140819 151802 GMT  
Start Date: 20140828 183018 GMT  
Current Date: 20140828 184053 GMT  
Up time: 10:34:876  
Peer Addr: 192.168.1.6  
Local Host: sudha.centos  
Local Addr: 192.168.1.8  
Local Port: 1420  
Room Count: 0
```

At the bottom of the page, there's a file upload form for a "Prefatory Frame" with a maximum size of 500K. The form includes fields for "Change" (with a "Choose File" button), "No file chosen", and a "Submit" button. The copyright notice at the bottom right reads "Copyright ©2014 by OpenMCU-ru Team".

This screenshot shows the "Prefatory Frame" upload page of the OpenMCU-ru web interface. The page has a similar layout to the main status page, with a navigation bar and a message box at the top. The message box contains the following text:

```
: More info can be found in Help (link leads to official Internet site).  
: Below shows a summary of the server.
```

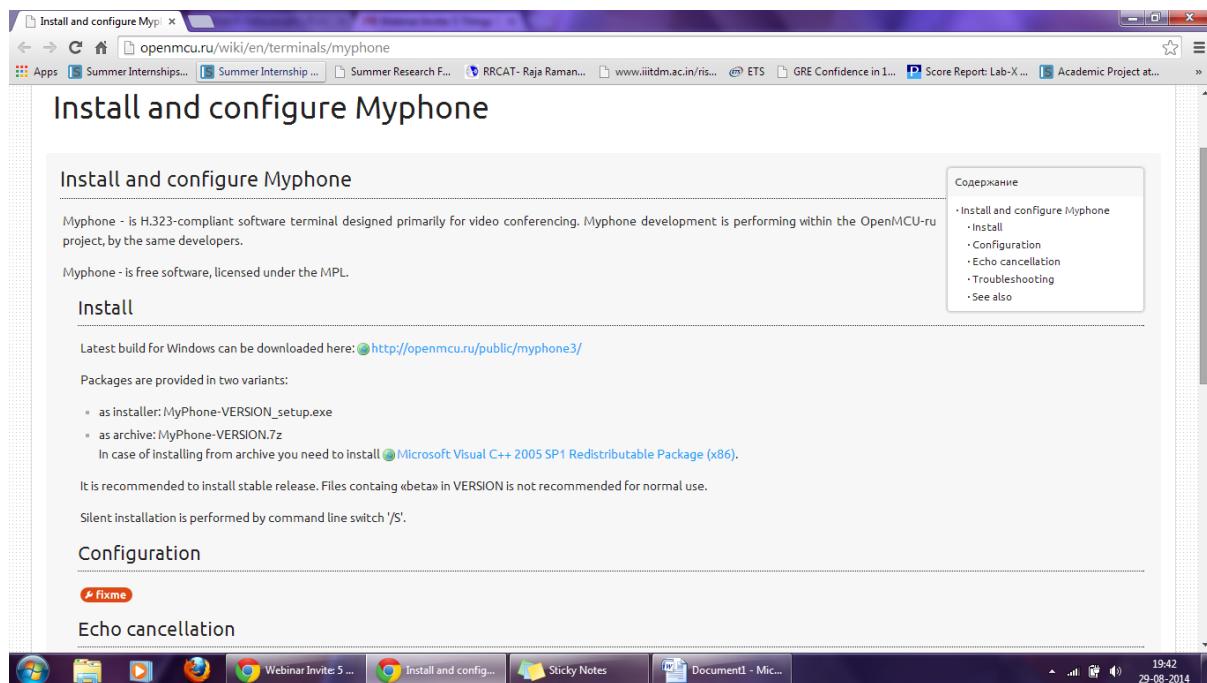
Below the message box, there's a section titled "Monitor Text (select all)" with server details. The "Prefatory Frame" upload form is the main focus of the page. It includes a file input field labeled "JPEG, max 500K:" with a "Choose File" button, a "No file chosen" message, and a "Submit" button. The copyright notice at the bottom right is "Copyright ©2014 by OpenMCU-ru Team".

INSTALLATION OF MyPhone3

