

## Installing Java 6 on CentOS 7

David J. Walling, March 9<sup>th</sup>, 2017

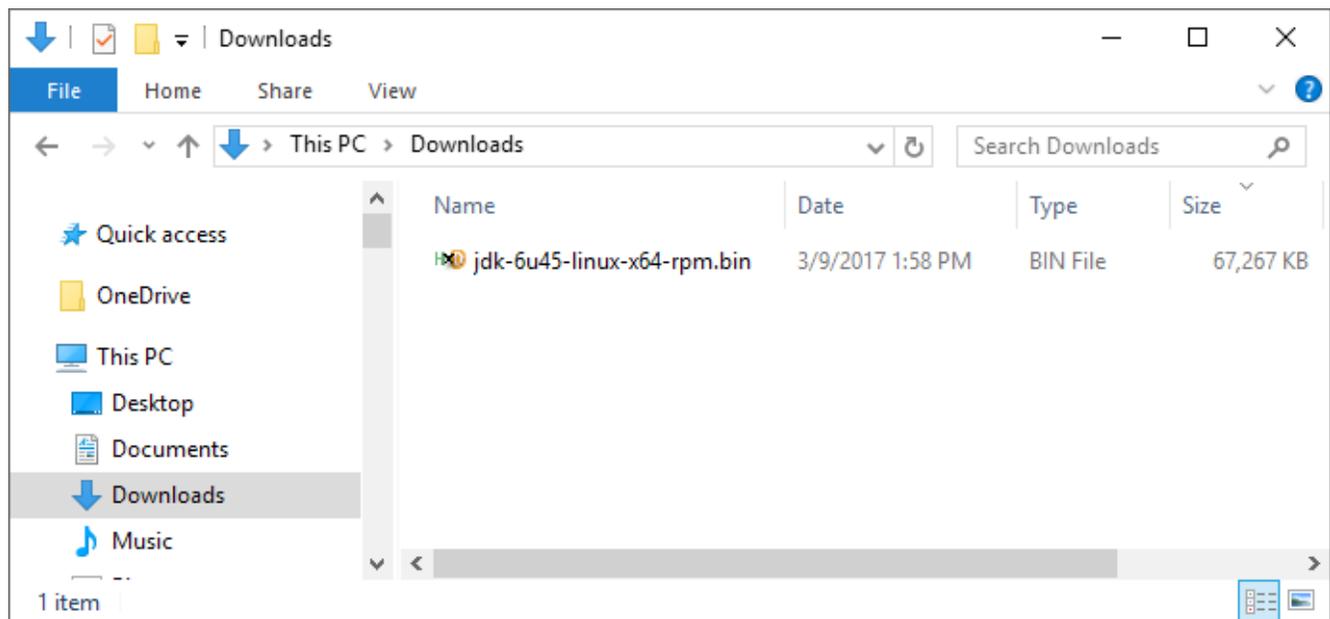
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This “how to” describes a process to download and install Java 6 on a CentOS 7 virtual machine using the Oracle VirtualBox hypervisor on a Windows 10 host. This “how to” is part of a series and continues from the point where a CentOS 7 “Minimal” distribution ISO has been downloaded and used to install and configure CentOS 7 and Oracle XE 11g.

Java 6 is an older version of Java as of this writing. This “how to” is intended for use when an application requires use of Java 6. Use current versions of Java in other instances.

