<JSTORM>

Java Foundation

Document Information

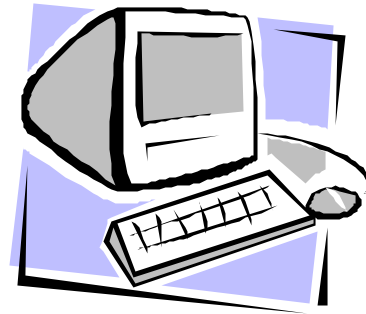|	
Document title:	Java Foundation
Document file name:	javaFoundation_ywlee_fundamental_jstorm_1.0 _final.doc
Revision number:	<1.0>
Issued by:	< > ywlee73@hotmail.com
Issue Date:	<2001/08/19>
Status:	final

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Exception in thread "main" java.lang.NoClassDefFoundError:
<   >

.
.   ,   ,
.

java -classpath C:\ lib\ SpellChecker.jar WordProcessor

, Java VM   ,   WordProcessor
,   .

- classpath   java   ,   Java VM
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extension

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                                  .

                                        ,

            Java VM   ,   java

                        public static void main(String[])

                              .   java
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                                              .

            java

                        java   .

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                        ? java

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java

?

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-verbose:jni
, Java VM   Java Native Interface(JNI)   ,   . JNI   , CPU   operating system   , native code Java VM   ,   .   , JNI   , native code   Java VM

?

-X
(   ),   .

"　　　　"

?JAR

-jar
, java　　　　　　　　　JAR　　　　, Java VM　　JAR 　　　　　　　　　　,　　　　　. , JAR　　　　　　　　Java VM 　.　　　,

, Sun　　(　　　　　, IBM　) Java VM
　　　　　.　,　　　　　　　,
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?　　　　　　　　　　(JIT　　　　　)

-Xmixed
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? interpreter

-Xint
, Java VM　　interpreter　　　　.

?　　　　　　debug

-Xdebug
, Java VM , .

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-Xbootclasspath:<　　　　　>

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-Xbootclasspath/a:<   >
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-Xbootclasspath/p:<   >
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-Xfuture
, Java VM
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.   Java
- Xfuture
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?

-Xnoclassgc
( ), Java VM ,   .

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-Xincgc
,   Java VM "   "   ,
.   ,   ,
.   ,   10%   .

?Java VM   heap

-Xms<heap   (   )>
, Java VM   heap   .
heap   , 1024   , 1   .
,   "k"   ,   "m"
,   ( ) 1024   heap

.   , heap   1024
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java - Xms1024k

? Java VM   heap

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,   "k"   ,   "m"
,   1024   heap
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?   CPU   filing

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?   CPU   filing

-Xrunhprof
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,
java - Xrunhprof: help
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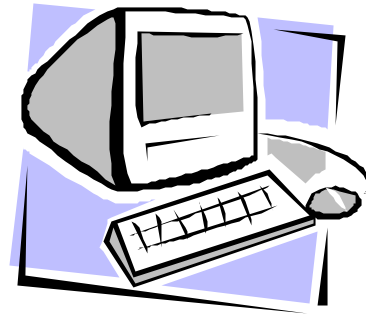
javac   .

javac   Java   (.java
)   (.class   )   .
                                                                            .   ,
javac   Java   .
                                compiler   . Java
Compiler   , javac   .

Java Virtual Machine(Java VM)   .
    , javac   Java VM   ,
Java   ,
                .

javac

javac   DOS prompt   prompt   . javac
            , DOS prompt   prompt ,   .

javac

            ,   javac   javac   .

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            ,   PATH   ,   PATH
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PATH   , javac
,   .

(Java 2 SDK   )\ bin\ javac

, Java 2 SDK   C:\ jdk1. 3   ,   .