Go to <http://openmcu.ru/wiki/en/terminals/myphone>

Download the latest build for windows in the given hyperlink

<http://openmcu.ru/public/myphone3/>



Install and configure Myphone

Myphone - is H.323-compliant software terminal designed primarily for video conferencing. Myphone development is performing within the OpenMCU-ru project, by the same developers.

Myphone - is free software, licensed under the MPL.

Install

Latest build for Windows can be downloaded here: <http://openmcu.ru/public/myphone3/>

Packages are provided in two variants:

- as installer: MyPhone-VERSION_setup.exe
- as archive: MyPhone-VERSION.7z

In case of installing from archive you need to install [Microsoft Visual C++ 2005 SP1 Redistributable Package \(x86\)](#).

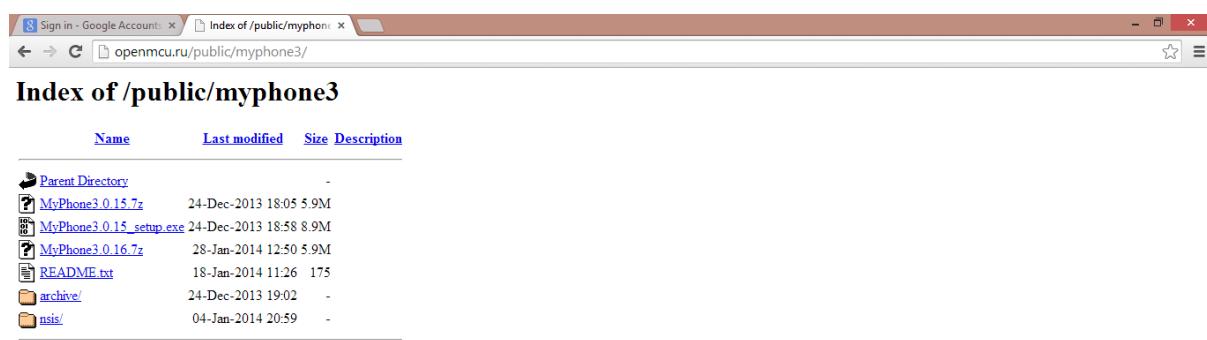
It is recommended to install stable release. Files containing «beta» in VERSION is not recommended for normal use.

Silent installation is performed by command line switch '/S'.

Configuration

[fixme](#)

Echo cancellation

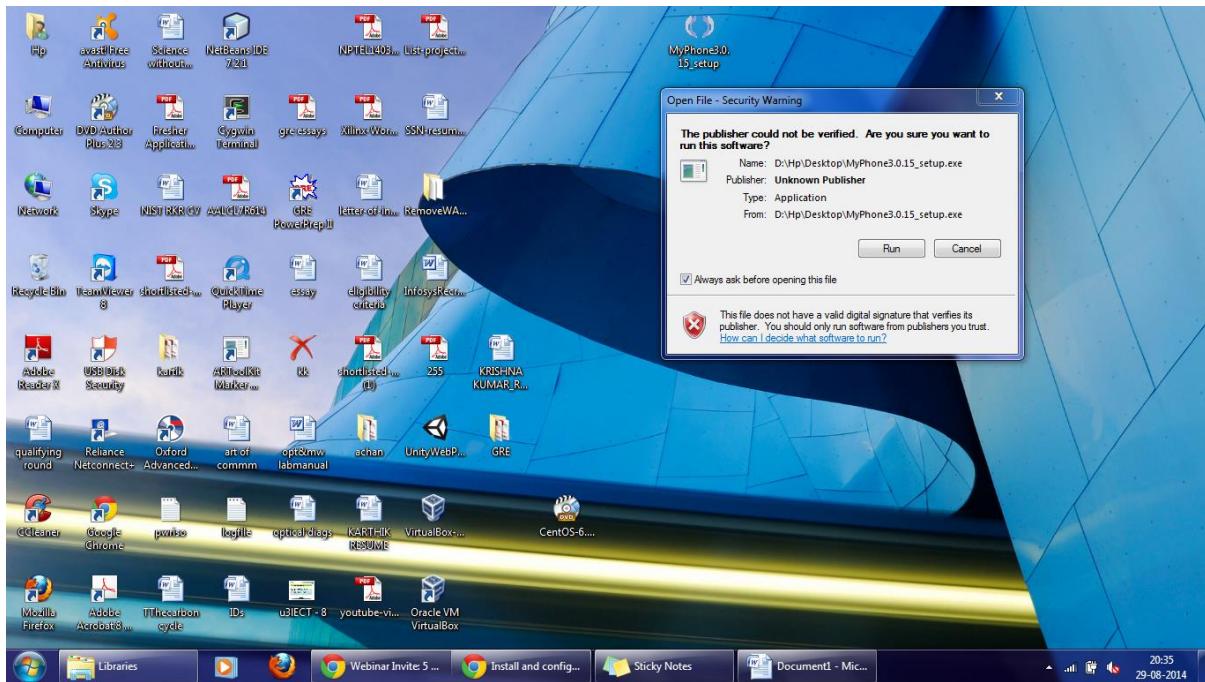


Name	Last modified	Size	Description
Parent Directory	-	-	
MyPhone3.0.15.7z	24-Dec-2013 18:05	5.9M	
MyPhone3.0.15_setup.exe	24-Dec-2013 18:58	8.9M	
MyPhone3.0.16.7z	28-Jan-2014 12:50	5.9M	
README.txt	18-Jan-2014 11:26	175	
archive/	24-Dec-2013 19:02	-	
nsis/	04-Jan-2014 20:59	-	

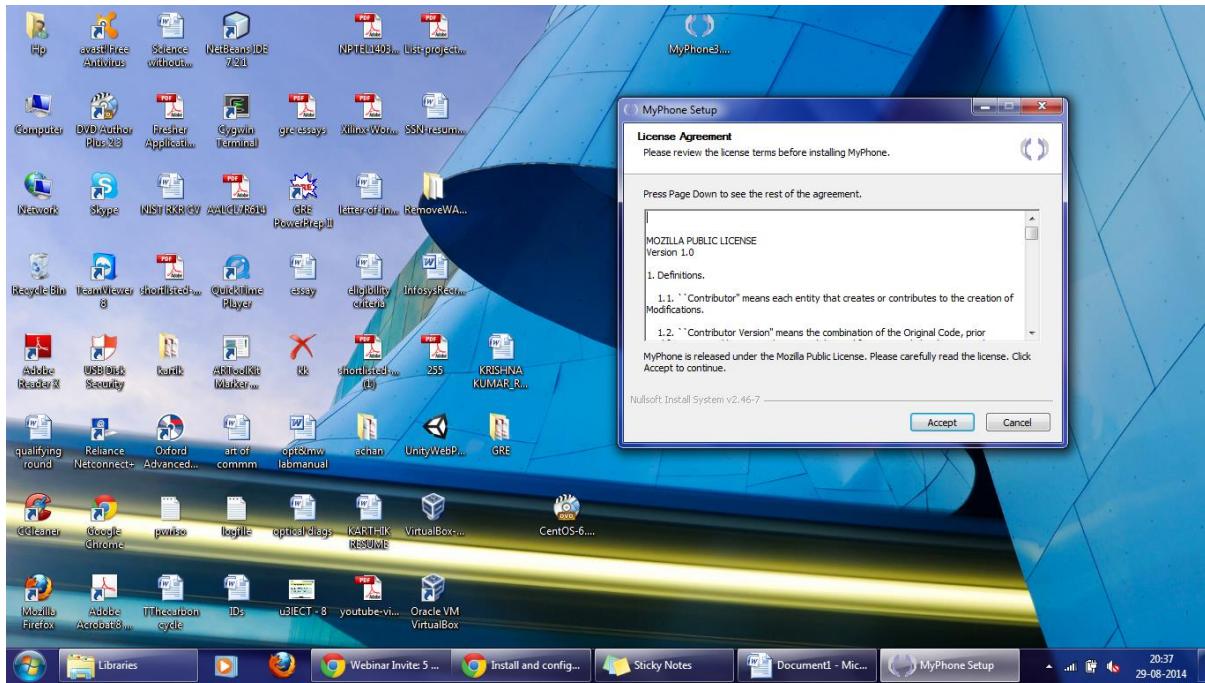
