1.安装xcode并安装命令行工具

操作系统：OS X Mountain Lion 10.8.5

xcode：5.1

clang++: clang-503.0.40

验证gcc，g++版本，OS X默认下不再使用gcc作为C语言编译器了，转而使用自家的clang＋llvm

xgcs-Mac:build\_unix xgc$ gcc -v

Configured with: --prefix=/Applications/Xcode.app/Contents/Developer/usr --with-gxx-include-dir=/usr/include/c++/4.2.1

Apple LLVM version 5.1 (clang-503.0.40) (based on LLVM 3.4svn)

Target: x86\_64-apple-darwin12.5.0

Thread model: posix

xgcs-Mac:build\_unix xgc$ g++ -v

Configured with: --prefix=/Applications/Xcode.app/Contents/Developer/usr --with-gxx-include-dir=/usr/include/c++/4.2.1

Apple LLVM version 5.1 (clang-503.0.40) (based on LLVM 3.4svn)

Target: x86\_64-apple-darwin12.5.0

Thread model: posix

2.安装brew（软件包管理工具）

/usr/bin/ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"

3.安装automake等工具

brew install autoconf automake libtool

4.安装openssl

brew install openssl

5.安装miniupnpc

brew install miniupnpc

6.安装boost

1）查找boost版本号，编译发现版本1.55链接时有问题，所以安装了1.60

xgcs-Mac:build\_unix xgc$ brew search boost

boost boost-build homebrew/versions/boost-python159 homebrew/versions/boost159

boost-bcp boost-python homebrew/versions/boost155 homebrew/versions/boost160 ✔

2）获取编译安装boost160选项

xgcs-Mac:build\_unix xgc$ brew options boost

--c++11

Build using C++11 mode

--universal

Build a universal binary

--with-icu4c

Build regexp engine with icu support

--with-mpi

Build with MPI support

--without-single

Disable building single-threading variant

--without-static

Disable building static library variant

--HEAD

Install HEAD version

3）安装boost

brew install homebrew/versions/boost160 --c++11

7.编译并安装db-4.8.30

cd db-4.8.30/build\_unix

../dist/configure --enable-cxx --with-pic

修改Makefile，CPPFLAGS加上-stdlib=libc++

CPPFLAGS= -stdlib=libc++ -I$(builddir) -I$(srcdir)

sudo make

sudo make install

8.编译leveldb

修改Makefile，CFLAGS，CXXFLAGS都添加-stdlib=libc++

CFLAGS += -stdlib=libc++ -I. -I./include $(PLATFORM\_CCFLAGS) $(OPT)

CXXFLAGS += -stdlib=libc++ -I. -I./include $(PLATFORM\_CXXFLAGS) $(OPT)

编译libleveldb.a

make all

编译libmemenv.a

make libmemenv.a

将libleveldb.a，libmemenv.a拷贝到后台程序leveldb目录下。

9.编译后台程序，以koala的为例

1）修改autogen-koala-man.sh

CPPFLAGS="-stdlib=libc++ -std=c++11 -I/usr/local/opt/boost160/include -I/usr/local/BerkeleyDB.4.8/include" \

LDFLAGS="-L/usr/local/opt/boost160/lib -L/usr/local/BerkeleyDB.4.8/lib -lc++" \

./configure \

--disable-upnp-default \

--enable-debug \

--without-gui \

$flag1 \

$flag2 \

$flag3 \

$flag4 \

--with-boost-libdir=/usr/local/opt/boost160/lib \

--with-incompatible-bdb

2）编译koalad

a）在mac上编译要将代码中的make\_shared函数加上命名空间，不然编译器会报错。

改为std:: make\_shared

3)编译koala\_test

a）将BOOST\_MESSAGE改为BOOST\_TEST\_MESSAGE，BOOST\_MESSAGE宏在1.60中已经废弃

b）修改util\_tests.cpp中的BOOST\_AUTO\_TEST\_CASE(strprintf\_numbers)用例中的所有BOOST\_CHECK。

BOOST\_CHECK(strprintf("%s %d %s", B, s64t, E) == B" -9223372036854775807 "E);

改为

BOOST\_CHECK(strprintf("%s %d %s", B, s64t, E) == B " -9223372036854775807 " E);

B和E与"之间加一个空格，不然编译器会报错。

c）在mac上编译要将代码中的make\_shared函数加上命名空间，不然编译器会报错。

改为std:: make\_shared

4）编译koala\_ptest

a）在mac上编译要将代码中的make\_shared函数加上命名空间，不然编译器会报错。

改为std:: make\_shared

10.运行

xgcs-Mac:src xgc$ ./koalad -datadir=/Users/xgc/Downloads/koala\_main

Koala version v1.1.1.2-c951113-dirty-release-linux (2016-06-14 18:11:42 +0800)

Using OpenSSL version OpenSSL 1.0.2j 26 Sep 2016

Startup time: 2016-09-28 07:09:42

Default data directory /Users/xgc/Library/Application Support/Bitcoin

Using data directory /Users/xgc/Downloads/koala\_main/main

Using at most 125 connections ( 275 file descriptors available)

xgcs-Mac:src xgc$ ./koalad -datadir=/Users/xgc/Downloads/koala\_main getinfo

{

"version" : 1010102,

"fullversion" : "v1.1.1.2-c951113-dirty-release-linux (2016-06-14 18:11:42 +0800)",

"protocolversion" : 10001,

"walletversion" : 0,

"balance" : 0.00000000,

"blocks" : 212048,

"timeoffset" : 0,

"connections" : 6,

"proxy" : "",

"difficulty" : 363.26346787,

"nettype" : "MAIN",

"chainwork" : "0000000000000000000000000000000000000000000000000122f7f25d9b1186",

"tipblocktime" : 1475033887,

"paytxfee" : 0.00010000,

"relayfee" : 0.00001000,

"fuelrate" : 1,

"fuel" : 0,

"data directory" : "/Users/xgc/Downloads/koala\_main/main",

"tip block hash" : "a6178607caf4bed0710bb675008cb3dc4477d3cafa8ff1bd13f9ff0be4526bd7",

"errors" : ""

}