

目次

configure & make	1
configure	1
build	2

Last
update:
2018/12/27 mae3xx_tips:build_openjdk:configure_and_make:start https://ma-tech.centurysys.jp/doku.php?id=mae3xx_tips:build_openjdk:configure_and_make:start
09:38

configure & make

configure

configure スクリプトを実行します。

```
bionic64:~/src/openjdk-jdk11u$ bash configure --openjdk-target=arm-linux-gnueabihf --with-jvm-variants=client,server,minimal \
--disable-warnings-as-errors --enable-headless-only --disable-manpages --
with-abi-profile=arm-vfp-hflt
configure: Configuration created at Thu Dec 27 09:16:02 JST 2018.
checking for basename... /usr/bin/basename
checking for bash... /bin/bash
checking for cat... /bin/cat
checking for chmod... /bin/chmod
checking for cmp... /usr/bin/cmp
checking for comm... /usr/bin/comm
checking for cp... /bin/cp
checking for cut... /usr/bin/cut
checking for date... /bin/date
checking for gdiff... no
checking for diff... /usr/bin/diff
checking for dirname... /usr/bin dirname
... 略 ...
using configure arguments '--openjdk-target=arm-linux-gnueabihf --with-jvm-variants=client,server,minimal --disable-warnings-as-errors --enable-headless-only --disable-manpages --with-abi-profile=arm-vfp-hflt'.
```

Configuration summary:

- * Debug level: release
- * HS debug level: product
- * JVM variants: client server minimal
- * JVM features: client: 'cds cmsgc compiler1 epsilon gc jfr jni-check jvmti management nmt parallelgc serialgc services vm-structs'
server: 'cds cmsgc compiler1 compiler2 epsilon gc jfr jni-check jvmti management nmt parallelgc serialgc services vm-structs'
minimal: 'compiler1 link-time-opt minimal serialgc'
- * OpenJDK target: OS: linux, CPU architecture: arm, address length: 32
- * Version string: 11.0.1+13-centurysys-1-MAE3xx (11.0.1)

Tools summary:

- * Boot JDK: java version "11.0.1" 2018-10-16 LTS Java(TM) SE Runtime Environment 18.9 (build 11.0.1+13-LTS) Java HotSpot(TM) 64-Bit Server VM 18.9 (build 11.0.1+13-LTS, mixed mode) (at /usr/lib/jvm/java-11-oracle)
- * Toolchain: gcc (GNU Compiler Collection)
- * C Compiler: Version 7.3.0 (at /usr/bin/arm-linux-gnueabihf-gcc)
- * C++ Compiler: Version 7.3.0 (at /usr/bin/arm-linux-gnueabihf-g++)

Last update: 2018/12/27 mae3xx_tips:build_openjdk:configure_and_make:start https://ma-tech.centurysys.jp/doku.php?id=mae3xx_tips:build_openjdk:configure_and_make:start 09:38

Build performance summary:

- * Cores to use: 16
- * Memory limit: 32170 MB

NOTE: You have requested to build more than one version of the JVM, which will result in longer build times.

build

make でビルドを実行します。

```
bionic64:~/src/openjdk-jdk11u$ make jdk-image JOBS=8
Building target 'jdk-image' in configuration 'linux-arm-normal-
clientANDserverANDminimal-release'
Warning: No mercurial configuration present and no .src-rev
Parsing 2 properties into enum-like class for jdk.compiler
Compiling 7 properties into resource bundles for jdk.jshell
Compiling 13 properties into resource bundles for jdk.javadoc
Compiling 12 properties into resource bundles for jdk.jdeps
Compiling 19 properties into resource bundles for jdk.compiler
Compiling 117 files for BUILD_java.compiler.interim
Compiling 1 files for BUILD_JFR_TOOLS
Compiling 1 files for BUILD_JFR_TOOLS
Compiling 1 files for BUILD_JFR_TOOLS
Compiling 394 files for BUILD_jdk.compiler.interim
... 略 ...
注意:一部の入力ファイルは推奨されないAPIを使用またはオーバーライドしています。
注意:詳細は、-Xlint:deprecationオプションを指定して再コンパイルしてください。
注意:入力ファイルの操作のうち、未チェックまたは安全ではないものがあります。
注意:詳細は、-Xlint:uncheckedオプションを指定して再コンパイルしてください。
Creating support/demos/image/jfc/SampleTree/SampleTree.jar
Creating support/demos/image/jfc/TableExample/TableExample.jar
Creating support/demos/image/jfc/TransparentRuler/TransparentRuler.jar
Creating support/demos/image/jfc/J2Ddemo/J2Ddemo.jar
Creating jdk image
Stopping sjavac server
Finished building target 'jdk-image' in configuration 'linux-arm-normal-
clientANDserverANDminimal-release'
```

ビルドが完了しました。

build/linux-arm-normal-clientANDserverANDminimal-release/images/jdk/ 以下に一式あります。

```
bionic64:~/src/openjdk-jdk11u$ ls -ln build/linux-arm-normal-
clientANDserverANDminimal-release/images/jdk/
```

合計 32

```
drwxrwxr-x 2 1000 1000 4096 12月 27 09:30 bin
drwxrwxr-x 4 1000 1000 4096 12月 27 09:30 conf
drwxrwxr-x 4 1000 1000 4096 12月 27 09:30 demo
drwxrwxr-x 3 1000 1000 4096 12月 27 09:30 include
drwxrwxr-x 2 1000 1000 4096 12月 27 09:30 jmods
drwxrwxr-x 68 1000 1000 4096 12月 27 09:30 legal
drwxrwxr-x 8 1000 1000 4096 12月 27 09:30 lib
-rw-rw-r-- 1 1000 1000 1099 12月 27 09:30 release
```

```
bionic64:~/src/openjdk-jdk11u$ file build/linux-arm-normal-
clientANDserverANDminimal-release/images/jdk/bin/java
build/linux-arm-normal-clientANDserverANDminimal-
release/images/jdk/bin/java: ELF 32-bit LSB shared object, ARM, EABI5
version 1 (SYSV), dynamically linked,
interpreter /lib/ld-linux-armhf.so.3, for GNU/Linux 3.2.0,
BuildID[sha1]=27f16c3edf4d2bd688aafcd4337539e81a806717, not stripped
```

たしかに armhf 用バイナリができあがっていることが確認できます。

du コマンドで容量を確認すると 885240iB¹⁾もあるため、実機にはそのまま持ち込むことは難しそうです。

```
885240 build/linux-arm-normal-clientANDserverANDminimal-release/images/jdk
```

そこで jlink により compact3 相当に shrink を行います。

¹⁾

約 864MiB

From:

<https://ma-tech.centurysys.jp/> - MA-X/MA-S/MA-E/IP-K Developers' WiKi

Permanent link:

https://ma-tech.centurysys.jp/doku.php?id=mae3xx_tips:build_openjdk:configure_and_make:start

Last update: 2018/12/27 09:38