Apache/2.2.22 (Debian) Server at openmcu.ru Port 80



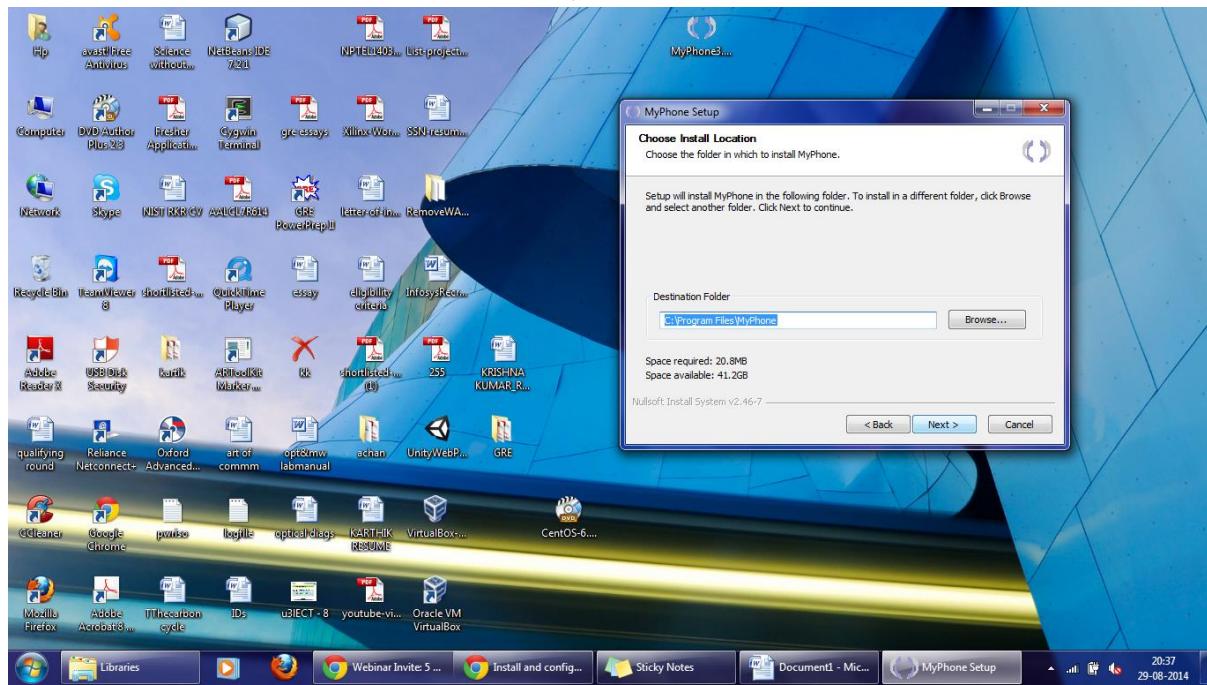
Double click the set up file and click run in the dialog box



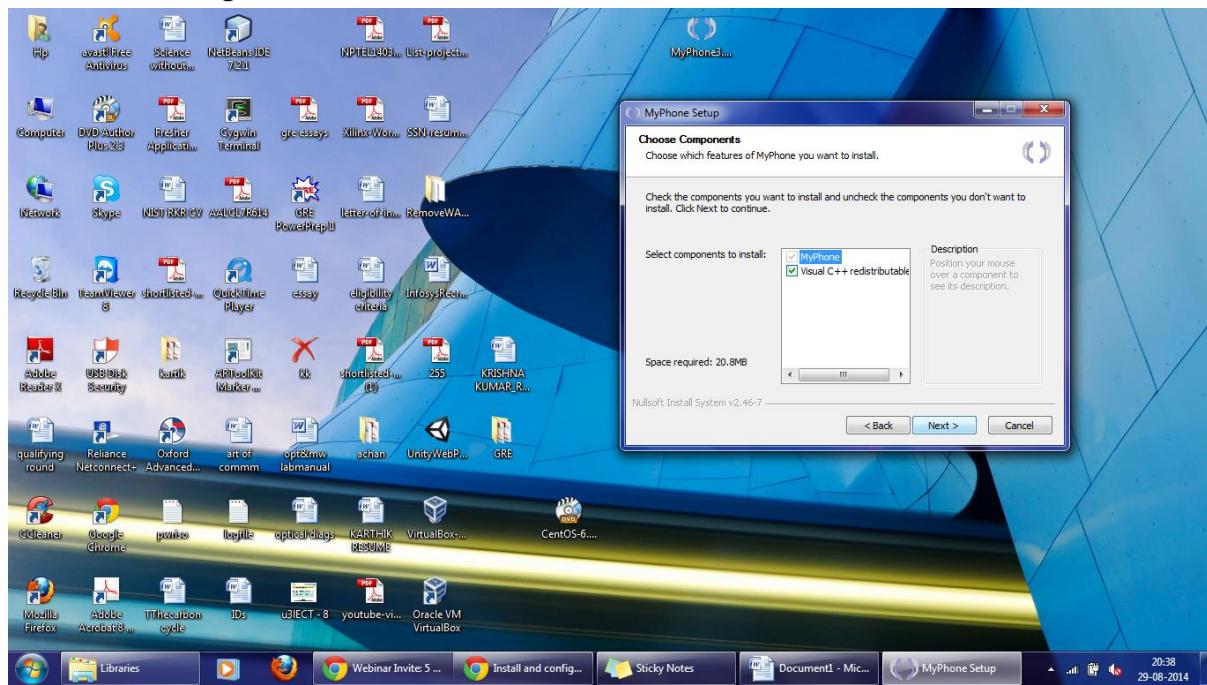
Accept the terms and conditions of the License



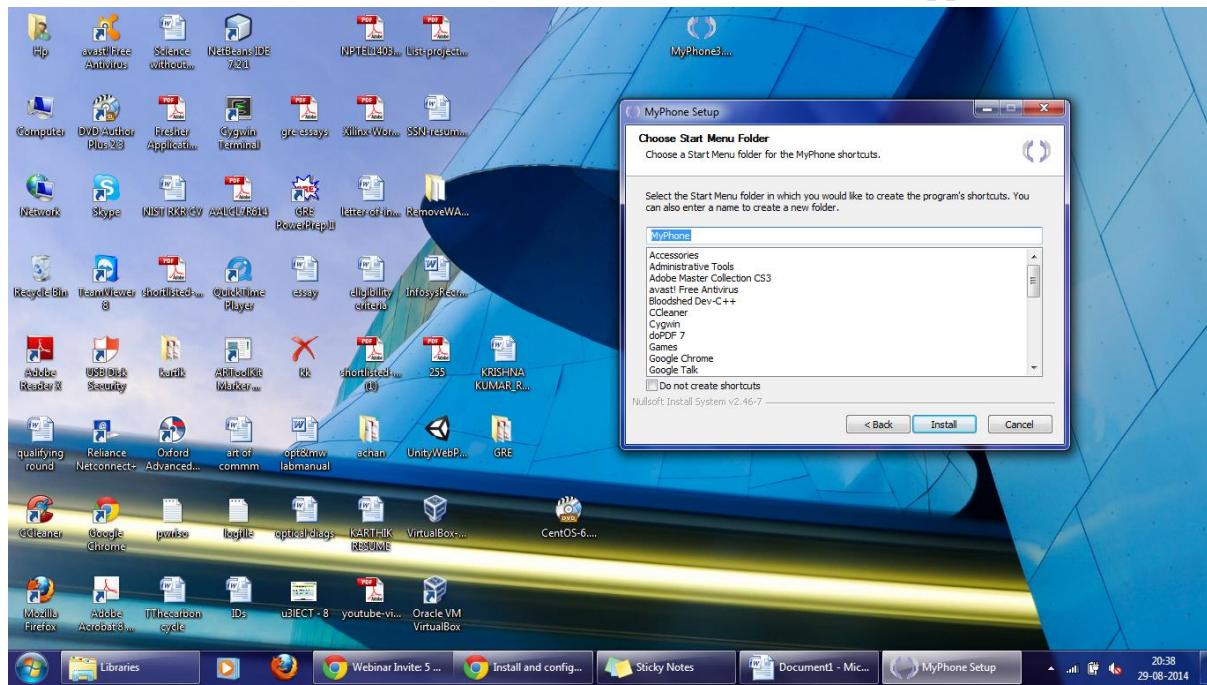
Choose destination folder to install MyPhone



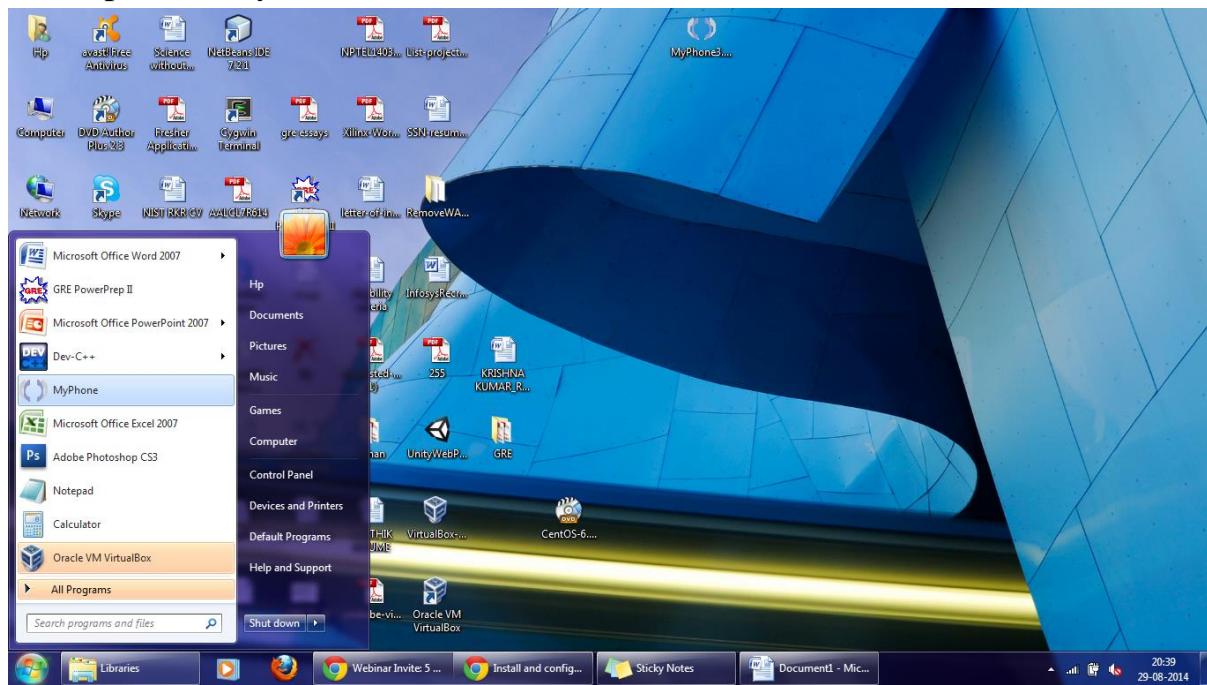
Select the components to be installed from the list



Select the folder in the start menu where the shortcut should appear



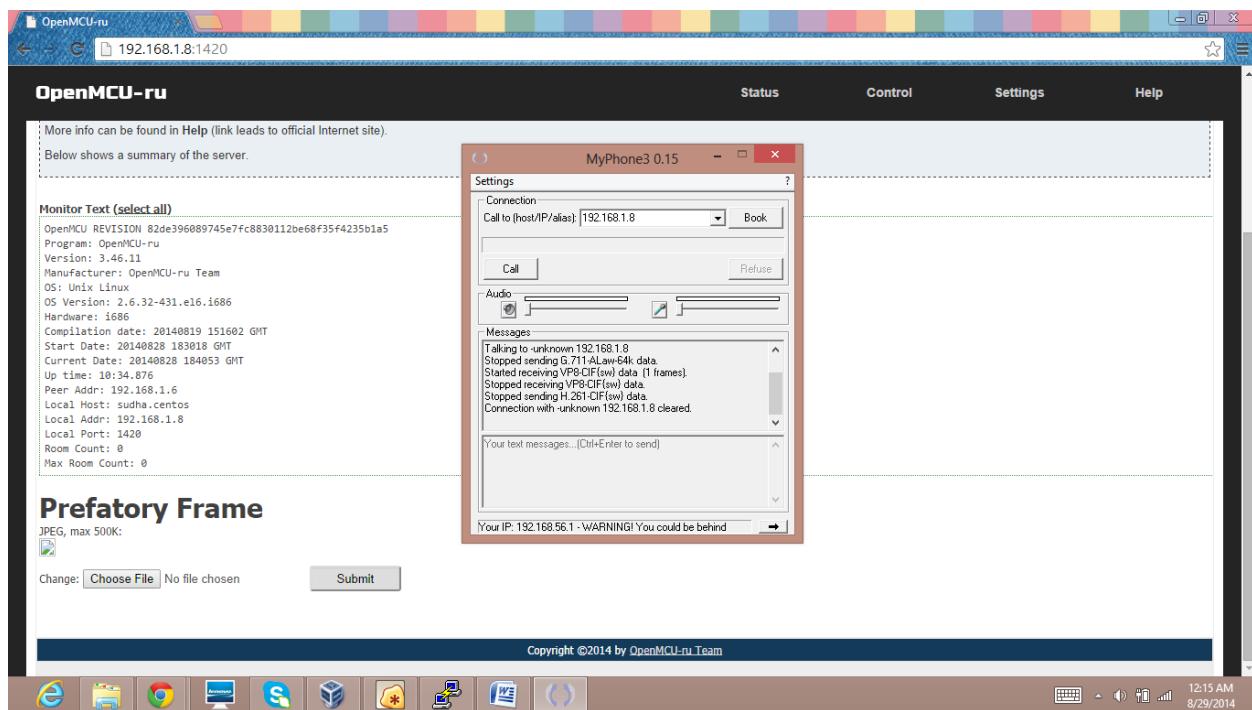
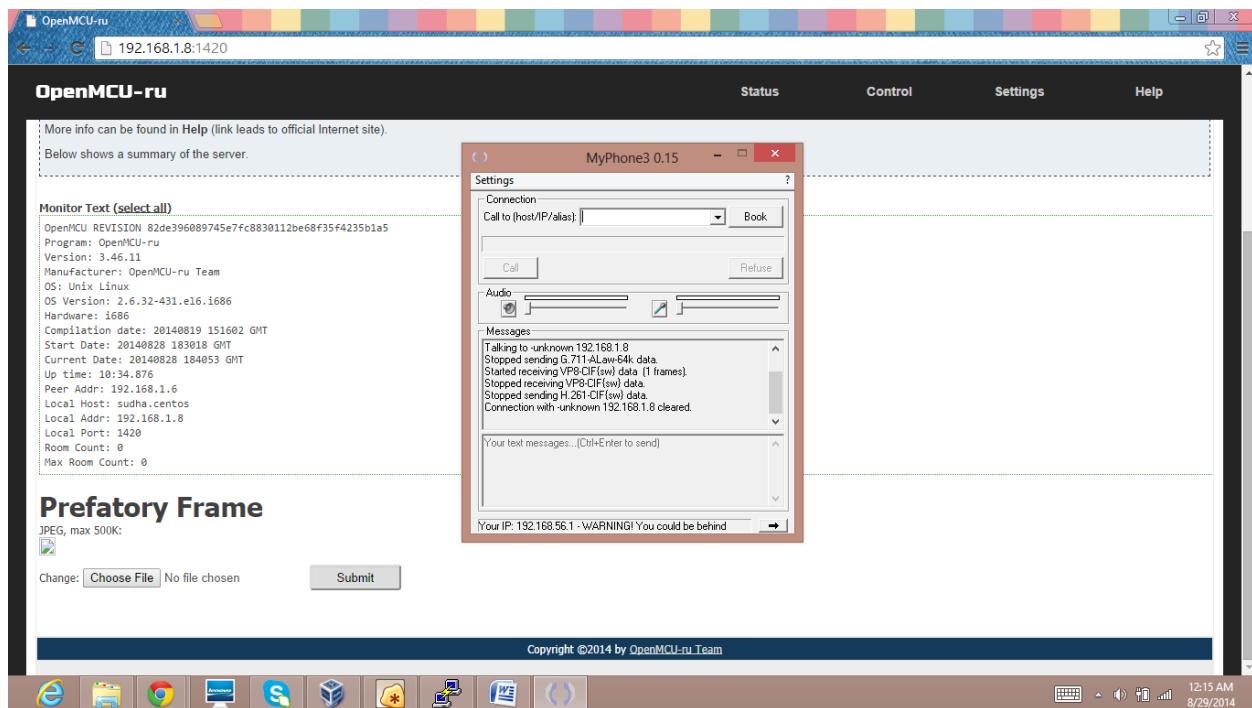
Now open the MyPhone software



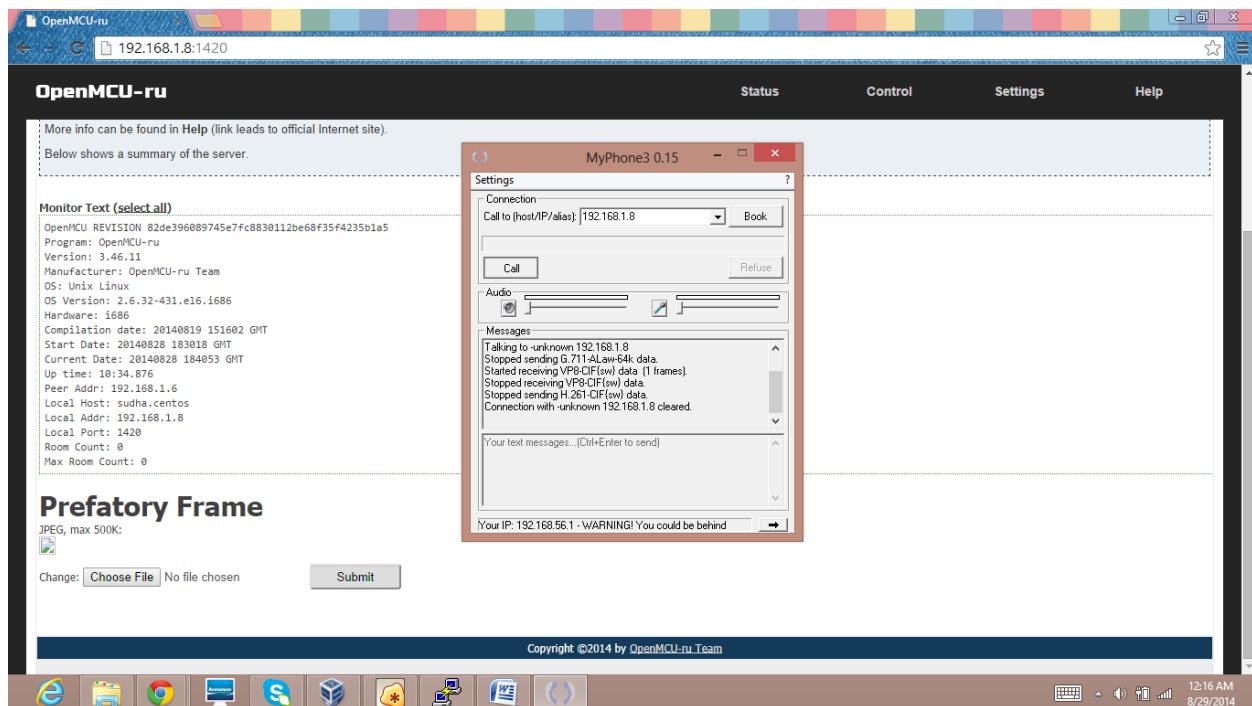
SETTING UP A VIDEO CONFERENCE CALL IN MyPhone3

USER 1

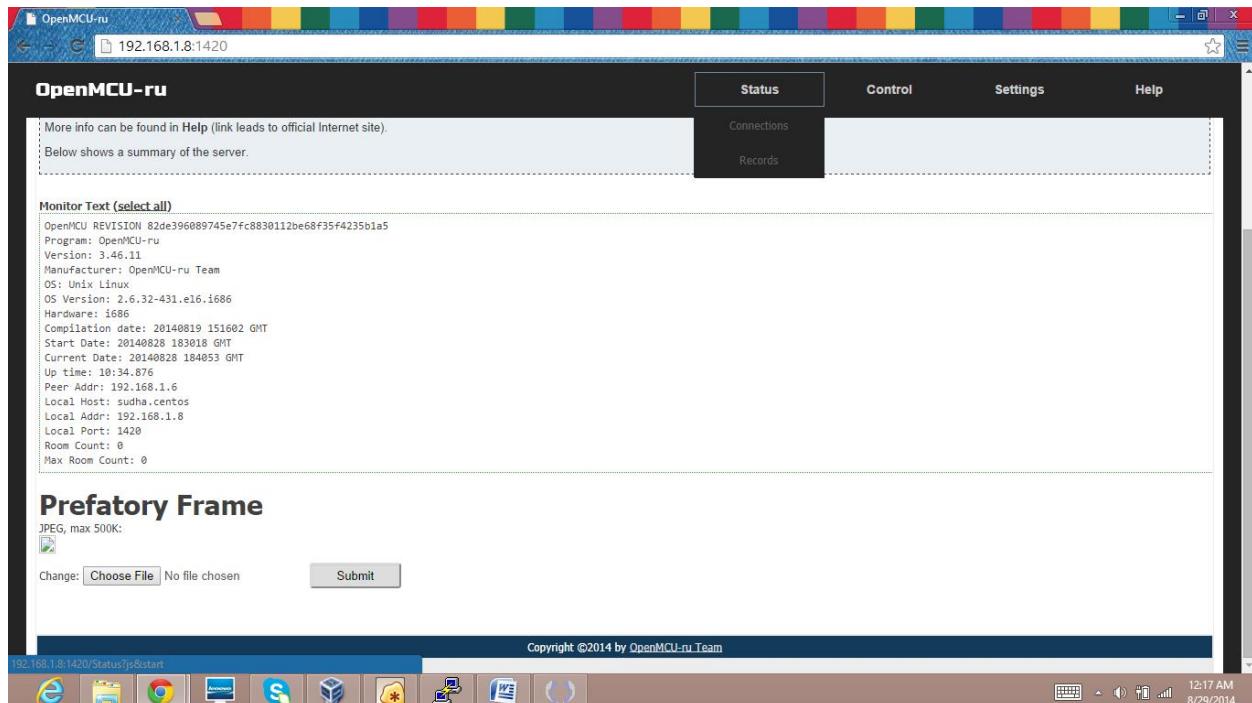
Open MyPhone and enter the host IP address



Click the call button to establish a connection



To view active connections click on the status tab in the Open MCU –ru portal



Click “Connections” under the Status tab

The screenshot shows a web browser window titled "OpenMCU-ru" with the URL "192.168.1.8:1420". The top navigation bar has tabs for "Status", "Control", "Settings", and "Help". The "Status" tab is active, and its sub-menu includes "Connections" and "Records". The main content area displays system monitoring text and a "Prefatory Frame" section for JPEG files.

Monitor Text (select all)

