

1. Download and Install Java

<https://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>

Java SE Development Kit 8u201		
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Product / File Description	File Size	Download
Linux ARM 32 Hard Float ABI	72.98 MB	jdk-8u201-linux-arm32-vfp-hflt.tar.gz
Linux ARM 64 Hard Float ABI	69.92 MB	jdk-8u201-linux-arm64-vfp-hflt.tar.gz
Linux x86	170.98 MB	jdk-8u201-linux-i586.rpm
Linux x86	185.77 MB	jdk-8u201-linux-i586.tar.gz
Linux x64	168.05 MB	jdk-8u201-linux-x64.rpm
Linux x64	182.93 MB	jdk-8u201-linux-x64.tar.gz
Mac OS X x64	245.92 MB	jdk-8u201-macosx-x64.dmg
Solaris SPARC 64-bit (SVR4 package)	125.33 MB	jdk-8u201-solaris-sparcv9.tar.Z
Solaris SPARC 64-bit	88.31 MB	jdk-8u201-solaris-sparcv9.tar.gz
Solaris x64 (SVR4 package)	133.99 MB	jdk-8u201-solaris-x64.tar.Z
Solaris x64	92.16 MB	jdk-8u201-solaris-x64.tar.gz
Windows x86	197.66 MB	jdk-8u201-windows-i586.exe
Windows x64	207.46 MB	jdk-8u201-windows-x64.exe

下载 exe 文件，点击安装，注意不要含有空格或者汉字。

配置 java 环境变量

JAVA_HOME

C:\Program Files\Java\jdk1.8.0_201（即 JDK 的安装路径）

Path

追加 ;%JAVA_HOME%\bin;%JAVA_HOME%\jre\bin

CLASSPATH

.;%JAVA_HOME%\lib;%JAVA_HOME%\lib\dt.jar;%JAVA_HOME%\lib\tools.jar

测试 java、javac、java -version

```

C:\Users\yuanfang>java
用法: java [-options] class [args...]
        <执行类>
    或 java [-options] -jar jarfile [args...]
        <执行 jar 文件>
其中选项包括:
    -d32          使用 32 位数据模型 <如果可用>
    -d64          使用 64 位数据模型 <如果可用>
    -server       选择 "server" VM
                  默认 VM 是 server.

    -cp <目录和 zip/jar 文件的类搜索路径>
    -classpath <目录和 zip/jar 文件的类搜索路径>

```

```

C:\Users\yuanfang>javac
用法: javac <options> <source files>
其中, 可能的选项包括:
    -g            生成所有调试信息
    -g:none       不生成任何调试信息
    -g:{lines,vars,source} 只生成某些调试信息
    -nowarn       不生成任何警告
    -verbose      输出有关编译器正在执行的操作的消息
    -deprecation  输出使用已过时的 API 的源位置
    -classpath <路径> 指定查找用户类文件和注释处理程序的位置
    -cp <路径>    指定查找用户类文件和注释处理程序的位置
    -sourcepath <路径> 指定查找输入源文件的位置
    -bootclasspath <路径> 覆盖引导类文件的位置
    -extdirs <目录> 覆盖所安装扩展的位置
    -endorseddirs <目录> 覆盖签名的标准路径的位置
    -proc:{none,only} 控制是否执行注释处理和/或编译。
                      (只编译源文件) (只运行注释处理程序) (编译源文件并运行注释处理程序)

```

```

C:\Users\yuanfang>java -version
java version "1.8.0_201"
Java(TM) SE Runtime Environment (build 1.8.0_201-b09)
Java HotSpot(TM) 64-Bit Server VM (build 25.201-b09, mixed mode)

```

2. Download and Install Spark

<http://spark.apache.org/downloads.html>

Download Apache Spark™

1. Choose a Spark release: 2.2.3 (Jan 11 2019) ▼
2. Choose a package type: Pre-built for Apache Hadoop 2.7 and later ▼
3. Download Spark: [spark-2.2.3-bin-hadoop2.7.tgz](#)
4. Verify this release using the 2.2.3 [signatures](#), [checksums](#) and [project release KEYS](#).

解压 到 C:\spark-2.2.3-bin-hadoop2.7，注意直接放在 C 盘根目录下

配置环境变量

SPARK_HOME

C:\spark-2.2.3-bin-hadoop2.7\spark-2.2.3-bin-hadoop2.7

Path

追加 ;%SPARK_HOME%\bin

3. Download and Install Hadoop

<https://hadoop.apache.org/releases.html>

Download

Hadoop is released as source code tarballs with corresponding binary tarballs for convenience. The downloads are distributed via mirror sites and should be checked for tampering using GPG or SHA-256.

Version	Release date	Source download	Binary download	Release notes
3.1.2	2019 Feb 6	source (checksum signature)	binary (checksum signature)	Announcement
3.2.0	2019 Jan 16	source (checksum signature)	binary (checksum signature)	Announcement
2.9.2	2018 Nov 19	source (checksum signature)	binary (checksum signature)	Announcement
2.8.5	2018 Sep 15	source (checksum signature)	binary (checksum signature)	Announcement
2.7.7	2018 May 31	source (checksum signature)	binary (checksum signature)	Announcement

解压到 C:\hadoop-2.7.7

配置环境变量

HADOOP_HOME

C:\hadoop-2.7.7\hadoop-2.7.7

Path

追加 ;%HADOOP_HOME%\bin

下载 winutils.exe

<https://github.com/steveloughran/winutils/tree/master/hadoop-2.7.1/bin>

将 winutils.exe 放到 hadoop 的 bin 目录下

4. 最终测试 spark-shel

```
C:\Users\yuanfang>spark-shell
Using Spark's default log4j profile: org/apache/spark/log4j-defaults.properties
Setting default log level to "WARN".
To adjust logging level use sc.setLogLevel(newLevel). For SparkR, use setLogLevel(newLevel).
19/03/07 11:36:48 WARN NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
Spark context Web UI available at http://172.18.4.68:4040
Spark context available as 'sc' (master = local[*], app id = local-1551929809290).
Spark session available as 'spark'.
Welcome to

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version 2.2.3

Using Scala version 2.11.8 (Java HotSpot(TM) 64-Bit Server VM, Java 1.8.0_201)
Type in expressions to have them evaluated.
Type :help for more information.

scala>
```