

Executing Tassel

www.maizegenetics.net/tassel

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August 28, 2014

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>

The screenshot shows the Tassel 5.0 website interface. At the top, there is a large red 'T' logo with a DNA double helix and the text 'TASSEL 5.0'. Below this, the text 'Tassel Version 5.0 (Getting Started!)' is displayed, followed by '(Build: August 28, 2014 Requires: Java 1.8)'. There are four download links: 'Tassel 5 Mac OS', 'Tassel 5 Windows 64 Bit', 'Tassel 5 Windows 32 Bit', and 'Tassel 5 UNIX'. A red arrow points to these links. Below these links, the text 'Tassel Version 5.0 Standalone (GBS Pipeline - Under Development)' is shown, followed by 'Using Git - Recommended! Download (Click on "Tags")'. Another red arrow points to this text. Below this, the text 'Archived Versions of Tassel (GBS Pipeline - Stable)' is displayed. At the bottom, there is a link for 'Tassel Documentation' and 'Tassel 5.0 User's Guide'. On the right side of the page, there are two preview images: 'Alignment Viewer' showing a grid of colored squares representing sequence alignments, and 'Linkage Disequilibrium Display' showing a plot of LD values.

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)

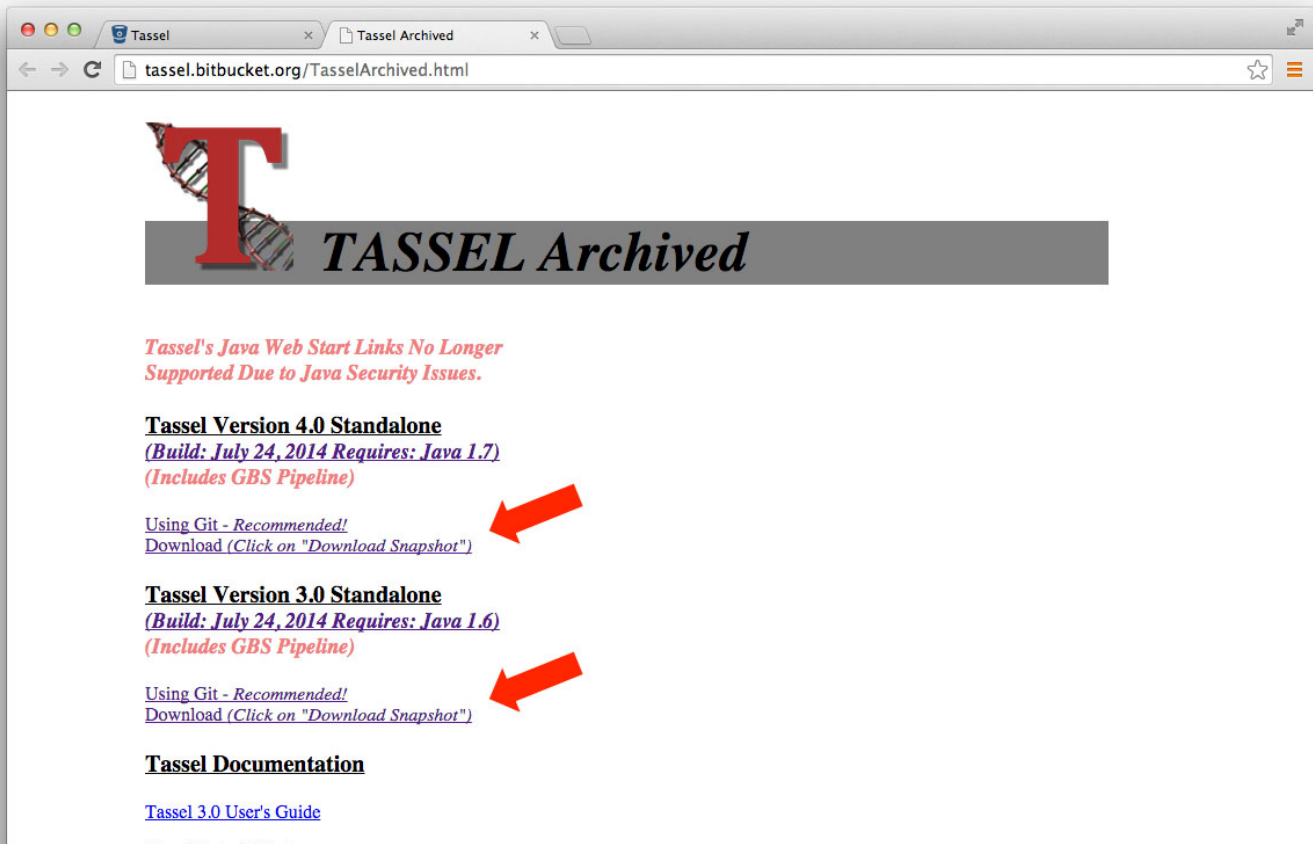
`./run_pipeline.bat` (To execute command line)

<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);`