```
OpenMCU REVISION 82de396089745e7fc8830112be68f35f4235b1a5
Program: OpenMCU-ru
Version: 3.46.11
Manufacturer: OpenMCU-ru Team
OS: Unix Linux
OS Version: 2.6.32-431.e16.i686
Hardware: i686
Compilation date: 20140819 151602 GMT
Start Date: 20140828 183018 GMT
Current Date: 20140828 184053 GMT
Up time: 10:34.876
Peer Addr: 192.168.1.6
Local Host: sudha.centos
Local Addr: 192.168.1.8
Local Port: 1420
Room Count: 0
Max Room Count: 0
```

Prefatory Frame
JPEG, max 500K:
 Change: No file chosen

Copyright ©2014 by OpenMCU-ru Team

Active connections can be viewed in detail

The screenshot shows a web browser window titled "Connections" with the URL "192.168.1.8:1420>Status?js&start". The top navigation bar has tabs for "Status", "Control", "Settings", and "Help". The "Status" tab is active, and its sub-menu includes "Connections" and "Records". The main content area displays a table of active connections.

Connections

Page shows current connections and terminal parameters.

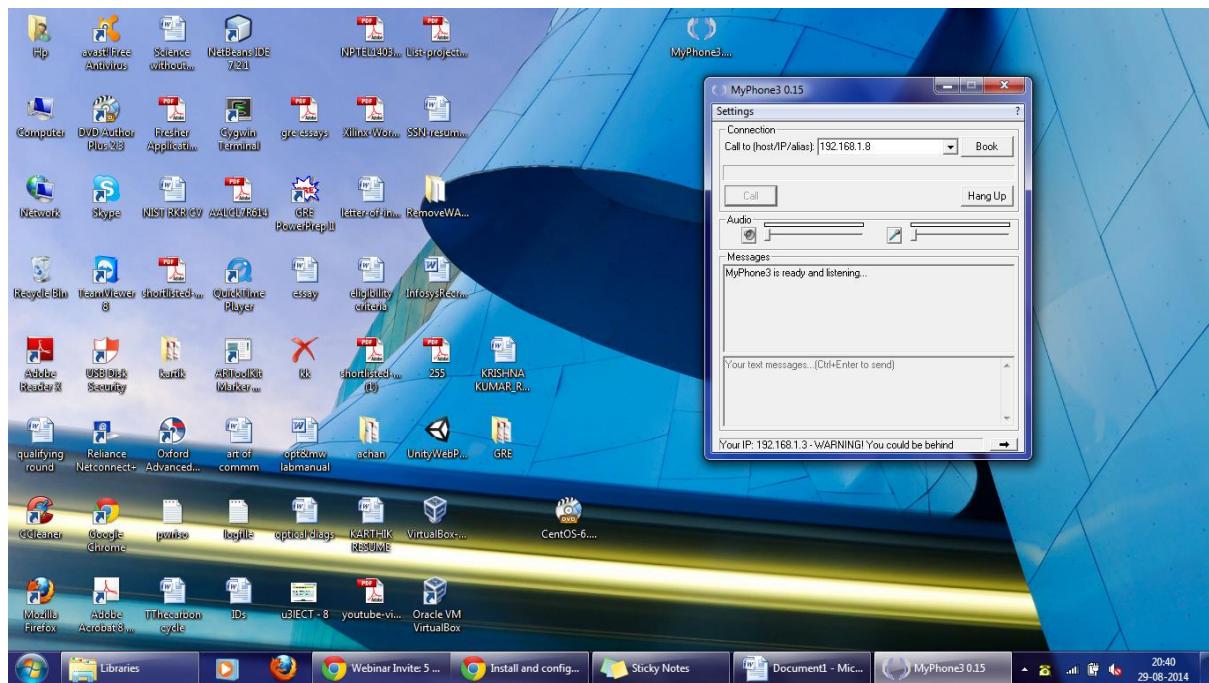
Room room101							
Name	Duration	RTP Channel: Codec	packets	Bytes	Kbit/s	FPS	
[Hidden] file recorder	7:17	-	-	-	-	-	
[Hidden] cache	7:16	Video Out: VP8-CIF@352x288:327600x10_room101/0	-	-	-	-	1 x 10.00
Sudha [h323:@192.168.1.6]	3:13	Audio In: G.711-Alaw-64k@8000Hz Audio Out: OPUS_48K2@48000Hz/stereo Video In: H.261-CIF@352x288 Video Out: VP8-CIF@352x288:327600x10_room101/0	3839	2974588	122.7	10.01	
			13360	6540547	269.9	10.00	

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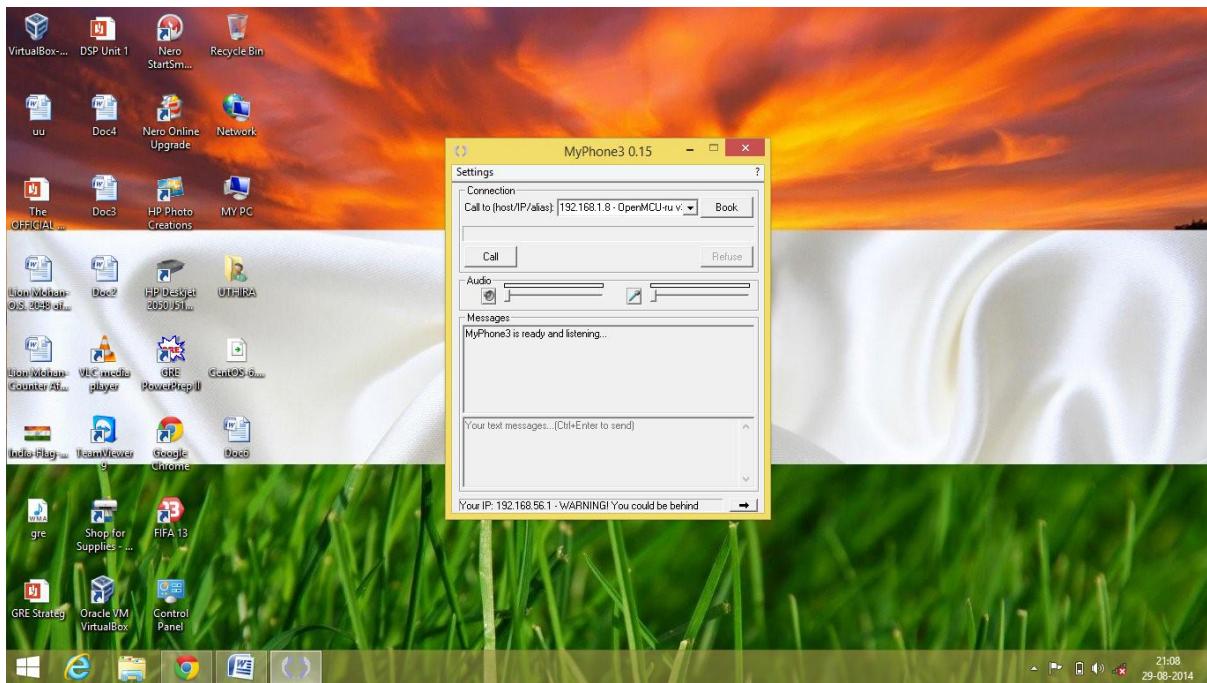
Initial screen when the user establishes a connection



USER 2



USER 3



The call is in progress

More info can be found in Help (link leads to official Internet site).
Below shows a summary of the server.

Monitor Text (select all)