C:\ jdk1. 3\ bin\ javac

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,   WordProcessor.java   ,   .

javac WordProcessor.java

WordProcessor.java   Java   , javac
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.   ,   WordProcessor.java   Scheduler.java
,   .

javac WordProcessor.java Scheduler.java

, javac   .   ,
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javac *. java

javac   ,   ,   ,
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,   ,   .
,   .
,
.   ,   javac   ,
.   ,
WordProcessor.java   ,   (
) C:\ lib\ SpellChecker.jar   , javac
, - classpath   ,

**javac -classpath . :C:\ lib\ SpellChecker.jar
WordProcessor.java**

,   .
, extension(   )
,   .   ,
(class   path)   ,   extension(   )
.

(dependencies)

javac   (dependencies)   .
.
, javac   ,
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javac   . javac   Java VM   ,
, extension(   )   ,   ,
,
.   ,   - sourcepath   .
,
.   ,   ,   ,
.
,   ,
,   , javac
.

,
,   .

, javac   ,   (dependencies)
.   ,   **2**   ,
Car.java   Engine.java   ,   .

```
public class Car {

   public Engine engine;

}
```
Car.java:

```
public class Engine {

}
```
Engine.java:

,

```
javac Car.java
```

javac   Car.java   , javac
Engine.java   .

          javac   .   , javac   Car.java   .   ,
          Car.java   ,   Engine   .   , javac
          Engine   .   ,   Engine.class
Engine.java   .   ,   ,   Engine.java
          , javac   Engine.java   .

     Engine.java   .

```
public class Engine {
        public int horsepower;
}
```
Engine.java

,

```
javac Car.java
```

,   Engine.java   .

javac   ,   javac   Car.java   .   ,
          Car.java   ,   Engine   .   , javac
            Engine   .   ,   Engine.class
Engine.java   .   ,   Engine.class   Engine.java
                ,   javac   .   ,
Engine.java   , javac   Engine.java   .

            ,   javac   (dependencies)   ,
          (dependencies)   ,
                        .

          , javac   ,   ,
                              (3   ,   ).   ,
                      ,   javac   .

javac

?

-classpath <   >
javac   .

javac   .
            ,   , "
          (class path)   "   .   ,
            ,

?

-d <   >
javac   ,   <   >

?

-sourcepath <   >
javac   .

javac   .   ,
            , javac   .   ,

?

-g:<   (   ) >
. - g:source   , javac

                                            .

- g:lines   , javac   .
- g:vars   , javac   .

                               javac   , - g: ", "
               .   ,   , -
  g:source, vars   .   - g   ,
              .

- g:none   , javac   .

- g   , javac
                               .   , - g:lines, source   .

?   (   )

–O
, javac
…   ,   , - O   .   , - O
, javac   .

?

-nowarn
, javac   (Warning)

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-verbose
, javac   .   ,
,   ,

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-deprecation
, javac   ,
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,   ,
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, javac   ,
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?

-bootclasspath <   >
,   .   ,   (class path)   .

? extension

-extdirs <extension(   )   >

, extension   extension   . extension
              ,   extension(   )   .
            .

?   Java

-target <   >

,   Java VM   .
              , 1.1, 1.2, 1.3   3   .
 	
1.1   ,   1.1   Java VM   . -
  target   , javac   - target   1.1
        .

1.2   ,   1.2   Java VM   .
1.3   ,   1.3   Java VM   .   .

?

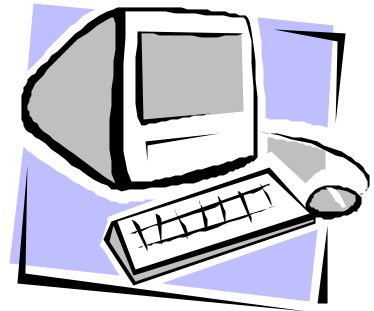| **-encoding <   >** |
|---|
| ,   encode   , javac
        .   javac   , operating system
                                                    . |

(   )

  - bootclasspath/ - extdirs/ - target   ,   Java
  VM   .   , JDK1. 1
  Java VM   ,   Java VM
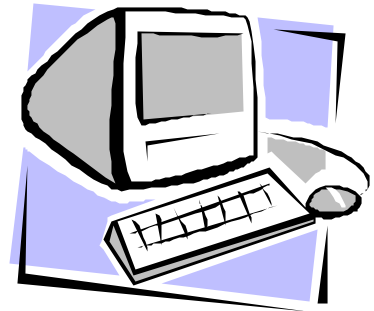   .

