

Install Eclipse on your own Computer

These instructions will help you set up Eclipse so you can work on your own computer outside of your regular recitation time.

WORKING FROM YOUR OWN MACHINE

If you wish to work on labs from your own machine YOU MUST follow these software installation instructions to get the software components necessary for you to be able to work on your own machine AND be able to submit your work to Web-CAT.

If you decide to work from your own machine you should bring it with you to recitation so that you can start and finish your work there.

NOTE: It is NOT acceptable to skip recitation just because you are working from your own machine. Students who have attended recitation have priority in office hours. Both TA and instructor office hours are supplements to recitation and lecture, not a replacement for either.

The installation process consists of 4 parts:

- 1.) The Java JDK (Java Development Kit, which includes Java itself as well as a compiler).
- 2.) The Eclipse IDE (Integrated Development Environment, which provides an environment to code in).
- 3.) Connecting to the Student repository (so you can check out code and work on the labs).
- 4.) Additional required plug-ins

After you complete these, you can connect to the class CVS repository and check out code just like you do on the machines in Baldy 21.

Note: If you use your own computer, please remember that your code is stored on your local hard drive instead of the CSE servers. Keep in mind that any projects you start from your personal computer will not reside on your CSE file system. Your workspace on the lab machines and your personal computer(s) will NOT sync.

If you are connecting from **Off-Campus**, you need to use a VPN to access to the UB network. Download and install the AnyConnect VPN client: <https://www.buffalo.edu/ubit/service-guides/connecting/vpn.html>

If you are connecting from **On-Campus**, be sure to connect using **UB_Secure** or ResNet. **Do NOT use** UB_Wireless or UB_Guest. They are insecure and do not provide the level of network access you need. Depending on which network you connect to on campus, you may need to run AnyConnect to reach Web-CAT.

Step 1: Install the Java SDK

You probably DO NOT have this on your computer already. You might have the Java runtime, but not the JDK. So please be sure to follow this step. This is needed to compile Java programs and to run Eclipse. To install this, follow the steps below.

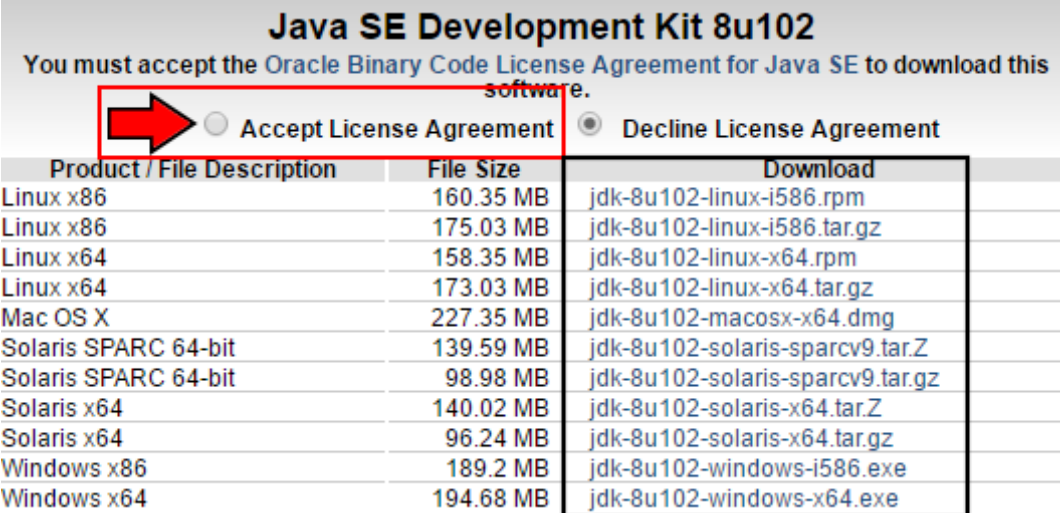
The architecture of the JDK should match the architecture of your operating system (32-bit or 64-bit).

If you have 32-bit Windows/Linux (also known as: x86, i386, i586, i686), you must download the 32-bit version of the JDK. Same goes for 64-bit (also known as: x64, AMD64) Linux. Mac users have only 1 option. If you have questions, contact your TA.

- 1.) Go to Java SDK download site.

