

Кросс-компиляция openssh-portable

zlib

```
340 git clone https://github.com/madler/zlib.git
341 cd ../zlib
342 ARCH=arm CC=arm-linux-gnueabi-gcc ./configure --prefix=_install/
343 ARCH=arm CC=arm-linux-gnueabi-gcc make -j 6
344 ARCH=arm CC=arm-linux-gnueabi-gcc make install -j 6
```

openssl

```
133 git clone https://github.com/openssl/openssl.git
134 cd openssl
135 git checkout OpenSSL_1_1_1
136 ./Configure linux-armv4 --prefix=$PWD/_install --cross-compile-prefix=arm-linux-gnueabi-gcc
137 make -j6
138 $?
139 make install -j6
140 $?
```

openssh-portable

```
553 git clone https://github.com/openssh/openssh-portable.git
554 cd ../openssh-portable
555 ./configure --disable-strip --prefix=$PWD/_install --host=arm-linux-gnueabi-gcc --with-zlib=$PWD/../zlib/_install/ --with-ssl-dir=$PWD/../openssl/_install/
556 make -j 6
557 make install -j 6
```

Подготовка файловой системы и запуск

```
579 cd ..
580 cp -r */_install/* _install/
581 cp ~/gcc-linaro-5.4.1-2017.05-x86_64_arm-linux-gnueabi-gcc/arm-linux-gnueabi-gcc/libc/lib/* _install/lib
582 arm-linux-gnueabi-gcc-strip _install/lib/*
583 cd _install
584 find . | cpio -o -H newc | gzip > initramfs.cpio.gz && mv initramfs.cpio.gz ..
585 cd ..
586 QEMU_AUDIO_DRV=none qemu-system-arm -M vxpress-a9 -kernel zImage -initrd initramfs.cpio.gz -dtb vxpress
2p-ca9.dtb -append "rdinit=/bin/ash" -nographic
```

Вывод qemu

```
rev1
[ 3.342658] input: ImExPS/2 Generic Explorer Mouse as /devices/platform/bus@40000000/bus@40000000:motherboard-bus@40000000/bus@40000000:iofpga@7,00000000/10007000.kmi/serial/input/input2
[ 3.505581] clk: Disabling unused clocks
[ 3.505966] PM: genpd: Disabling unused power domains
[ 3.551172] Freeing unused kernel image (initmem) memory: 2048K
[ 3.555422] Run /bin/ash as init process
/bin/ash: can't access tty; job control turned off
/ # [ 13.932065] amba 1000f000.wdt: deferred probe pending: (reason unknown)
[ 13.932251] amba 100e0000.memory-controller: deferred probe pending: (reason unknown)
[ 13.932292] amba 100e1000.memory-controller: deferred probe pending: (reason unknown)
[ 13.932326] amba 100e5000.watchdog: deferred probe pending: (reason unknown)

/ # sshd
Couldn't open /dev/null: No such file or directory
/ # ls lib
ld-2.21.so          libcrypt.so.1.1    libssl.so
ld-linux-armhf.so.3 libdl-2.21.so      libssl.so.1.1
libc-2.21.so        libdl.so.2         libutil-2.21.so
libc.so.6           libpthread-2.21.so libutil.so.1
libcrypt-2.21.so    libpthread.so.0    libz.so
libcrypt.so.1       libresolv-2.21.so  libz.so.1
libcrypto.so        libresolv.so.2     libz.so.1.2.1.2
/ #
```