

## **Build notes for Linux type systems - tested on amd64**

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It is assumed you know how to unpack the stuff after downloading, these are just the commands I used to build each thing on my 64 bit linux system.

I'm keeping everything in ~/bitcoin where ~ is /home/solar (solar being my unix id)  
The dependencies are under ~/bitcoin/deps, the bitcoin source from svn is in ~/bitcoin/trunk

This process should be the same on i386 linux but you'll have to change a couple of small things when building the deps (should be obvious).

### **Boost**

<http://www.boost.org/users/download/>

```
./bootstrap.sh
./bjam --prefix=/home/solar/bitcoin/deps link=static runtime-
link=static install
```

### **OpenSSL**

Download from <http://www.openssl.org/source/>

```
./Configure --prefix=/home/solar/bitcoin/deps --openssldir=/
home/solar/bitcoin/deps/openssl linux-x86_64
make && make install
```

### **Berkeley DB**

Download from <http://freshmeat.net/projects/berkeleydb/>

```
cd build_unix
../dist/configure --prefix=/home/solar/bitcoin/deps --enable-cxx
&& make && make install
```

### **wxWidgets**

<http://prdownloads.sourceforge.net/wxwindows/wxWidgets-2.9.0.tar.bz2>

```
sudo apt-get install libgtk2.0-dev (for debian)
```

```
mkdir buildgtk
cd buildgtk
../configure --prefix=/home/solar/bitcoin/deps --with-gtk --
disable-shared --disable-debug_flag --enable-stl --enable-utf8
--with-libjpeg=builtin --with-libpng=builtin --with-
regex=builtin --with-libtiff=builtin --with-zlib=builtin --with-
expat=builtin
```

**make && make install**

### **Bitcoin**

```
svn checkout https://bitcoin.svn.sourceforge.net/svnroot/
bitcoin/trunk
```

**edit net.h and change line 15: 'htons(8333)' to 0x8d20**

```
make -f makefile.unix
make -f makefile.unix bitcoind
```

### **My modified makefile.unix**

```
# Copyright (c) 2009-2010 Satoshi Nakamoto
# Distributed under the MIT/X11 software license, see the
# accompanying
# file license.txt or http://www.opensource.org/licenses/mit-
license.php.
```

```
DEPSDIR=/home/solar/bitcoin/deps
```

```
INCLUDEPATHS= \
-I"${DEPSDIR}/include"
```

```
LIBPATHS= \
-L"${DEPSDIR}/lib"
```

```
WXLIBS=$(shell ${DEPSDIR}/bin/wx-config --libs --static)
WXBASELIBS=$(shell ${DEPSDIR}/bin/wx-config --libs base --
static)
```

```
LIBS= -dead_strip \
${DEPSDIR}/lib/libdb_cxx-4.8.a \
${DEPSDIR}/lib/libboost_system.a \
${DEPSDIR}/lib/libboost_filesystem.a \
```

```
$(DEPSDIR)/lib64/libcrypto.a
```

```
WXDEFS=$(shell $(DEPSDIR)/bin/wx-config --cxxflags) -DNOPCH  
DEBUGFLAGS=-g -DwxDEBUG_LEVEL=0  
CFLAGS=-O2 -Wno-invalid-offsetof -Wformat $(DEBUGFLAGS) $(  
(WXDEFS) $(INCLUDEPATHS)  
HEADERS=headers.h strlcpy.h serialize.h uint256.h util.h key.h  
bignum.h base58.h \  
    script.h db.h net.h irc.h main.h rpc.h uibase.h ui.h init.h  
sha.h
```

```
all: bitcoin
```

```
headers.h.gch: headers.h $(HEADERS)  
    g++ -c $(CFLAGS) -o $@ $<
```

```
obj/%.o: %.cpp $(HEADERS) headers.h.gch  
    g++ -c $(CFLAGS) -o $@ $<
```

```
obj/sha.o: sha.cpp sha.h  
    g++ -c $(CFLAGS) -O3 -o $@ $<
```

```
OBJS= \  
    obj/util.o \  
    obj/script.o \  
    obj/db.o \  
    obj/net.o \  
    obj/irc.o \  
    obj/main.o \  
    obj/rpc.o \  
    obj/init.o
```

```
bitcoin: $(OBJS) obj/ui.o obj/uibase.o obj/sha.o  
    g++ $(CFLAGS) -o $@ $(LIBPATHS) $^ $(WXLIBS) $(LIBS)
```

```
obj/nogui/%.o: %.cpp $(HEADERS)  
    g++ -c $(CFLAGS) -DwxUSE_GUI=0 -o $@ $<
```

```
bitcoind: $(OBJS:obj/%=obj/nogui/%) obj/sha.o  
    g++ $(CFLAGS) -o $@ $(LIBPATHS) $^ $(WXBASELIBS) $(LIBS)
```

```
clean:
```

```
-rm -f bitcoin bitcoind  
-rm -f obj/*  
-rm -f obj/nogui/*  
-rm -f headers.h.gch
```

```
# end
```