<http://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html>

- 2.) As of this writing the most current version of the download is the JDK 8u73. Accept the license terms, and download the appropriate version of the JDK for your operating system:



Product / File Description	File Size	Download
Linux x86	160.35 MB	jdk-8u102-linux-i586.rpm
Linux x86	175.03 MB	jdk-8u102-linux-i586.tar.gz
Linux x64	158.35 MB	jdk-8u102-linux-x64.rpm
Linux x64	173.03 MB	jdk-8u102-linux-x64.tar.gz
Mac OS X	227.35 MB	jdk-8u102-macosx-x64.dmg
Solaris SPARC 64-bit	139.59 MB	jdk-8u102-solaris-sparcv9.tar.Z
Solaris SPARC 64-bit	98.98 MB	jdk-8u102-solaris-sparcv9.tar.gz
Solaris x64	140.02 MB	jdk-8u102-solaris-x64.tar.Z
Solaris x64	96.24 MB	jdk-8u102-solaris-x64.tar.gz
Windows x86	189.2 MB	jdk-8u102-windows-i586.exe
Windows x64	194.68 MB	jdk-8u102-windows-x64.exe

- 3.) After downloading the appropriate file, run it to install the JDK. Instructions for installing the **Java JDK** are available here:

http://docs.oracle.com/javase/8/docs/technotes/guides/install/install_overview.html

Step 2: Download Eclipse:

1.) Eclipse can be downloaded here:

<http://www.eclipse.org/downloads/packages/eclipse-ide-java-developers/neon1/>

Note: You must select the same architecture (32 or 64 bit) that you used in Step 1.

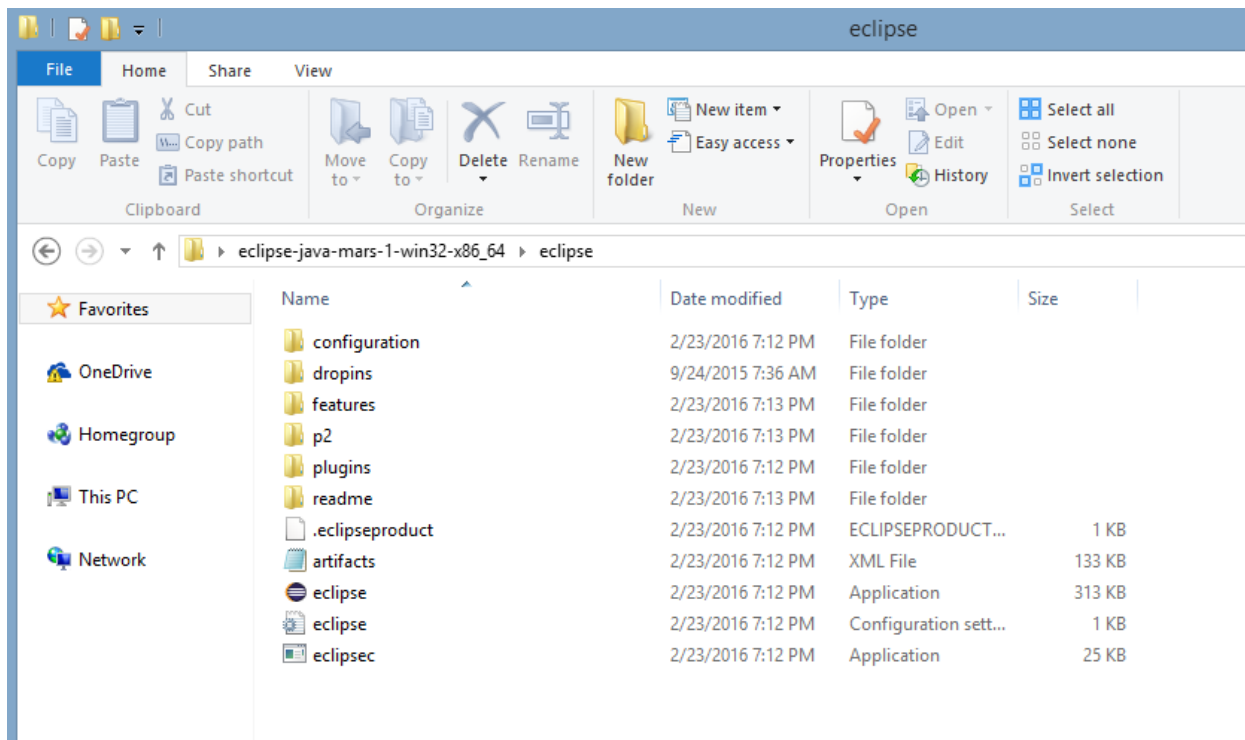
Select your appropriate OS Platform (Windows, Mac, or Linux), and download the Eclipse file using the dropdown box:



