# Executing Tassel

**[www.maizegenetics.net/tassel](http://www.maizegenetics.net/tassel)**

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## Tassel 5.0 Requirements

Java 1.8.  (Check using this command…)
`java -version`   **Example:** `java version "1.8.0_11"`

## Tassel 5.0 Native Installers

Download and Execute for your Operating System

## Tassel 5.0 Standalone / Command Line (Tassel Pipeline)

1) Download the "Standalone" .zip and unzip it on your computer.  2) Follow the "Using Git" instructions to make getting future updates very easy (Highly Recommended!).
[https://bytebucket.org/tasseladmin/tassel-5-source/wiki/docs/UpdatingTasselStandaloneUsingGit.pdf](https://bytebucket.org/tasseladmin/tassel-5-source/wiki/docs/UpdatingTasselStandaloneUsingGit.pdf)

## Change Heap for GUI on MAC

- In Applications Folder, Double click "TASSEL 5"
- Right click on "Tassel 5" application, and choose "Show Package Contents"
- Double click on "Contents"
- Edit file vmoptions.txt
- Change -Xms (minimum heap, i.e. -Xms 512m) and -Xmx (maximum heap, i.e. -Xmx 5g) as appropriate.

## Change Heap for GUI on Windows

- In Tassel Installation Directory (default: C:\Program Files\TASSEL5)
- Edit file "Tassel 5.vmoptions" (NOTE: If you have User Account Control (UAC) enabled, start the editor with "Run as administrator")
- Change -Xms (minimum heap, i.e. -Xms 512m) and -Xmx (maximum heap, i.e. -Xmx 5g) as appropriate.

## Command Line on MAC / Linux / Windows (bash shell)

**You can run these from any location if you have the Tassel directory on your PATH.**

`PATH=$PATH:/analysis_tools/tassel5.0_standalone` (For example in .bash_profile)

**Use these commands**

`./start_tassel.pl -Xmx4g` (Example to start GUI with 4 GB Max Heap size)

`./run_pipeline.pl -Xmx5g` (Example to execute command line with 5 GB Max Heap size)

https://bytebucket.org/tasseladmin/tassel-5-source/wiki/docs/Tassel5PipelineCLI.pdf
https://bytebucket.org/tasseladmin/tassel-5-source/wiki/docs/TasselPipelineGBS.pdf