```
OpenMCU REVISION 82de396089745e7fc8830112be68f35f4235b1a5
Program: OpenMCU-ru
Version: 3.46.11
Manufacturer: OpenMCU-ru Team
OS: Unix Linux
OS Version: 2.6.32-431.e16.1686
Hardware: i686
Compilation date: 20140819 151602 GMT
Start Date: 20140828 183018 GMT
Current Date: 20140828 184053 GMT
Up time: 10:34.876
Peer Addr: 192.168.1.6
Local Host: sudha.centos
Local Addr: 192.168.1.8
Local Port: 1420
Room Count: 0
Max Room Count: 0
```

Prefatory Frame

Change: No file chosen

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Screenshots indicating multiple users interacting

OpenMCU-ru

Connections

This page shows current connections and terminal parameters.

Room room101

Name	Duration	RTP Channel: Codec	Packets	Bytes	Kbit/s	FPS
[Hidden] file recorder	4:33:50	-	-	-	-	-
[Hidden] cache	4:33:48	Video Out: VP8-CIF@352x288:327600x10_room101/0	-	-	-	3 x 10.00
[Offline] Hp [h323:@192.168.1.9]	-	-	-	-	-	-
[Offline] Sri Ram [h323:@192.168.1.3]	-	-	-	-	-	-
Sudha [h323:@192.168.1.6]	1:38	Audio In: G.711-ALaw-64k@8000Hz Audio Out: OPUS_48K2@48000Hz/stereo Video In: H.261-CIF@352x288 Video Out: VP8-CIF@352x288:327600x10_room101/0	0 0 2646 6736	0 0 2198453 3301578	0.0 0.0 244.2 346.0	10.01 10.00
UTHIRAI [h323:@192.168.1.11]	1:08	Audio In: G.711-ALaw-64k@8000Hz Audio Out: OPUS_48K2@48000Hz/stereo Video In: H.261-CIF@352x288 Video Out: VP8-CIF@352x288:327600x10_room101/0	0 0 1020 5035	0 0 697469 2481632	0.0 0.0 94.3 347.7	10.00 10.00
Krishna kumar [h323:@192.168.1.9]	39.5	Audio In: G.711-ALaw-64k@8000Hz Audio Out: OPUS_48K2@48000Hz/stereo Video In: H.261-CIF@352x288 Video Out: VP8-CIF@352x288:327600x10_room101/0	0 0 1400 3185	0 0 1228558 1582691	0.0 0.0 380.3 349.4	10.03 10.00

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APPENDIX

INSTALLATION OF OPTIONAL PACKAGES

yum install freetype-devel