The screenshot shows the Eclipse website's download page for Eclipse IDE for Java Developers. The page features the Eclipse logo, navigation links (GETTING STARTED, MEMBERS, PROJECTS, MORE), and a search bar. A prominent orange 'DOWNLOAD' button is visible. The main content area is titled 'Eclipse IDE for Java Developers' and includes a 'Package Description' section. A red arrow points from the 'Download Links' section to the 'Download Links' box. The 'Download Links' box lists the following options: Windows 32-bit, Windows 64-bit, Mac OS X (Cocoa) 64-bit, Linux 32-bit, and Linux 64-bit. Below the links, it states 'Downloaded 52,953 Times' and provides a link to 'Checksums...'. A sidebar on the left lists various releases under the heading 'RELEASES'.

Eclipse does not need to be “installed.” It simply comes packaged as a compressed file (zip or tar) and all you have to do is extract to a location of your choice, i.e. the Desktop. Once extracted, open the folder you extracted to and run the Eclipse program. If you run into problems doing this, see the Install Guide on the Eclipse website. **Make note of where you extract Eclipse** as it will be needed later to install plugins like Web-CAT. One suggestion would be to extract it to your “Documents” folder or your Desktop.

After extraction, you will see a window similar to this (depending on your OS). All you need to do is run Eclipse:



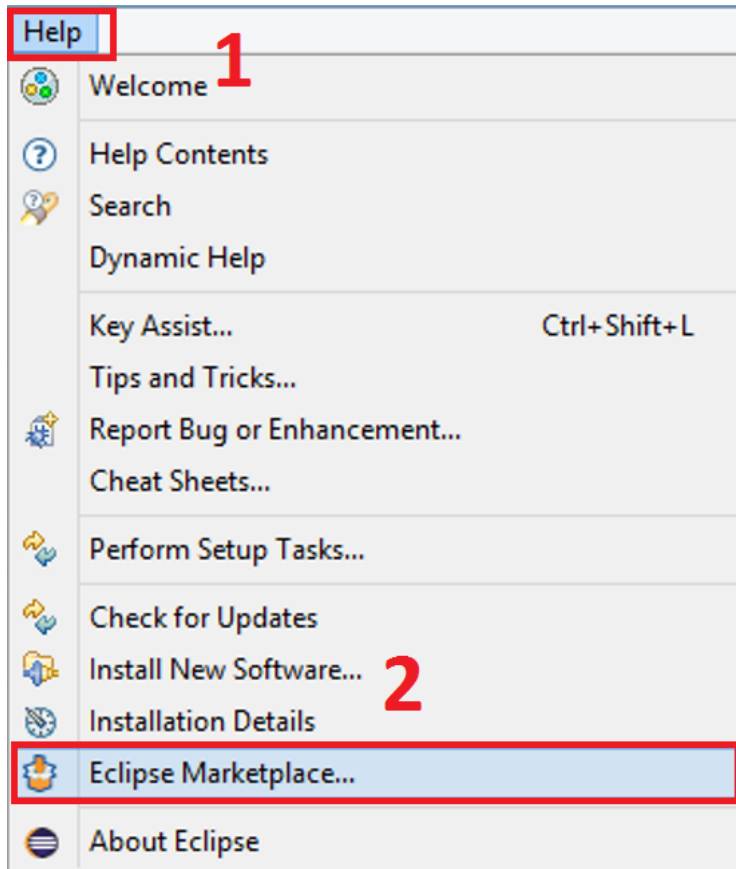
You should be able to open Eclipse. Now, follow the procedure below to connect to the class CVS repositories.

Step 3(a): Installing CVS Repository Exploring

The CVS Repository Exploring Perspective doesn't come with the newest version of Eclipse, so it needs to be installed separately before the perspective can be added. This can be done using the Eclipse Marketplace Client preinstalled in Eclipse.