## Command Line on Windows

**To increase heap size, you need to edit the .bat you are using.  Change the -Xmx parameter.**

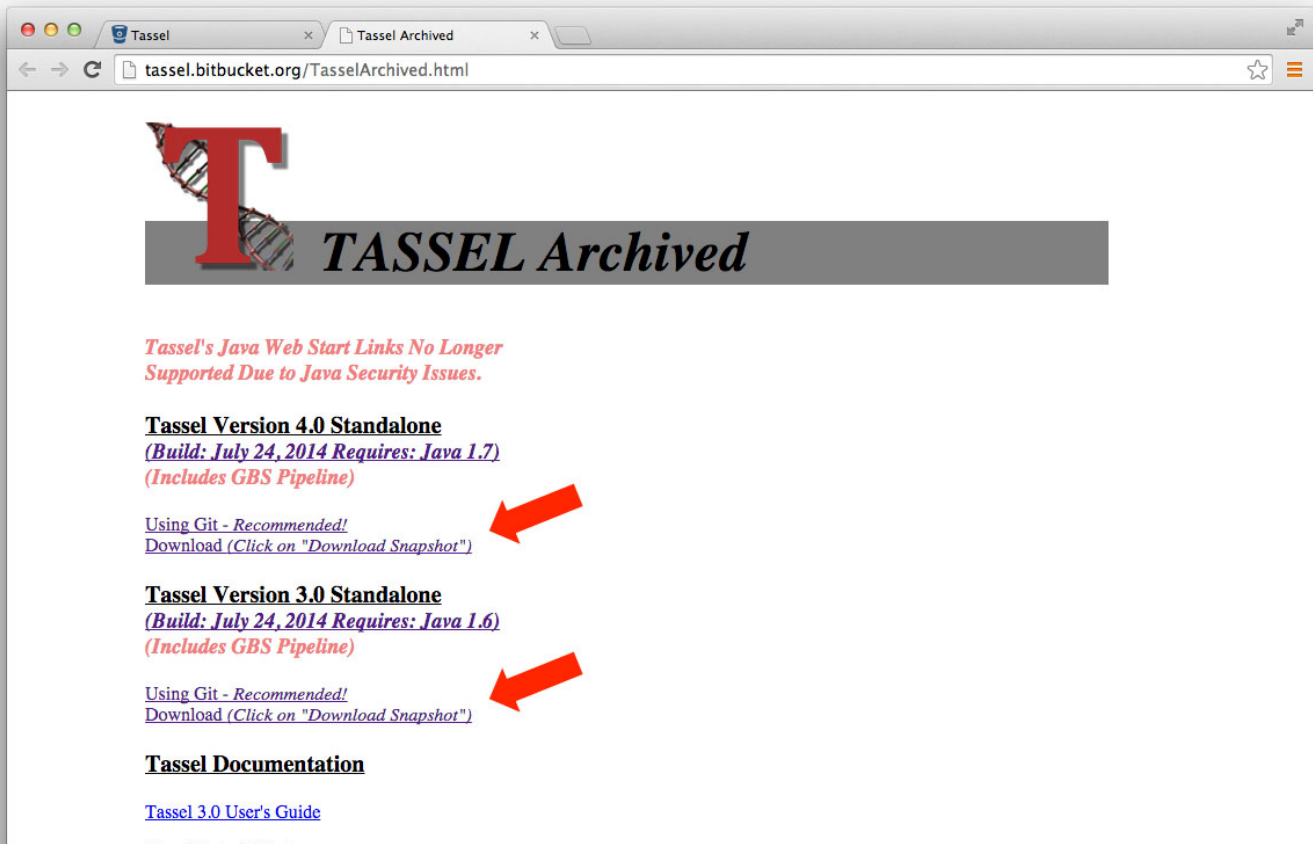**Use these commands**

`./start_tassel.bat` (To start GUI)

`./run_pipeline.bat` (To execute command line)

https://bytebucket.org/tasseladmin/tassel-5-source/wiki/docs/Tassel5PipelineCLI.pdf
https://bytebucket.org/tasseladmin/tassel-5-source/wiki/docs/TasselPipelineGBS.pdf

## Tassel 3.0 / 4.0

Java Web Start Launches are no longer supported due to Java Security Issues. Only downloadable .zip files and installing using Git are available.

# Troubleshooting...

**- If you get an error message containing "Error: Could not create the Java Virtual Machine**"...

http://www.oracle.com/technetwork/java/hotspotfaq-138619.html#gc_heap_32bit

Most likely, you have a mismatching in your Java Installation and Operating System.  One will be 32-Bit and the other 64-Bit.  Type the command "`java -version`" to see if it matches your Operating System.  Notice there may be multiple Java installations on your machine.  Your web browser may be using a different installation than your command line.

**- If you get this error message...**

Invalid maximum heap size: -Xmx4g
The specified size exceeds the maximum representable size.
Error: Could not create the Java Virtual Machine.

This might be due to a limit in the maximum heap, but it is system dependent.  Try reducing the -Xmx setting.

**- If you get an error message like this… Exception in thread "main" java.lang.UnsupportedClassVersionError: net/maizegenetics/pipeline/TasselPipeline : Unsupported major.minor version 51.0**

You need a higher level of Java.  Tassel 5 requires Java 1.8.

**- If you get this error… "Error: Could not find or load main class net.maizegenetics.tassel.TASSELMainApp" while running start_tassel.pl or run_pipeline.pl in the bash shell on Windows.**

Change the following line to use a ; instead of a :.
my $CP = join(":", @fl);