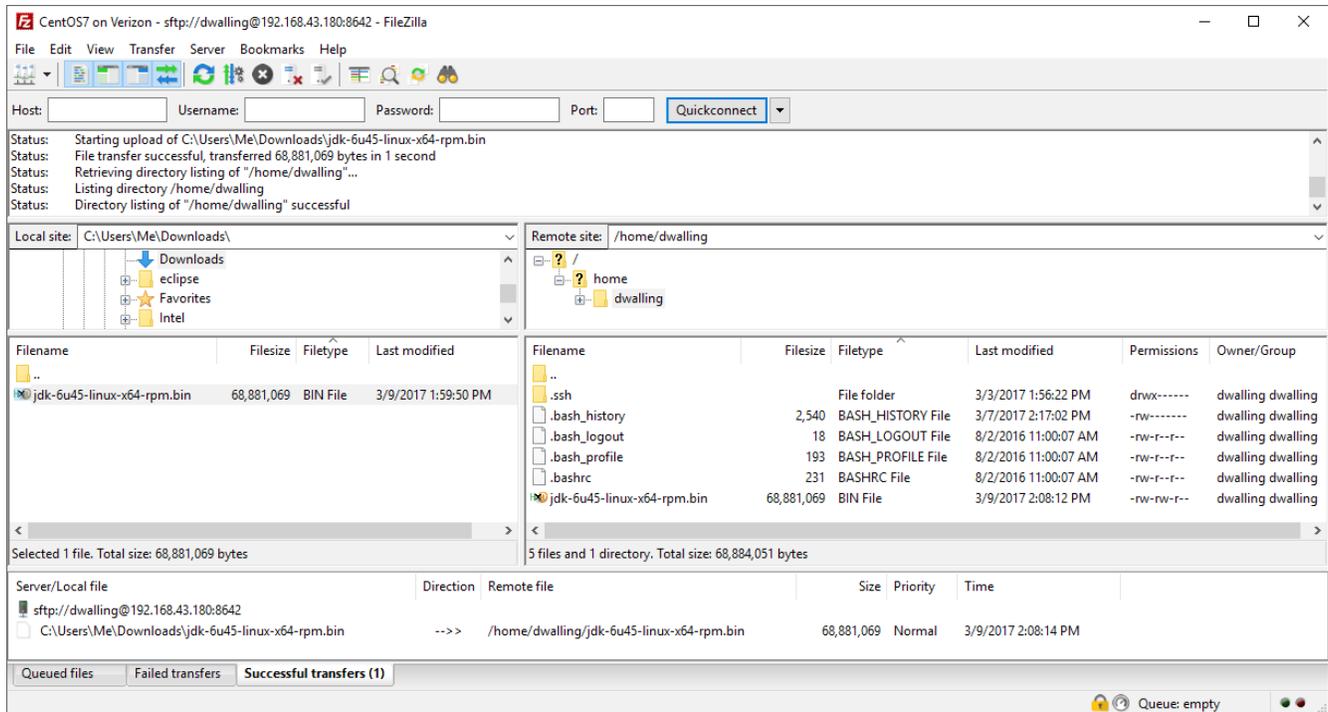
Open a browser and download the Java 6 installation archive using the following link. You may be prompted to enter Oracle subscription information.

<https://download.oracle.com/otn/java/jdk/6u45-b06/jdk-6u45-linux-x64-rpm.bin>



After downloading the file, consider storing it in an organized download hierarchy in case you want or need to reinstall again.

Next, we'll upload the installatin file to CentOS. In a previous “how to”, we established secure connectivity into our CentOS using SFTP or secure shell (SSH). Here, we're leveraging this configuration to connect to CentOS from a file transfer application, FileZilla. This tool allows the upload by dragging and dropping the archive file from our Windows 10 host to our CentOS virtual machine.



Recall that we setup one user for all SSH connections into CentOS. For better security, do not allow the “root” user or any other user with elevated privileges to remotely connect to CentOS over SSH.