To open the Eclipse Marketplace Client:

- 1.) In **Eclipse**, click the Help menu.
- 2.) Then click Eclipse Marketplace.



In the Eclipse Marketplace Client wizard:

3.) Search for CVS

4.) Click Install on CVS Integration 1.4

The screenshot shows the Eclipse Marketplace Client wizard interface. At the top, it says "Eclipse Marketplace" and "Select solutions to install. Press Install Now to proceed with installation. Press the 'more info' link to learn more about a solution." Below this is a search bar with "cvs" entered, highlighted by a red box and a red number "3". The search results are displayed in a list. The first result is "artifacts hosted in a CVS repository. It is a graphical replacment for Eclipse..." with a "more info" link and an "Install" button. The second result is "codeBeamer Eclipse Studio 2.0" with a "more info" link and an "Install" button. The third result, "CVS Integration 1.4.300", is highlighted with a red box and a red number "4". It has a "more info" link and an "Install" button. Below the search results is a "Marketplaces" section with three icons. At the bottom of the wizard are buttons for "< Back", "Install Now >", "Finish", and "Cancel".

Eclipse Marketplace

Select solutions to install. Press Install Now to proceed with installation.
Press the "more info" link to learn more about a solution.

Search **3** recent Popular Favorites Installed September Newsletter (IoT)

Find: **cvs** All Markets All Categories Go

artifacts hosted in a CVS repository. It is a graphical replacment for Eclipse...
[more info](#)
by [Jan Karstens](#), [Andre Langhorst](#), [Konrad Hubner](#), [Dmitry Mitskevich](#), [Andrew Gvozdev](#), Other Open Source
[cvs](#) [versiontree](#)
★ 5 Installs: **12.8K** (778 last month) **Install**

codeBeamer Eclipse Studio 2.0
Mylyn codeBeamer Eclipse Studio (CBES) gives reflectivity and mobility to codeBeamer users. You can create and edit tasks, bugs, requirements, edit and commit code...
[more info](#)
by [Intland Software](#), EPL
[subversion](#) [mylyn](#) [mercurial](#) [distributed version control](#) [distributed version control system ...](#)
★ 4 Installs: **1.38K** (16 last month) **Install**

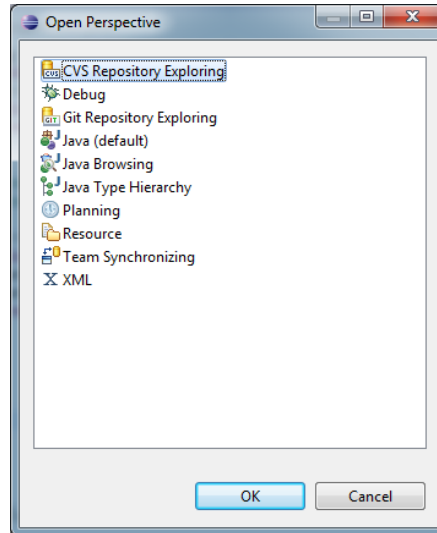
CVS Integration 1.4.300
4 The CVS component provides the best CVS integration in the best IDE. Because the CVS plug-in includes a pure java client, the support works without requiring a...
[more info](#)
by [The Eclipse Foundation](#), EPL
★ 11 Installs: **27.1K** (1,952 last month) **Install**


Marketplaces

< Back Install Now > Finish Cancel

Step 3(b): Configure Class Repositories

Open the CVS Repository Exploring Perspective, click on “Open Perspective” button and Double Click on “CVS Repository Exploring:”



Once the CVS Repository Exploring Perspective Loads, Click the Add Repository Button 

Fill out the information, using **your own CSE Username and Password**. Then click OK.

Host: timberlake.cse.buffalo.edu

Repository Path: /projects/CSE115/Repositories/Fall2016/Student

Connection Type: extssh

Add a new CVS Repository

Add a new CVS Repository to the CVS Repositories view

Location

Host: timberlake.cse.buffalo.edu

Repository path: /projects/CSE115/Repositories/Fall2016/Student

Authentication

User: blakehur

Password:

Connection

Connection type: extssh

Use default port

Use port:

Validate connection on finish

Save password (could trigger secure storage login)

To manage your password, please see ['Secure Storage'](#)

[Configure connection preferences...](#)

Finish Cancel

Upon doing this, you will now be connected to the class repository and will be able to check out any code provided.

