Scala from Home on Windows

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1 Introduction

This is a guide for installing the Scala programming language on Windows. If you have any questions about this guide please send an email to the CS18 TAs using the email cs018tas@cs.brown.edu and/or go to TA hours which are listed on the website.

2 Step-by-Step Guide

1. Go to `http://scala-lang.org/downloads`. This is the Scala website, and a great resource if one cares to explore it.
2. Download the latest stable release of Scala for Windows. For convenience, the easiest way to install on Windows is a .msi file. The current stable release at the time of writing file is scala-2.10.4.msi
3. After Scala finishes downloading, click on the downloaded file to start the installation process.
4. Click next until you get to a screen that asks you to select which features you want installed (and accept the license agreement). Make sure that everything is selected. The only optional section is the "Sources" option, which downloads the source code for the Scala libraries to your computer. This can be useful to have, but the code is already available for browsing on the internet. Click next once you have ensured that the features being installed are correct.

5. Click Install to begin the installation process.

6. The installer should install Scala. While installing, Windows might give you a warning about an unknown publisher installing software on your computer. Click yes to ignore this warning. After Scala is finished installing click finish to complete the installation.

3 What's next?

You should now have Scala installed on your computer. It can be somewhat tricky to find a good text editor for Scala. Anything that allowed you to write OCaml files on Windows should allow you to save .scala files similarly. If you want to use Scala with Eclipse, you should move on to the Windows eclipse guide.

4 Moving on to Eclipse

Before moving on, make sure you actually have scala installed on your computer and run the REPL to make sure scala is working. This section of the guide assumes that you do not yet have Eclipse installed on your computer and will guide you through both installing Eclipse.

5 Installing Eclipse

1. Go to `http://eclipse.org/downloads` and download Eclipse Classic. You can download either 32 or 64 bit. Utilize whichever one matches your computer. Note that Eclipse depends on Java, so your version of Eclipse (32 or 64 bit) needs to match the version of Java you have. Once you click on a link it will take you to a list of mirrors. Mirrors are locations that host the file for eclipse.org so it doesn't have everyone downloading from it at once. Generally, you can download from the link the website recommends which will be next to the green arrow.

2. Unzip the zip file you just downloaded into a folder of your choice. You can put it into your user's home folder, but other places work as well. To launch Eclipse, double click the Eclipse icon.

3. (Optional) Drag the Eclipse icon to your dock so you'll be able to open Eclipse more easily.

6 Installing Scala in Eclipse

In CS 18, we will be using the Scala IDE Eclipse Plugin to simplify coding in Scala. The following instructions should help you install and configure Scala IDE. They are based on a video at `scala-ide.org/download/current.html`, which you can also refer to for reference. Note that the URL mentioned in the video is not necessarily the one you want (see below).

6.1 Requirements

For scala 2.10, use the ScalaIDE version appropriate to your version of Eclipse. If you have Eclipse 3.7 (Indigo), you will need to install the Scala IDE version 3.0.1. If you have Eclipse 3.8/4.2 (Juno) or Eclipse 4.3 (Kepler), you will be installing Scala IDE version 3.0.2. All versions will require the JDK 6 or JDK 7.

Older versions of the Eclipse IDE are not currently supported by ScalaIDE (and support for Eclipse 3.7 has been dropped as of version 3.0.1), but can still be used.

1. Because Scala IDE is a plugin for Eclipse, you can install it through Eclipse. To start this process, go to Help and select "Install New Software...".
2. The popup window has a field "Work With:". The entry for this depends on the version of Eclipse you are running (featured prominently on the eclipse startup box, also available from Help → About Eclipse). Copy the URL below for the appropriate version:
   - Juno/Kepler: `http://download.scala-ide.org/sdk/helium/e38/scala210/stable/site`
   - Indigo: `http://download.scala-ide.org/sdk/helium/e37/scala210/stable/site`
3. Once the URL is entered, just hit Return and wait a few seconds. You should get a list of various plugins. Select "Scala IDE for Eclipse" , hit next, and follow the instructions to install this plugin.
4. To switch to the Scala perspective, click the button in the top-right corner of eclipse next to the selected button that says "Java". From there, you can select the Scala perspective, and from now on a "Scala" button will be present next to the Java one.

7 Creating Scala Projects in Eclipse

To create a Scala project in Eclipse, click on the button in the upper left portion of the screen with the plus. Go to "Scala Wizards" select Scala Project, and hit "Next". Name your project whatever you want (we suggest `scalaproject`, and then finish creating the project. From now on, creating new packages for each assignment, and classes will be as explained in lab.

Please let us know if you find any mistakes, inconsistencies, or confusing language in this or any other CS18 document by filling out the anonymous feedback form:

`http://cs.brown.edu/courses/cs018/feedback`.