We will also demonstrate the use of SSH connections using the PuTTY client program. Since we have not (yet) installed support for a GUI in our CentOS VM, the PuTTY client at least allows us to dynamically resize the client window dimensions and to open multiple concurrent sessions (windows) as needed.

```
dwalling@CentOS7:/home/dwalling
[dwalling@CentOS7 ~]$ su root
Password:
[root@CentOS7 dwelling]# chmod +x jdk-6u45-linux-x64-rpm.bin
[root@CentOS7 dwelling]# ./jdk-6u45-linux-x64-rpm.bin
Unpacking...
Checksumming...
Extracting...
UnZipSFX 5.50 of 17 February 2002, by Info-ZIP (Zip-Bugs@lists.wku.edu).
  inflating: jdk-6u45-linux-amd64.rpm
  inflating: sun-javadb-common-10.6.2-1.1.i386.rpm
  inflating: sun-javadb-core-10.6.2-1.1.i386.rpm
  inflating: sun-javadb-client-10.6.2-1.1.i386.rpm
  inflating: sun-javadb-demo-10.6.2-1.1.i386.rpm
  inflating: sun-javadb-docs-10.6.2-1.1.i386.rpm
  inflating: sun-javadb-javadoc-10.6.2-1.1.i386.rpm
Preparing... ##### [100%]
Updating / installing...
 1:jdk-2000:1.6.0_45-fcs ##### [100%]
Unpacking JAR files...
  rt.jar...
  jsse.jar...
  charsets.jar...
  tools.jar...
  localedata.jar...
  plugin.jar...
  javaws.jar...
  deploy.jar...
Installing JavaDB
Preparing... ##### [100%]
Updating / installing...
 1:sun-javadb-common-10.6.2-1.1 ##### [ 17%]
 2:sun-javadb-core-10.6.2-1.1 ##### [ 33%]
 3:sun-javadb-client-10.6.2-1.1 ##### [ 50%]
 4:sun-javadb-demo-10.6.2-1.1 ##### [ 67%]
 5:sun-javadb-docs-10.6.2-1.1 ##### [ 83%]
 6:sun-javadb-javadoc-10.6.2-1.1 ##### [100%]
Done.
[root@CentOS7 dwelling]#
```

Here we “su” to the “root” user to make the RPM archive executable. We execute the RPM archive to install Java.

```
dwalling@CentOS7:/home/dwalling
[root@CentOS7 dwelling]# alternatives --install /usr/bin/java java /usr/java/jdk1.6.0_45/bin/java 17000
[root@CentOS7 dwelling]# alternatives --display java
java - status is auto.
link currently points to /usr/java/jdk1.6.0_45/bin/java
/usr/java/jdk1.6.0_45/bin/java - priority 17000
Current 'best' version is /usr/java/jdk1.6.0_45/bin/java.
[root@CentOS7 dwelling]# rm -f jdk*
[root@CentOS7 dwelling]# rm -f sun*
[root@CentOS7 dwelling]#
```

Use the “alternatives” tool to install the Java version as current Java version. Then, we can cleanup the jdk and sun files that were expanded during the installation.

```
dwalling@CentOS7:/home/dwalling
export JAVA_HOME=/usr/java/default
export PATH=$PATH:$JAVA_HOME/bin
export CLASSPATH=.:$JAVA_HOME/jre/lib:$JAVA_HOME/lib:$JAVA_HOME/lib/tools.jar
"/etc/profile" 81L, 1943C written
```

Update the default user profile, /etc/profile, to include statements setting the JAVA\_HOME, PATH and CLASSPATH variables.

```
root@CentOS7:/home/dwalling
[root@CentOS7 dwelling]# vi /etc/profile
[root@CentOS7 dwelling]# source /etc/profile
[root@CentOS7 dwelling]#
```

Use the “source” program to make the changes to the profile active.

```
root@CentOS7:/home/dwalling
[root@CentOS7 dwelling]# java -version
java version "1.6.0_45"
Java(TM) SE Runtime Environment (build 1.6.0_45-b06)
Java HotSpot(TM) 64-Bit Server VM (build 20.45-b01, mixed mode)
[root@CentOS7 dwelling]# javac -version
javac 1.6.0_45
[root@CentOS7 dwelling]#
```

Now, we can then issue the “java” and “javac” commands, as examples, with the “-version” parameter to validate that our newly installed Java version is current and active.