Step 4: Additional plug-ins

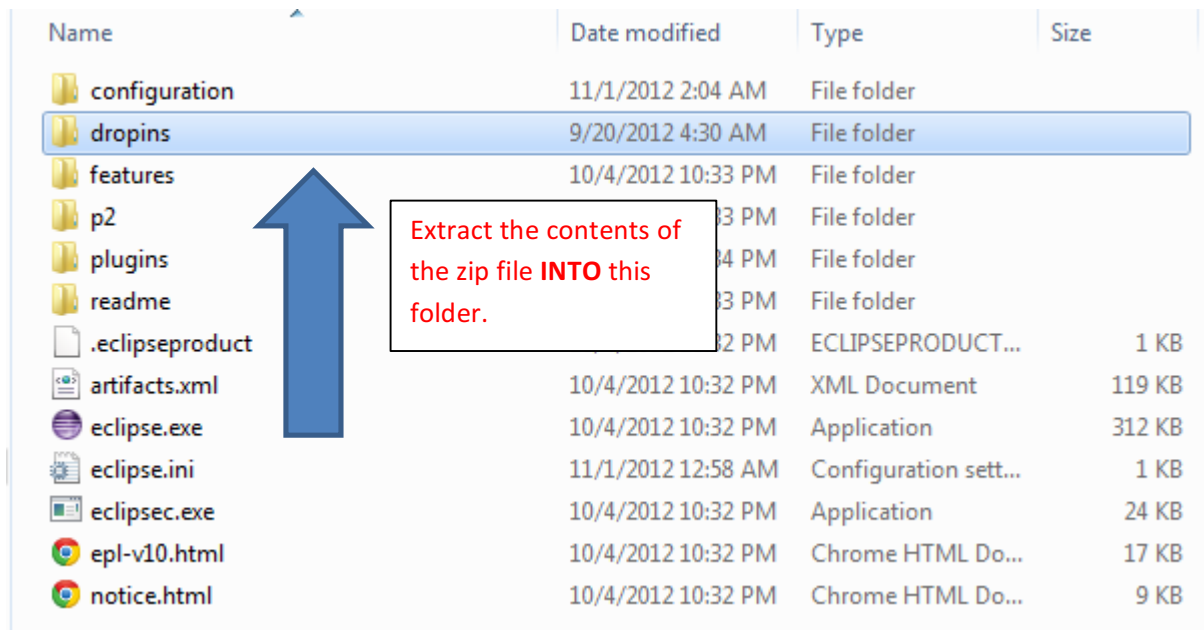
We use Web-CAT for much of Lab grading. In order to submit Labs from your own computer, you will need the Web-CAT plugin installed. You will also need an additional plugin called Sapphire. To install them, follow the steps below.

- 1.) If Eclipse is running, close it.
- 2.) Go to the following website:

