

# AccuRev Web Interface

## Installation Notes

### Beta Release, March 2008

The AccuRev Web Interface (Web UI) is a web application that runs on the Apache Tomcat application server. It provides read-only access to the information managed by AccuRev.

You will need root or administrator privileges to install Tomcat and the AccuRev Web UI.

### Ensuring Secure Use of the Web UI

Before the Web UI, your users accessed AccuRev data from within the organization's LAN, or from a VPN or similar secure connection. There were two layers of security -- your organization's firewall and AccuRev's security settings. Now using the Web UI, you can access AccuRev directly via the Internet, so please review the common security issues that arise when using a Web interface to access sensitive data before proceeding.

We recommend the following measures to secure your use of the Web UI:

- Obtain an SSL certificate, which is used to encrypt traffic generated by the Web UI, and install it on the machine running Tomcat. See the instructions at <http://tomcat.apache.org/tomcat-5.5-doc/ssl-howto.html> for information on installing and configuring SSL support on Tomcat.
- Set up password strength checking for the Web UI as described in *Setting Login Security*.
- Review your existing AccuRev security measures stringently. Consider the implications of an outsider gaining access to data stored in AccuRev. Set strong passwords for all AccuRev users, and put user and group permissions in place if none exist. Restrict user access by depot and stream to further secure the environment.

### Installing the AccuRev Web UI

The AccuRev Web UI is available for download from the AccuRev web site at [http://www.accurev.com/download\\_ac\\_4\\_6\\_1.htm](http://www.accurev.com/download_ac_4_6_1.htm). This page provides two installation bundles:

- A ZIP file containing Apache Tomcat 5.5 and the Web UI. Download this file if you are not yet using Tomcat, or have a version of Tomcat prior to 5.5. See *Installing from the ZIP File* for further instructions.
- A zipped WAR file containing the Web UI. Download this file if you have already installed Tomcat 5.5. See *Installing from the Zipped WAR File* for further instructions.

## Installing from the ZIP File

Use this deployment method if you do not have Apache Tomcat 5.5 installed on the target machine.

1. Make sure a Java Runtime Environment (JRE) (J2SE version 5.0 or later) is installed on the target machine, and the correct Java environment variable is set. See *Apache Tomcat Installation* below for more details.
2. Download the ZIP file from the AccuRev download page.
3. Unzip the downloaded file into a directory (referred to as *<TomcatInstallDir>* throughout this document) on the target machine.
4. Start Tomcat by running *<TomcatInstallDir>\bin\tomcat5.exe*.

## Installing from the Zipped WAR File

Use this installation method if you have already installed Apache Tomcat 5.5 and a Java Runtime Environment (JRE) (J2SE version 5.0 or later) on the target machine. If these products have not been installed, see *Apache Tomcat Installation* for instructions.

1. Download the zipped WAR file from the AccuRev download page.
2. Right-click on the Tomcat icon in the System Tray, and choose **Stop service** from the menu.
3. If **web\_gui.war** and a **web\_gui** directory exist in *<TomcatInstallDir>\webapps*, delete them.
4. Unzip the downloaded file into the *<TomcatInstallDir>\webapps* directory.
5. Right-click on the Tomcat icon in the System Tray, and choose **Start service** from the menu.

## Apache Tomcat Installation

The AccuRev Web UI requires Apache Tomcat version 5.5 or later.

Tomcat 5.5 is designed to run on J2SE 5.0 and later. The full Java environment is not needed. Tomcat 5.5 uses the Eclipse JDT Java compiler for compiling JSP pages, which means that only a Java Runtime Environment (JRE) is required.

Note: Tomcat can run on J2SE 1.4, but there are extra configuration steps needed. See the note in *Installing and Configuring Tomcat* for more information.

## Pre-installation: Setting Up Your Java Environment

1. Download the Java 2 Standard Edition JRE, release version 5.0, from [http://java.sun.com/javase/downloads/index\\_jdk5.jsp](http://java.sun.com/javase/downloads/index_jdk5.jsp).  
Later versions are available from <http://java.sun.com/javase/downloads/index.jsp>.
2. Install the JRE on the target machine according to the instructions in the download package.

3. Set an environment variable named `JRE_HOME` to the directory into which you installed the JRE. The default install location is `C:\Program Files\Java\<JRE_version>\bin`.