```
Downloading Packages:
(1/3): freetype-2.3.11-14.el6_3.1.i686.rpm           | 363 kB     00:01
(2/3): freetype-devel-2.3.11-14.el6_3.1.i686.rpm      | 364 kB     00:04
(3/3): zlib-devel-1.2.3-29.el6.i686.rpm               |  44 kB     00:00
-----
Total                                         98 kB/s | 771 kB   00:07
Running rpm_check_debug
Running Transaction Test
Transaction Test Succeeded
Running Transaction
  Installing : zlib-devel-1.2.3-29.el6.i686          1/3
  Installing : freetype-2.3.11-14.el6_3.1.i686       2/3
  Installing : freetype-devel-2.3.11-14.el6_3.1.i686  3/3
  Verifying  : freetype-2.3.11-14.el6_3.1.i686        1/3
  Verifying  : freetype-devel-2.3.11-14.el6_3.1.i686   2/3
  Verifying  : zlib-devel-1.2.3-29.el6.i686          3/3

Installed:
  freetype-devel.i686 0:2.3.11-14.el6_3.1

Dependency Installed:
  freetype.i686 0:2.3.11-14.el6_3.1           zlib-devel.i686 0:1.2.3-29.el6

Complete!
[root@localhost ~]# _
```

yum install libjpeg-devel

```
Total download size: 273 k
Installed size: 794 k
Is this ok [y/N]: y
Downloading Packages:
(1/2): libjpeg-turbo-1.2.1-3.el6_5.i686.rpm         | 177 kB     00:00
(2/2): libjpeg-turbo-devel-1.2.1-3.el6_5.i686.rpm    |  96 kB     00:00
-----
Total                                         240 kB/s | 273 kB   00:01
Running rpm_check_debug
Running Transaction Test
Transaction Test Succeeded
Running Transaction
  Installing : libjpeg-turbo-1.2.1-3.el6_5.i686          1/2
  Installing : libjpeg-turbo-devel-1.2.1-3.el6_5.i686    2/2
  Verifying  : libjpeg-turbo-1.2.1-3.el6_5.i686          1/2
  Verifying  : libjpeg-turbo-devel-1.2.1-3.el6_5.i686    2/2

Installed:
  libjpeg-turbo-devel.i686 0:1.2.1-3.el6_5

Dependency Installed:
  libjpeg-turbo.i686 0:1.2.1-3.el6_5

Complete!
[root@localhost ~]# _
```

INSTALLATION OF OPTIONAL PROJECT SOURCE FILES

```
yum install svn
```

```
svn --revision 634 checkout http://libyuv.googlecode.com/svn/trunk/ ./libyuv
```

```
[root@sudha new]# svn --revision 634 checkout http://libyuv.googlecode.com/svn/trunk/ ./libyuv
A   libyuv/README.chromium
A   libyuv/tools
A   libyuv/tools/valgrind-libyuv
A   libyuv/tools/valgrind-libyuv/libyuv_tests.bat
A   libyuv/tools/valgrind-libyuv/libyuv_tests.py
A   libyuv/tools/valgrind-libyuv/tsan
A   libyuv/tools/valgrind-libyuv/tsan/PRESUBMIT.py
A   libyuv/tools/valgrind-libyuv/tsan/suppressions.txt
A   libyuv/tools/valgrind-libyuv/tsan/suppressions_mac.txt
A   libyuv/tools/valgrind-libyuv/tsan/OWNERS
A   libyuv/tools/valgrind-libyuv/tsan/suppressions_win32.txt
A   libyuv/tools/valgrind-libyuv/libyuv_tests.sh
A   libyuv/tools/valgrind-libyuv/memcheck
A   libyuv/tools/valgrind-libyuv/memcheck/PRESUBMIT.py
A   libyuv/tools/valgrind-libyuv/memcheck/suppressions.txt
A   libyuv/tools/valgrind-libyuv/memcheck/suppressions_mac.txt
A   libyuv/tools/valgrind-libyuv/memcheck/OWNERS
A   libyuv/tools/valgrind-libyuv/memcheck/suppressions_win32.txt
A   libyuv/source
A   libyuv/source/format_conversion.cc
A   libyuv/source/rotate.cc
A   libyuv/source/row_mips.cc
A   libyuv/source/scale_argb_neon.cc
A   libyuv/source/convert_from.cc
A   libyuv/source/compare_win.cc
A   libyuv/source/planar_functions.cc
A   libyuv/source/scale_neon.cc
A   libyuv/source/convert_argb.cc
A   libyuv/source/row_common.cc
A   libyuv/source/convert.cc
A   libyuv/source/scale_argb.cc
A   libyuv/source/row_win.cc
A   libyuv/source/rotate_mips.cc
A   libyuv/source/row_neon.cc
A   libyuv/source/convert_from_argb.cc
A   libyuv/source/compare_common.cc
```

