

Iperf3 compilation for arm64 android phone:

Download source from:

<https://github.com/baiyufei/iperf3-android>

Since this git has steps for old android phone , modifications needs to be made to the [configure-android.sh](#) and [iperf3.gyp](#) files.

[configure-android.sh](#)

```
#!/bin/bash
export TOOLCHAIN=$PWD/android-toolchain
mkdir -p $TOOLCHAIN
API=21
NDK_ROOT=$1
echo $API
export CFLAGS="-D__ANDROID_API__=$API"

function build() {
  ARCH=$1
  PREFIX=$2
  TARGET=$3
  OUT=out_$ARCH
  $NDK_ROOT/build/tools/make-standalone-toolchain.sh \
    --toolchain=aarch64-linux-android21 \
    --arch=$ARCH \
    --install-dir=$TOOLCHAIN \
    --platform=android-$API \
    --force

  export PATH=$TOOLCHAIN/bin:$PATH
  export AR=$PREFIX-ar
  export CC=$PREFIX-clang
  export CXX=$PREFIX-clang++
  export LINK=$PREFIX-clang++
  gyp --depth=. -Goutput_dir=$OUT
  make V=1 -j16
}

function build_arm() {
  build arm64 aarch64-linux-android21 arm64
}
```

build\_arm

[iperf3.gyp](#)

```
{
  'target_defaults': {
  },
  'targets': [{
    'target_name': 'iperf3',
    'type': 'executable',
    'c_flags': 'fPIE',
    'ldflags': ['-pie', '-frtti', '-fexceptions'],
    'sources': [
      './src/cjson.c',
      './src/cjson.h',
      './src/dscp.c',
      './src/flowlabel.h',
      './src/iperf.h',
      './src/iperf_api.c',
      './src/iperf_api.h',
      './src/iperf_auth.c',
      './src/iperf_auth.h',
      './src/iperf_client_api.c',
      './src/iperf_error.c',
      './src/iperf_locale.c',
      './src/iperf_locale.h',
      './src/iperf_sctp.c',
      './src/iperf_sctp.h',
      './src/iperf_server_api.c',
      './src/iperf_tcp.c',
      './src/iperf_tcp.h',
      './src/iperf_udp.c',
      './src/iperf_udp.h',
      './src/iperf_util.c',
      './src/iperf_util.h',
      './src/libiperf.3',
      './src/main.c',
      './src/net.c',
      './src/net.h',
      './src/portable_endian.h',
      './src/queue.h',
      './src/tcp_info.c',
      './src/timer.c',
```

```
        './src/timer.h',  
        './src/units.c',  
        './src/units.h',  
        './src/iperf_config.h',  
        './src/version.h',  
    ],  
    'include_dirs': [  
        'src',  
    ],  
    },  
    ]}
```

Now compile the directory

```
./configure-android.sh ~/android-ndk-r21c
```

NDK needs to be downloaded in Linux machine.

```
adb push out_arm64/Default/iperf3 /data/local/tmp/ -> copy the iperf3 to phone.
```

Now in phone.

When you run iperf3 it gives error as below:

```
taimen:/data/local/tmp # ./iperf3 --version
```

```
CANNOT LINK EXECUTABLE "./iperf3": library "libc++_shared.so" not found
```

Hence you need to set LD\_LIBRARY\_PATH, which needs the libc++\_shared.so file. Hence install termux which has inbuilt c/c++ support and set the path as below.

```
export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/data/data/com.termux/files/usr/lib/
```

Now run iperf3 it will run.