Note: You may choose to use the full JDK rather than just the JRE. In this case, set the `JAVA_HOME` (not `JRE_HOME`) environment variable to the directory into which you installed the JDK.

## Installing and Configuring Tomcat

Download Apache Tomcat 5.5 from <http://tomcat.apache.org/download-55.cgi> and follow the instructions in <http://tomcat.apache.org/tomcat-5.5-doc/setup.html> to complete the installation.

Note: If your existing Java environment uses J2SE 1.4, download the J2SE 1.4 compatibility package from <http://tomcat.apache.org/download-55.cgi>, and unzip the compatibility package into the `<TomcatInstallDir>` directory after installing Tomcat.

If you want Tomcat to run automatically on startup:

- On Windows platforms, configure the Tomcat service to start automatically using the Services control panel, which can be accessed from the **Start** menu by choosing **Settings > Control Panel > Administrative Tools > Services**.
- On Linux platforms, add the following line to `/etc/rc.d/rc.local`:

```
<TomcatInstallDir>/bin/startup.sh &
```

If you want to change the default session length (the default is set at 30 minutes). To do this, change the value of the following tag in the `<TomcatInstallDir>\conf\web.xml` file:

```
<session-config>
  <session-timeout>30</session-timeout>
</session-config>
```

When the Tomcat server restarts, the change will take effect.

## Troubleshooting

The following issues may arise during the Tomcat installation:

- *Another web server (or any process for that matter) uses port 8080.* This is the default HTTP port that Tomcat attempts to bind to at startup. To change this value:
  - Open `<TomcatInstallDir>\conf\server.xml`, and search for '8080'. Change that number to a port (higher than 1024) that isn't in use.
  - Restart Tomcat.
- *The Tomcat application is installed before the correct version of J2SE.* During the Tomcat installation, the current Java version and location is noted. This data will need to be overwritten if a newer version of Java is subsequently installed.

To fix this:

- Right-click the Tomcat icon in the System Tray, and choose **Configure** from the menu.
- Navigate to the Java tab on the Configuration dialog, and select the **Use default** checkbox.
- Click **OK** to save the change.

## Setting Login Security

You can configure the AccuRev Web UI to constrain usernames and passwords to conform to your site's security requirements.

The Web UI container, `web_gui.war`, includes an XML file that configures login security for users connecting to an AccuRev Server through the Web UI. When you start the Web UI, this file is copied to `<TomcatInstallDir>\webapps\web_gui\wui_config.xml`.

The default contents of this file are shown below:

```
<config>
  <security>
    <userName minLength = "0" minDigitCount = "0" minLetterCount = "0"/>
    <password minLength = "0" minDigitCount = "0" minLetterCount = "0"/>
  </security>
</config>
```

Note: AccuRev Servers have their own security settings, which are separate from the AccuRev Web UI.

To configure login security for the Web UI:

- Make a copy of `<TomcatInstallDir>\webapps\web_gui\wui_config.xml`.
- Edit the file to conform to your site's security requirements.

On startup, the Web UI checks that the `.accurev\wui_config.xml` file exists in the current user's home directory. If so, the user's user name and password must meet the requirements specified in that file when they log in. Any login attempt that doesn't meet the specified criteria will not be passed to the AccuRev Server.

## Testing the Installation

To test that the AccuRev Web UI installation is functioning correctly:

1. Obtain a user name and password for the AccuRev Server(s) that the Web UI will be accessing.
2. Test browser access to the AccuRev Web UI from the Tomcat install machine, from your organization's internal network, and from the Internet.
  - Open a browser and navigate to: `http://<server>:<port>/web_gui/WebGui.html`. You should see a dialog prompting you to log in to an AccuRev Server.
  - Log in to each AccuRev Server and open a stream.

## Informing Web UI Users

When the AccuRev Web UI has been installed, configured, and tested, distribute the following information to end users:

- The correct URL to access the AccuRev Web UI. Remember to use the new port assignment if you changed it from the default of 8080 as described in *Troubleshooting*.
- The **wui\_config.xml** file (if you have implemented login security), along with instructions to place the file under the **.accurev** subdirectory in the user's home directory. For Windows users the home directory is **C:\Program Files\Documents and Settings\<user name>**. For Linux users, the home directory is their login directory.