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(class path)

.

extension(   )   -

extension(   )   ,   (
) ,   .
extension   ,   ,   ,

                                        .   ,
                    ,   .
extension   ,   .

extension

extension   2   .   ,
            ,   .

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            , Java   ,
      .   ,   ,
                              . javac
                        . Java VM
            ,   (class path)   .

, JAR   , "
            "   .   ,
      ,   .   , "   "
            .

                                    , Java 2 SDK
jre\ lib\ ext   .   Java 2 SDK   C:\ jdk1. 3
      ,   C:\ jdk1. 3\ jre\ lib\ ext   .

            JAR   .   , Java 2 SDK
Standard   Edition   ,   Java 2 Runtime Environment Standard
Edition(JRE)   Java   C:\ Program
Files \ JavaSoft\ JRE\ <   >\   .   JRE
            , C:\ Program Files \ JavaSoft\ JRE\ <   >\ lib\ ext   .   ,
                  JAR   .   , java   ,
            JRE   java   .   , extension
                        C:\ Program Files \ JavaSoft\ JRE\ <   >\ lib\ ext   .
      , javac   ,   Java 2 SDK   java   .
        , extension   ,   Java 2 SDK
C:\ jdk1. 3   , C:\ jdk1. 3Yjre\ lib\ ext   .   ,
                        JAR

            .

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                              ,   JAR   ,
                                          .   ,
      ,   JAR   ,   JAR
                  . Java VM   JAR   ,   JAR
                                          .   ,
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                        ,   ,
            .

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Package

.   3   .

1.
2.
3.

(1)

,   .   ,

.   , Java   ,
java.io   ,   java.net
.

(2)
Java VM   ,
,   ,   .   ,

.

,   .   ,
,   .   ,   .
.   ,
,
,   .

(3)

, ,

.

,

, , package

. , Car kr.pe.jstorm.vehicle ,
Car.java .

```
package kr.pe.jstorm.vehicle;
```

Car ,
. , Car
.

```
kr.pe.jstorm.vehicle.Car car = new kr.pe.jstorm.vehicle.Car();
```

, . ,
import , . ,
kr.pe.jstorm.vehicler ,
.

```
import kr.pe.jstorm.vehicle.Car;
```

, Car .

```
Car car = new Car();
```

, , import
. java.lang
, import .

import , ,
. , kr.pe.jstorm.vehicle
, .

```
import kr.pe.jstorm.vehicle. *;
```

import   .   ,   kr.pe.jstorm.vehicle
java.io   ,
.

        import kr.pe.jstorm.vehicle. *;

        import java.io. *;

    import   ,   .   ,
                        .

        ,   kr.pe.jstorm.vehicle   java.io   ,
        NotActiveException   ,   import   ,
compiler   , compile
error   .

        import kr.pe.jstorm.vehicle. *;

        import java.io. *;

        ,   import   .

        import kr.pe.jstorm.vehicle. *;

        import java.io. *;

        import kr.pe.jstorm.vehicle.NotActiveException;

    ,   ,   ,   kr.pe.jstorm.vehicle
    NotActiveException   .   java.io   NotActiveException   ,
        java.io   .

                                                        .   , Java
    VM   ,   .

        ,   kr.pe.jstorm   Example   ,   ,
"."
kr\ pe\ jstorm   Example.class   .
C:\ classes   ,   C:\ classes\ kr\ pe\ jstorm\
Example.class   .

Java VM   ,   .   ,   kr. pe. jstorm
Example   ,   .

java kr.pe.jstorm.Example