<http://www.cse.buffalo.edu/faculty/alphonse/CSE-ECLIPSE.zip>

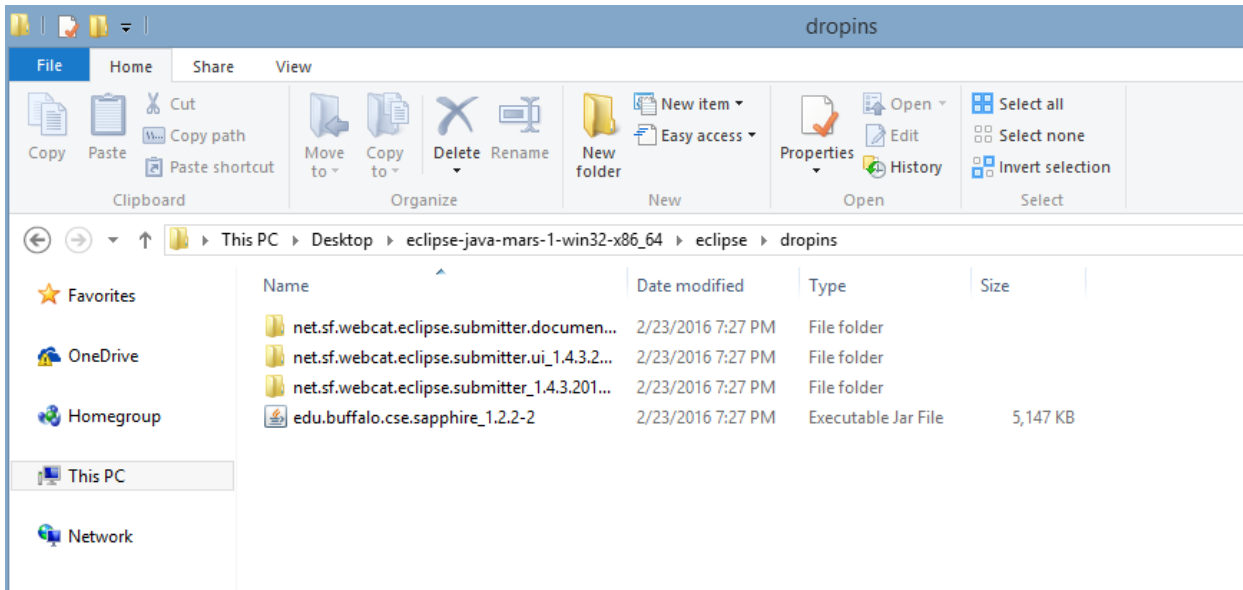
This is a download link. Download the zip file to a convenient location.

- 3.) Extract **all contents** of the zip file to the “dropins” directory of your eclipse folder. The contents of the eclipse folder are shown below:



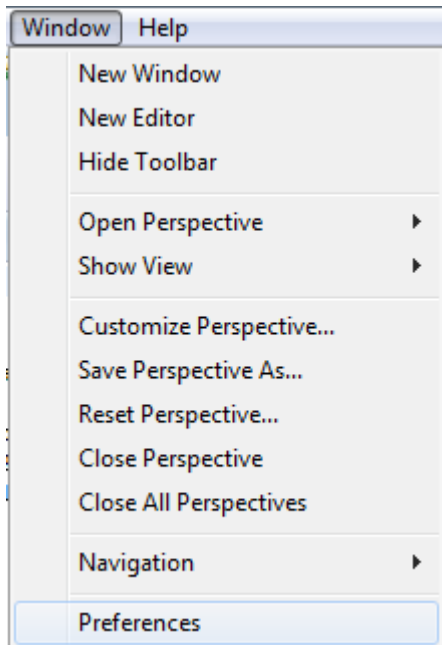
Name	Date modified	Type	Size
configuration	11/1/2012 2:04 AM	File folder	
dropins	9/20/2012 4:30 AM	File folder	
features	10/4/2012 10:33 PM	File folder	
p2	10/4/2012 10:33 PM	File folder	
plugins	10/4/2012 10:34 PM	File folder	
readme	10/4/2012 10:33 PM	File folder	
.eclipseproduct	10/4/2012 10:32 PM	ECLIPSEPRODUCT...	1 KB
artifacts.xml	10/4/2012 10:32 PM	XML Document	119 KB
eclipse.exe	10/4/2012 10:32 PM	Application	312 KB
eclipse.ini	11/1/2012 12:58 AM	Configuration sett...	1 KB
eclipsec.exe	10/4/2012 10:32 PM	Application	24 KB
epl-v10.html	10/4/2012 10:32 PM	Chrome HTML Do...	17 KB
notice.html	10/4/2012 10:32 PM	Chrome HTML Do...	9 KB

Your “dropins” folder should now contain these folders:



Now, go back to the “eclipse” folder and launch Eclipse. We need to configure Web-CAT in Eclipse.

