

Lab 1, Compiler

By ADMIN | Published: NOVEMBER 16, 2012

Let’s start with tools that we need to just build the OS for ARM. First clone official inferno os repository from google code repository:

```
1 | # hg clone https://code.google.com/p/inferno-os/
```

What we need to move further? We need the ARM cross compiler, linker, etc. For this, let’s just compile inferno targeting mac as host (we are on mac now, so we will get hosted inferno for mac as result):

```
01 | # cd inferno-os/
02 | # INF_ROOT=`pwd` perl -i -pe 's/^ROOT=.*\/ROOT=$ENV{INF_ROOT}/m' mkconfig
03 | # perl -i -pe 's/^SYSHOST=.*\/SYSHOST=MacOSX/m' mkconfig
04 | # perl -i -pe 's/^OBJTYPE=.*\/OBJTYPE=386/m' mkconfig
05 | # sh makemk.sh
06 | # PATH=`pwd`/MacOSX/386/bin:$PATH mk nuke
07 | # PATH=`pwd`/MacOSX/386/bin:$PATH mk install
08 | ... waiting just few minutes ...
09 | # ls MacOSX/386/bin/
10 | 0a      2l      8l      iar      ksize    ms2      tc
11 | 0c      5a      acid    idea     kstrip   ndate    va
12 | 0l      5c      asm     inm      limbo    qa       vc
13 | 1a      5coff   c2l     iyacc    md5sum   qc       vl
14 | 1c      5cv     data2c  ka       mk       ql
15 | 1l      5l      data2s  kc       mk.save  sqz
16 | 2a      8a      emu     k1       mkext    srclist
17 | 2c      8c      ftl     kprof    mkppcimage styxtest
18 | #
```

Yes! Now we have all needed cross-platform tools for building Inferno OS for ARM, see 5c – C compiler, 5a – ARM assembler, 5l – ARM linker.

Let’s check ARM asm generated:

```
1 | # export PATH=`pwd`/MacOSX/386/bin:$PATH
2 | # echo "int main() { return 123; }" >tmp.c && 5c -S tmp.c && rm tmp.c
3 |      TEXT      main+0(SB),0,$0
4 |      MOVW      $123,R0
5 |      RET      ,
6 |      RET      ,
7 |      END      ,
```

This entry was posted in *Blog, Inferno OS, Raspberry Pi, Research*. Bookmark the *permalink*. *Post a comment* or leave a *trackback*: *Trackback URL*.

Categories

- [Blog](#)
- [Boost](#)
- [C++](#)
- [Cryptography](#)
- [Embedding](#)
- [Hybrids](#)
- [Inferno OS](#)
- [MacAppStore](#)
- [Misc](#)
- [Models](#)
- [Projects](#)
- [PyQt](#)
- [PySide](#)
- [Qt](#)
- [QtSpeech](#)
- [Raspberry Pi](#)
- [Research](#)
- [Ru](#)
- [TogMeg](#)
- [Trac](#)
- [TTS](#)
- [Tutorial](#)
- [Undo](#)
- [Web](#)