```
A   libyuv/unit_test/rotate_test.cc
A   libyuv/unit_test/unit_test.cc
A   libyuv/unit_test/convert_test.cc
A   libyuv/unit_test/unit_test.h
A   libyuv/unit_test/scale_argb_test.cc
A   libyuv/unit_test/version_test.cc
A   libyuv/unit_test/testdata
A   libyuv/unit_test/testdata/tegra3.txt
A   libyuv/unit_test/testdata/arm_v7.txt
A   libyuv/unit_test/compare_test.cc
A   libyuv/unit_test/basicatypes_test.cc
A   libyuv/unit_test/cpu_test.cc
A   libyuv/unit_test/scale_test.cc
A   libyuv/unit_test/rotate_argb_test.cc
A   libyuv/PATENTS
Checked out revision 634.
[root@sudha new]# yum install svn
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
 * base: centos.aol.in
 * extras: centos.aol.in
 * updates: centos.aol.in
Setting up Install Process
Package subversion-1.6.11-10.el6_5.i686 already installed and latest version
```

```
wget http://downloads.xiph.org/releases/opus/opus-1.1.tar.gz
tar xvzf ./opus-1.1.tar.gz
```

```
sofia-sip-1.12.11/tests/test_nua.c
sofia-sip-1.12.11/README
sofia-sip-1.12.11/README.developers
[root@sudha new]# wget http://downloads.xiph.org/releases/opus/opus-1.1.tar.gz
--2014-08-28 21:16:03--  http://downloads.xiph.org/releases/opus/opus-1.1.tar.gz
Resolving downloads.xiph.org... 64.50.236.52, 64.50.233.100
Connecting to downloads.xiph.org|64.50.236.52|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 850208 (830K) [application/x-gzip]
Saving to: "opus-1.1.tar.gz"

100%[=====] 2014-08-28 21:16:15 (80.4 KB/s) - "opus-1.1.tar.gz" saved [850208/850208]

[root@sudha new]# tar xvzf ./opus-1.1.tar.gz
opus-1.1/
opus-1.1/Makefile.in
opus-1.1/AUTHORS
opus-1.1/opus.m4
opus-1.1/COPYING
opus-1.1/lmain.sh
opus-1.1/aclocal.m4
opus-1.1/INSTALL
opus-1.1/opus_headers.mk
opus-1.1/version.mk
opus-1.1/NEWS
opus-1.1/config.sub
opus-1.1/m4/
opus-1.1/m4/ltsugar.m4
opus-1.1/m4/lt~obsolete.m4
opus-1.1/m4/as-gcc-inline-assembly.m4
opus-1.1/m4/libtool.m4
opus-1.1/m4/ltversion.m4
opus-1.1/m4/ltoptions.m4
opus-1.1/configure
opus-1.1/celt_sources.mk
opus-1.1/include/
opus-1.1/include/opus_multistream.h
opus-1.1/include/opus_custom.h
opus-1.1/include/opus_types.h
opus-1.1/include/opus_defines.h
opus-1.1/include/opus.h
opus-1.1/Makefile.am
opus-1.1/silk_sources.mk
opus-1.1/opus.pc.in
opus-1.1/package_version
opus-1.1/compile
opus-1.1/Makefile.unix
opus-1.1/config.guess
opus-1.1/celt/
opus-1.1/celt/celt_decoder.c
opus-1.1/celt/cpu_support.h
opus-1.1/celt/vq.h
opus-1.1/celt/arm/
opus-1.1/celt/arm/fixed_armv5e.h
```

```

opus-1.1/doc/
opus-1.1/doc/Makefile.in
opus-1.1/doc/customdoxygen.css
opus-1.1/doc/header.html
opus-1.1/doc/Makefile.am
opus-1.1/doc/trivial_example.c
opus-1.1/doc/Doxyfile.in
opus-1.1/doc/footer.html
opus-1.1/doc/opus_logo.svg
opus-1.1/src/
opus-1.1/src/tansig_table.h
opus-1.1/src/opus_encoder.c
opus-1.1/src/analysis.h
opus-1.1/src/analysis.c
opus-1.1/src/repacketizer_demo.c
opus-1.1/src/opus_multistream_encoder.c
opus-1.1/src/opus_multistream_decoder.c
opus-1.1/src/mlp_data.c
opus-1.1/src/opus_multistream.c
opus-1.1/src/opus.c
opus-1.1/src/opus_decoder.c
opus-1.1/src/mlp.c
opus-1.1/src/opus_compare.c
opus-1.1/src/mlp.h
opus-1.1/src/opus_private.h
opus-1.1/src/repacketizer.c
opus-1.1/src/opus_demo.c
[root@sudha new]#

```

CONFIGURING OPTIONAL PROJECT SOURCE FILES

cd ..

cd libyuv

```

for SRCFILE in ./source/*.cc; do SRCFILEBASE=$(basename $SRCFILE .cc) ; echo
$SRCFILE ; gcc -fPIC -c -fno-stack-protector -Iinclude $SRCFILE -o
source/$SRCFILEBASE.o ; done && gcc -shared -Wl,-soname,libyuv.so -o libyuv.so
source/*.o -lstdc++

```

```

[root@sudha ffmpeg-0.10.4]# cd ..
[root@sudha new]# cd libyuv
[root@sudha libyuv]# for SRCFILE in ./source/*.cc; do SRCFILEBASE=$(basename $SRCFILE .cc) ; echo $SRCFILE ; gcc -fPIC -c -fno-stack-protector -Iinclude $SRCFILE -o sou
rce/$SRCFILEBASE.o ; done && gcc -shared -Wl,-soname,libyuv.so -o libyuv.so source/*.o -lstdc++
./source/compare.cc
./source/compare_common.cc
./source/compare_neon.cc
./source/compare_posix.cc
./source/compare_win.cc
./source/convert_argb.cc
./source/convert.cc
./source/convert_from_argb.cc
./source/convert_from.cc
./source/cpu_id.cc
./source/format_conversion.cc
./source/mjpeg_decoder.cc
./source/planar_functions.cc
./source/rotate_argb.cc
./source/rotate.cc
./source/rotate_mips.cc
./source/rotate_neon.cc
./source/row_any.cc
./source/row_common.cc
./source/row_mips.cc
./source/row_neon.cc
./source/row_posix.cc
./source/row_win.cc
./source/scale_argb.cc
./source/scale_argb_neon.cc
./source/scale.cc
./source/scale_mips.cc
./source/scale_neon.cc
./source/video_common.cc
[root@sudha libyuv]#

```

```

cp libyuv.so /usr/local/include
chmod 444 /usr/local/include/libyuv.so
cp include/libyuv.h /usr/local/include/
mkdir -p /usr/local/include/libyuv
cp include/libyuv/*.h /usr/local/include/libyuv/

```

```

[root@sudha libyuv]# cp libyuv.so /usr/local/include
cp: overwrite `/usr/local/include/libyuv.so'?
[root@sudha libyuv]# chmod 444 /usr/local/include/libyuv.so
[root@sudha libyuv]# cp include/libyuv.h /usr/local/include/
cp: overwrite `/usr/local/include/libyuv.h'?
[root@sudha libyuv]# mkdir -p /usr/local/include/libyuv
[root@sudha libyuv]# cp include/libyuv/*.h /usr/local/include/libyuv/
cp: overwrite `/usr/local/include/libyuv/basic_types.h'?
cp: overwrite `/usr/local/include/libyuv/compare.h'?
cp: overwrite `/usr/local/include/libyuv/convert_argb.h'?
cp: overwrite `/usr/local/include/libyuv/convert_from_argb.h'?
cp: overwrite `/usr/local/include/libyuv/convert_from.h'?

```

cd ..

cd opus-1.1/