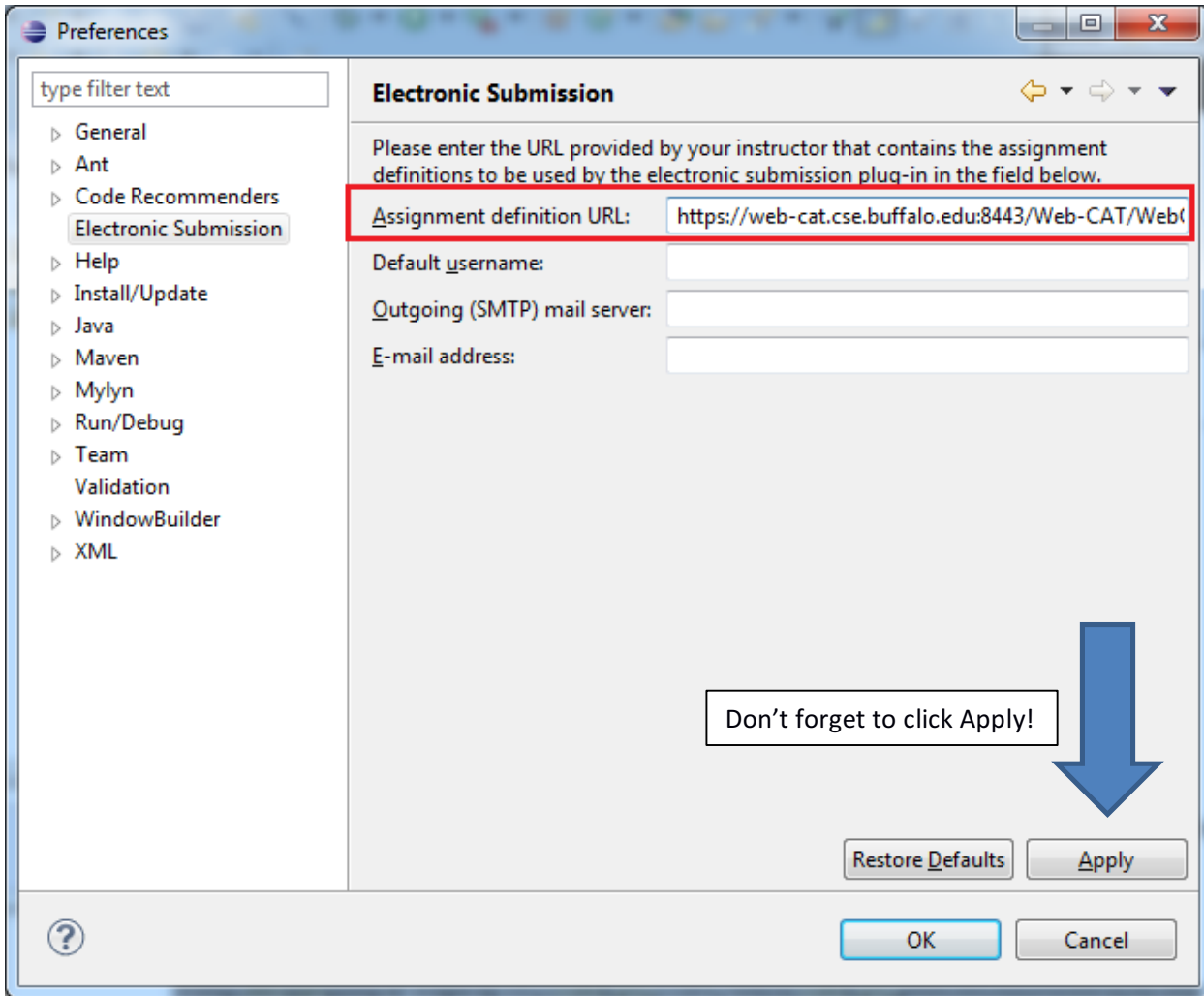
Click on the Window menu, and then click Preferences:



In the window that opens expand “Electronic Submission.” Copy and paste the following link into “Assignment Definition URL:”

<https://web-cat.cse.buffalo.edu:8443/Web-CAT/WebObjects/Web-CAT.woa/wa/assignments/eclipse>

Next, click Apply, followed by OK. The completed result is below.



Upon doing this, you can right click on any project in your workspace and submit to Web-CAT. **Be sure to use your UBIT credentials when submitting! Make sure to check Web-CAT to ensure your submission went through!!**

UBIT Credentials	CSE Credentials
Web-CAT, UBMail, myUB, HUB, UBLearns	CSE Repositories, Log into Sunrays/OVDC, SSH to CSE Systems etc.

Web-CAT will probably not appear automatically in Eclipse for you. You will need to use the link below and log in manually to check if your submission went through.

<https://web-cat.cse.buffalo.edu:8443/Web-CAT/WebObjects/Web-CAT.woa>