sbt

Contents

Preface

sbt   ,   sbt   ,   ,

            sbt

    !

    ,   .sbt   ,scopes,

    ,

    sbt   !

2

sbt

sbt ， :

- sbt
- hello world
  - —
  - —
- sbt sbt
- .sbt

, Jar Shell , , Mac,Windows,Linux,

sbt , ,HTTP ,JVM

Mac sbt

: ,

Macports

```
$ port install sbt
```

Homebrew

```
$ brew install sbt
```

ZIP TGZ

Windows に sbt をインストールする

Windows

[msi]

[ZIP] か [TGZ]

Linux に sbt をインストールする

[ZIP] か [TGZ]

RPM や DEB

:

- [RPM]
- [DEB]

: [sbt-launcher-package]

Gentoo

sbt の ebuild は sbt の [ebuilds] ebuilds sbt:

```
$ mkdir -p /usr/local/portage && cd /usr/local/portage
$ git clone git://github.com/whiter4bbit/overlays.git
$ echo "PORTDIR_OVERLAY=$PORTDIR_OVERLAY /usr/local/portage/overlays" >> /etc/make.conf
$ emerge sbt-bin
```

: ebuild

4

sbt

[sbt-launch.jar](#),

Unix

[sbt-launch.jar](#)   ~/bin
      jar, ~/bin/sbt   :

```
SBT_OPTS="-Xms512M -Xmx1536M -Xss1M -XX:+CMSClassUnloadingEnabled -XX:MaxPermSize=256M"
java $SBT_OPTS -jar `  $0`/sbt-launch.jar "$@"
```

        :

```
$ chmod u+x ~/bin/sbt
```

Windows

  Windows   Cygwin   , batch   path ,   **sbt**
    sbt   ,   ,   JVM

Non-Cygwin   Windows   Cygwin ,   sbt.bat   batch :

```
set SCRIPT_DIR=%~dp0
java -Xms512M -Xmx1536M -Xss1M -XX:+CMSClassUnloadingEnabled -XX:MaxPermSize=256M -jar "%SCRIP
```

    [sbt-launch.jar](#)   sbt.bat

Cygwin   Windows   Cygwin   Windows ,   bash   ~/bin/sbt:

```
SBT_OPTS="-Xms512M -Xmx1536M -Xss1M -XX:+CMSClassUnloadingEnabled -XX:MaxPermSize=256M"
java $SBT_OPTS -jar sbt-launch.jar "$@"
```

    [sbt-launch.jar](#)   sbt-launch.jar,   cygpath   :

```
$ chmod u+x ~/bin/sbt
```

Cygwin   Ansi   Cygwin   Ansi (Ansi   stty   ),   bash
~/bin/sbt:

```
SBT_OPTS="-Xms512M -Xmx1536M -Xss1M -XX:+CMSClassUnloadingEnabled -XX:MaxPermSize=256M"
stty -icanon min 1 -echo > /dev/null 2>&1
java -Djline.terminal=jline.UnixTerminal -Dsbt.cygwin=true $SBT_OPTS -jar sbt-launch.jar "$@"
stty icanon echo > /dev/null 2>&1
```

   [sbt-launch.jar](#)   sbt-launch.jar,   cygpath   :

```
$ chmod u+x ~/bin/sbt
```

   (backspace)   scala   ,   (erase character),   stty   cygwin
(mintty),   ->   ,"   ^H"   cygwin   ^H

      :   [pull request](#)

Hello, World

          [sbt](#)

    sbt   hello   ,   hw.scala:

```scala
object Hi {
  def main(args: Array[String]) = println("Hi!")
}
```

   hello   sbt,   **run**   sbt   Linux   OS X   :

```
$ mkdir hello
$ cd hello
$ echo 'object Hi { def main(args: Array[String]) = println("Hi!") }' > hw.scala
$ sbt
...
> run
...
Hi!
```

    ,sbt   sbt   :

-
- `src/main/scala` `src/main/java`
- `src/test/scala` `src/test/java`
- `src/main/resources` `src/test/resources`
- `lib` jar

,sbt Scala

sbt run sbt console Scala REPL sbt console class-path, Scala

build.sbt

, hello , hello/build.sbt :

```
name := "hello"

version := "1.0"

scalaVersion := "2.10.3"
```

, .sbt build.sbt

jar , build.sbt name version

sbt

hello/project/build.properties sbt , 0.13.6:

```
sbt.version=0.13.6
```

sbt release 99% project/build.properties sbt

sbt Hello, World

sbt ," " , Hello, World hello , hello/build.sbt hello/hw.scala, hello

`hello/hw.scala`   ,   ,

sbt Maven   (   ):

```
src/
  main/
    resources/
       <files to include in main jar here>
    scala/
       <main Scala sources>
    java/
       <main Java sources>
  test/
    resources
       <files to include in test jar here>
    scala/
       <test Scala sources>
    java/
       <test Java sources>
```

`src/`   ,

sbt

        build.sbt   sbt   project

project   .scala ,   .sbt   .scala

```
build.sbt
project/
  Build.scala
```

  `project/`   .sbt ,   .sbt   ,

   (classes,   jars,   ,caches   )   target

  `.gitignore` (   ) :

target/

:   / (   )   / (target/   project/target/)

sbt   sbt   Hello, World

sbt   :

```
$ sbt
```

sbt   (tab   )

, sbt   compile:

```
> compile
```

compile,

run

exit   Ctrl+D (Unix)   Ctrl+Z (Windows)

sbt,   sbt   ,   sbt   :

```
$ sbt clean compile "testOnly TestA TestB"
```

,testOnly   TestA   TestB   (clean, compile,   testOnly)

- -   ,   sbt

~ ,   ,   :

```
> ~ compile
```

~

9

sbt

clean

(target)

compile

(src/main/scala src/main/java)

test

console

classpath Scala :quit, Ctrl+D (Unix), Ctrl+Z (Windows)
sbt

run < >*

sbt main class

package

src/main/resources src/main/scala src/main/java class jar

help < >

,

reload

(build.sbt, project/*.scala, project/*.sbt)

Tab

tab sbt , tab ,

, sbt :

!

!!

!:

!:n

      n

!n

      n   ,   !:

!-n

        n

!string

       string

!?string

        string

.sbt

Scopes

.scala