

Development Workstation Configuration for IST-AS Web Development

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1. Audience

Application/service/component developers working as team members in the standard IST-AS web application development project environment

2. Purpose

To develop applications/services/components using a standard set of tools on the Windows platform.

3. Prerequisites

- A modern, well-equipped workstation; 1GB RAM is minimal
- An up-to-date, patched, appropriately configured, and secure Windows operating system (this document is oriented toward Windows users, but the sequence of steps, if not the detailed particulars, will be applicable to other operating systems, e.g., Solaris, Linux, or Mac OS/X)
- A fast network connection
- An up-to-date version of an SSH client (The [software-central](#) site has SSH2 clients for Mac and Windows users)
- An account on a server that hosts a code repository (e.g., [svn.berkeley.edu](#), or [canvas.berkeley.edu](#)), with appropriate group memberships (e.g., [svnusers](#), [aswa](#))

4. Configuration Steps

The following steps will load and configure a developer's workstation appropriately for participation in an IST-AS project development team. Links to detailed instructions, where they exist, are highly recommended.

Optional steps are given *in emphasized text*.

Note:

Eclipse is a Java program, and requires a modern JRE (Java Runtime Environment) in which to run. Generally speaking, your best bet is to run a current version of Eclipse in the most recently released JRE. In the instructions that follow, developers are recommended to install the Java Development Kit (JDK), which includes the Java Runtime Environment. If you are certain you will not be doing Java development, and have some other reason to install the JRE only, that is also an option; however, installation and usage HowTo documents on this site will assume that the JDK is installed on a development machine.

Required Steps:

- If you're not already set up, apply for an account and appropriate group membership on the host machine(s) for code repositories you will need to access (cf. Prerequisites,

above). This may be something to discuss with your supervisor or manager.

- Exchange SSH keys with the code repository host(s) to enable public-key login; cf. [local SSH Key Exchange instructions for Windows users](#)
- Install an appropriate version of the Java Development Kit (JDK), Java 2 Platform, Standard Edition (J2SE); cf. [local Java instructions for Windows users](#) [Cf. Note, above]
- Install the [Eclipse](#) IDE; cf. [local Eclipse Installation instructions for Windows users](#), with particular attention to the configuration tasks in the last several sections of the document
- Install recommended Eclipse-plugins, as applicable to the development platform(s) in which you will be working; cf. [Recommended Plugins](#) page

Optional Steps:

In all likelihood, if you are not sure what the applications below are used for you do not need to install them.

- *If you will be developing Rails applications, [install Ruby, RubyGems, and Ruby on Rails](#). The Eclipse plugin for Rails, RadRails (cf. [Recommend Eclipse Plugins](#) on this site), is dependent on these installations. Installation instructions are located at: <http://www.rubyonrails.com/down>*
- *If you'll be working on applications that will be deployed to JBoss, you'll probably want to set your development box up to [run JBoss servers from inside Eclipse](#). This HowTo also explains how to set up the server running in Eclipse so that it responds only to requests from localhost (usually appropriate for a development box).*
- *If your machine runs a Windows OS, it may be convenient to install [Cygwin](#), a Unix-like shell that runs on the Windows OS; many unix goodies are available in addition to the base installation. The CVS and Subversion clients, for example, will allow you to access these repositories from a Cygwin command line. You can use [local instructions for Cygwin installation and configuration](#) to accomplish this.*
- *Download and install (or check-out from repository) [Forrest](#), an open-source (Apache) project documentation tool used in some [Streek](#) project builds*
- *Configure Ant (in Eclipse and, if you use Ant outside the IDE, elsewhere on your machine) to run Forrest targets per [these](#) instructions*
- *If [Forrest](#) and the [Oxygen](#) XML editor plugin were installed, configure the plugin to use Forrest schema catalogs, per [these instructions](#)*
- *Download and install (or check-out from repository) [JMeter](#), an open-source (Apache-Jakarta) testing tool used to verify and load-test [Streek](#) application deployments, etc.*