```

[root@sudha sofia-sip-1.12.11]# cd ..
[root@sudha new]# cd opus-1.1/
[root@sudha opus-1.1]#

```

./configure --enable-shared

```

[root@sudha opus-1.1]# ./configure --enable-shared
checking whether make supports nested variables... yes
checking for a BSD-compatible install... /usr/bin/install -c
checking whether build environment is sane... yes
checking for a thread-safe mkdir -p... /bin/mkdir -p
checking for gawk...
checking whether make sets $(MAKE)... yes
checking whether to enable maintainer-specific portions of Makefiles... yes
checking build system type... i686-pc-linux-gnu
checking host system type... i686-pc-linux-gnu
checking how to print strings... printf
checking for style of include used by make... GNU
checking for gcc... gcc
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 gcc accepts -g... yes
checking for gcc option to accept ISO C89... none needed
checking dependency style of gcc... gcc3
checking for a sed that does not truncate output... /bin/sed
checking for grep that handles long lines and -e... /bin/grep
checking for egrep... /bin/grep -E
checking for fgrep... /bin/grep -F
checking for ld used by gcc... /usr/bin/ld
checking if the linker (/usr/bin/ld) is GNU ld... yes
checking for BSD- or MS-compatible name lister (nm)... /usr/bin/nm -B
checking the name lister (/usr/bin/nm -B) interface... BSD nm
checking whether ln -s works... yes
checking the maximum length of command line arguments... 1966080
checking whether the shell understands some XSI constructs... yes
checking whether the shell understands "+="... yes
checking how to convert i686-pc-linux-gnu file names to i686-pc-linux-gnu format... func_convert_file_noop
checking how to convert i686-pc-linux-gnu file names to toolchain format... func_convert_file_noop
checking for /usr/bin/ld option to reload object files... -r
checking for objdump... objdump
checking how to recognize dependent libraries... pass_all
checking for dltool... no
checking how to associate runtime and link libraries... printf %s\n
checking for ar... ar
checking for archiver @FILE support... @

```

```

opus 1.1: Automatic configuration OK.

Compiler support:

C99 var arrays: ..... yes
C99 lrintf: ..... yes
Use alloca: ..... no (using var arrays)

General configuration:

Floating point support: ..... yes
Fast float approximations: ..... no
Fixed point debugging: ..... no
Inline Assembly Optimizations: . No ASM for your platform, please send patches
External Assembly Optimizations:
Run-time CPU detection: ..... no
Custom modes: ..... no
Assertion checking: ..... no
Fuzzing: ..... no

API documentation: ..... yes
Extra programs: ..... yes
-----
Type "make; make install" to compile and install
Type "make check" to run the test suite

```

[root@sudha opus-1.1]#

make clean && make && make install

```

[root@sudha opus-1.1]# make clean && make && make install
Making clean in .
make[1]: Entering directory '/root/new/opus-1.1'
test -z "celt/arm/celt_pitch_xcorr_arm-gnu.S celt/arm/armopts-gnu.S" || rm -f celt/arm/celt_pitch_xcorr_arm-gnu.S celt/arm/armopts-gnu.S
test -z "libopus.la" || rm -f libopus.la
rm -f "./so_locations"
rm -rf .libs libs
rm -rf celt/.libs celt/_libs
rm -rf celt/arm/.libs celt/arm/_libs
rm -rf celt/tests/.libs celt/tests/_libs
rm -rf silk/.libs silk/_libs
rm -rf silk/fixed/.libs silk/fixed/_libs
rm -rf silk/float/.libs silk/float/_libs
rm -rf src/.libs src/_libs
rm -rf tests/.libs tests/_libs
( cd doc && make clean )
make[2]: Entering directory '/root/new/opus-1.1/doc'
rm -rf .libs libs
rm -f *.lo
make[2]: Leaving directory '/root/new/opus-1.1/doc'

```

```

rm -f silk/float/find_LTP_FLP.lo
rm -f silk/float/find_pitch_lags_FLP.o
rm -f silk/float/find_pitch_lags_FLP.lo
rm -f silk/float/find_pred_coefs_FLP.o
rm -f silk/float/find_pred_coefs_FLP.lo
rm -f silk/float/inner_product_FLP.o
rm -f silk/float/inner_product_FLP.lo
rm -f silk/float/k2a_FLP.o
rm -f silk/float/k2a_FLP.lo
rm -f silk/float/levinsondurbin_FLP.o
rm -f silk/float/levinsondurbin_FLP.lo
rm -f silk/float/noise_shape_analysis_FLP.o
rm -f silk/float/noise_shape_analysis_FLP.lo
rm -f silk/float/pitch_analysis_core_FLP.o
rm -f silk/float/pitch_analysis_core_FLP.lo
rm -f silk/float/prefilter_FLP.o
rm -f silk/float/prefilter_FLP.lo
rm -f silk/float/process_gains_FLP.o
rm -f silk/float/process_gains_FLP.lo
rm -f silk/float/regularize_correlations_FLP.o
rm -f silk/float/regularize_correlations_FLP.lo
rm -f silk/float/residual_energy_FLP.o
rm -f silk/float/residual_energy_FLP.lo
rm -f silk/float/scale_copy_vector_FLP.o
rm -f silk/float/scale_copy_vector_FLP.lo
rm -f silk/float/scale_vector_FLP.o
rm -f silk/float/scale_vector_FLP.lo
rm -f silk/float/schur_FLP.o
rm -f silk/float/schur_FLP.lo
rm -f silk/float/solve_LS_FLP.o
rm -f silk/float/solve_LS_FLP.lo

CC      silk/float/LPC_inv_pred_gain_FLP.lo
CC      silk/float/pitch_analysis_core_FLP.lo
CC      silk/float/scale_copy_vector_FLP.lo
CC      silk/float/scale_vector_FLP.lo
CC      silk/float/schur_FLP.lo
CC      silk/float/sort_FLP.lo
CC      src/opus.lo
CC      src/opus_decoder.lo
src/opus_decoder.c: In function 'opus_decode_frame':
src/opus_decoder.c:218: warning: 'pcm_transition' may be used uninitialized in this function
  CC      src/opus_encoder.lo
  CC      src/opus_multistream.lo
  CC      src/opus_multistream_encoder.lo
  CC      src/opus_multistream_decoder.lo
  CC      src/repacketizer.lo
  CC      src/analysis.lo
  CC      src/mlp.lo
  CC      src/mlp_data.lo
  CCLD  libopus.la
  CC      src/opus_demo.o
  CCLD  opus_demo
  CC      src/repacketizer_demo.o

- use the '-Wl,-rpath -Wl,LIBDIR' linker flag
- have your system administrator add LIBDIR to '/etc/ld.so.conf'

```

See any operating system documentation about shared libraries for more information, such as the ld(1) and ld.so(8) manual pages.

```

-----
make[4]: Entering directory `/root/new/opus-1.1/doc'
make[5]: Entering directory `/root/new/opus-1.1/doc'
make[5]: Nothing to be done for `install-exec-am'.
make[5]: Nothing to be done for `install-data-am'.
make[5]: Leaving directory `/root/new/opus-1.1/doc'
make[4]: Leaving directory `/root/new/opus-1.1/doc'
 /bin/mkdir -p '/usr/local/share/aclocal'
 /usr/bin/install -c -m 644 opus.m4 '/usr/local/share/aclocal'
 /bin/mkdir -p '/usr/local/lib/pkgconfig'
 /usr/bin/install -c -m 644 opus.pc '/usr/local/lib/pkgconfig'
 /bin/mkdir -p '/usr/local/include/opus'
 /usr/bin/install -c -m 644 include/opus.h include/opus_multistream.h include/opus_
make[3]: Leaving directory `/root/new/opus-1.1'
make[2]: Leaving directory `/root/new/opus-1.1'
make[1]: Leaving directory `/root/new/opus-1.1'

```

REFERENCES:

<https://www.youtube.com/watch?v=7pQIIQ-mY90>

<https://github.com/muggot/openmcu/tree/3.46>

http://openmcu.ru/wiki/en/install/src_linux

<http://openmcu.ru/eng.htm>

<http://openmcu.ru/forum/index.php/board,13.0.html>