

Executing Tassel

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"
```

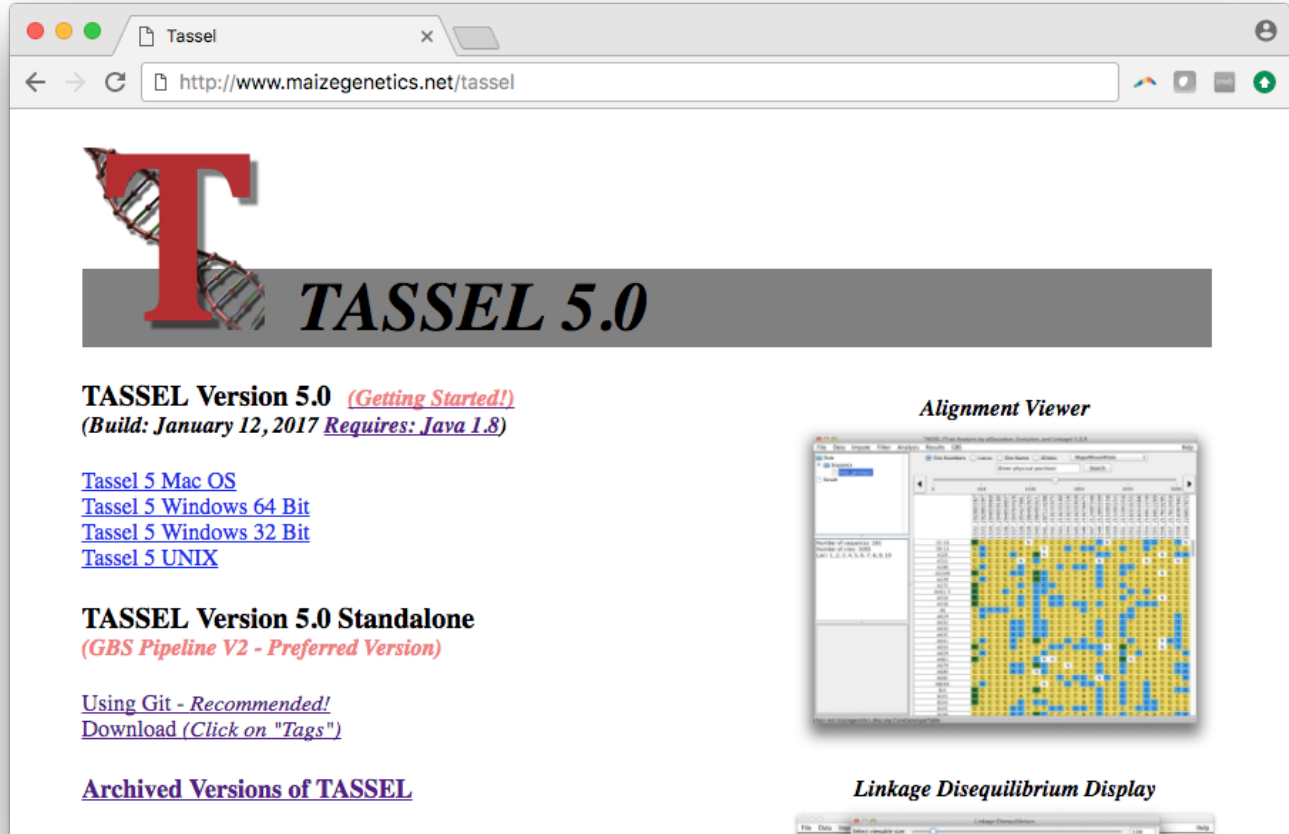
Tassel 5.0 Native Installers

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://bitbucket.org/tasseladmin/tassel-5-source/wiki/docs/UpdatingTasselStandaloneUsingGit.pdf>



The screenshot shows a web browser window with the URL <http://www.maizegenetics.net/tassel>. The page features a large red 'T' logo with a DNA double helix. Below the logo, the text reads "TASSEL 5.0". The page content includes:

- TASSEL Version 5.0** (*Getting Started!*)
(Build: January 12, 2017 Requires: Java 1.8)
- Links for downloading Tassel 5.0 on various operating systems:
 - [Tassel 5 Mac OS](#)
 - [Tassel 5 Windows 64 Bit](#)
 - [Tassel 5 Windows 32 Bit](#)
 - [Tassel 5 UNIX](#)
- TASSEL Version 5.0 Standalone** (*GBS Pipeline V2 - Preferred Version*)
- Links for [Using Git - Recommended!](#) and [Download \(Click on "Tags"\)](#)
- [Archived Versions of TASSEL](#)

Two smaller screenshots are shown on the right side of the page:

- Alignment Viewer**: A screenshot of a software interface displaying a grid of colored dots (yellow and blue) representing genomic data.
- Linkage Disequilibrium Display**: A screenshot of a software interface showing a heatmap of linkage disequilibrium 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://bitbucket.org/tasseladmin/tassel-5-source/wiki/docs/Tassel5PipelineCLI.pdf>

<https://bitbucket.org/tasseladmin/tassel-5-source/wiki/Tassel5GBSv2Pipeline>

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)
```

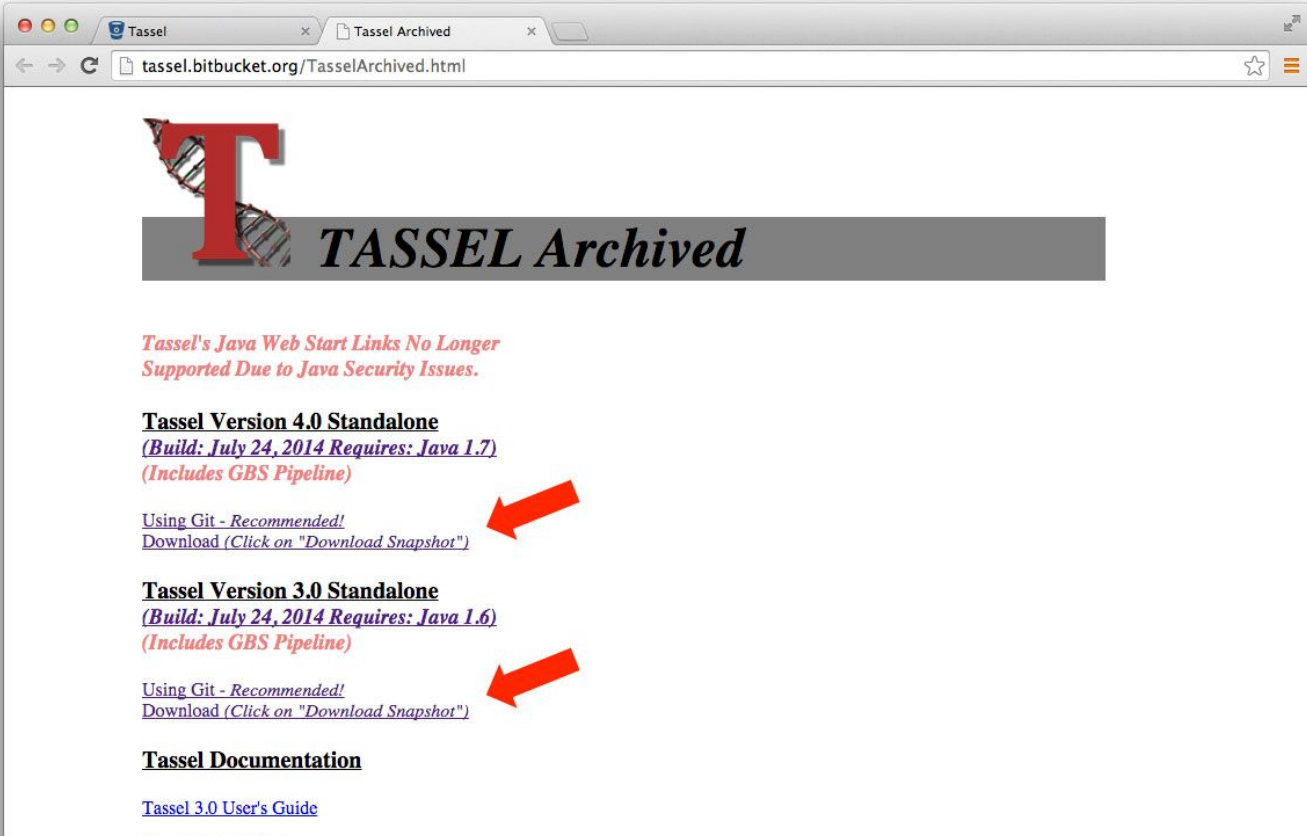
```
./run_pipeline.bat (To execute command line)
```

<https://bitbucket.org/tasseladmin/tassel-5-source/wiki/docs/Tassel5PipelineCLI.pdf>

<https://bitbucket.org/tasseladmin/tassel-5-source/wiki/Tassel5GBSv2Pipeline>

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.



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TASSEL Archived

Tassel's Java Web Start Links No Longer Supported Due to Java Security Issues.

Tassel Version 4.0 Standalone
(Build: July 24, 2014 Requires: Java 1.7)
(Includes GBS Pipeline)

[Using Git - Recommended!](#)
[Download \(Click on "Download Snapshot"\)](#)

Tassel Version 3.0 Standalone
(Build: July 24, 2014 Requires: Java 1.6)
(Includes GBS Pipeline)

[Using Git - Recommended!](#)
[Download \(Click on "Download Snapshot"\)](#)

Tassel Documentation

[Tassel 3.0 User's Guide](#)
[Tassel Tutorial Data](#)

Troubleshooting...

- If you get an error message containing **“Error: Could not create the Java Virtual Machine”** or **“The specified size exceeds the maximum representable size”** or **“Could not reserve enough space for 2097152KB object heap”**...

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. Try the command `java -d64 -version` to see if your installation supports 64-Bit.

- 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);`

- Tassel does not have an Apple signature, you may need to adjust gatekeeper to install the program.

<https://support.apple.com/en-us/HT202491>