

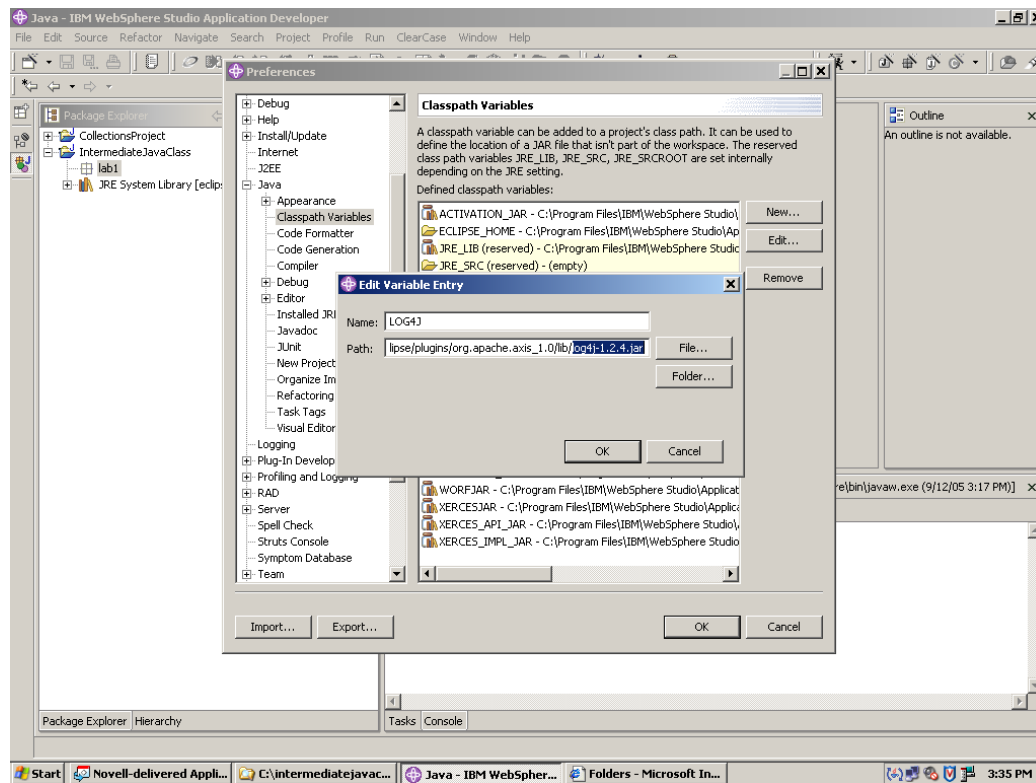
Getting Started with Log4j and WSAD 5.12

There are a couple of things you need to do. First, add the log4j jar file to you project. Second, create a properties file and third, add code to your classes. This document is a very quick start on how to start using Log4j. For more information, see: <http://logging.apache.org/log4j/docs/>

Add the log4j jar file to your project. There are a few ways to do this. One way is to create a Classpath Variable that can be used across many projects.

1. Select Window | Preferences | Jave | Classpath Variables
2. Select New...
3. Name the variable LOG4J
4. Select File...
5. Navigate to the following folder and select the jar file:

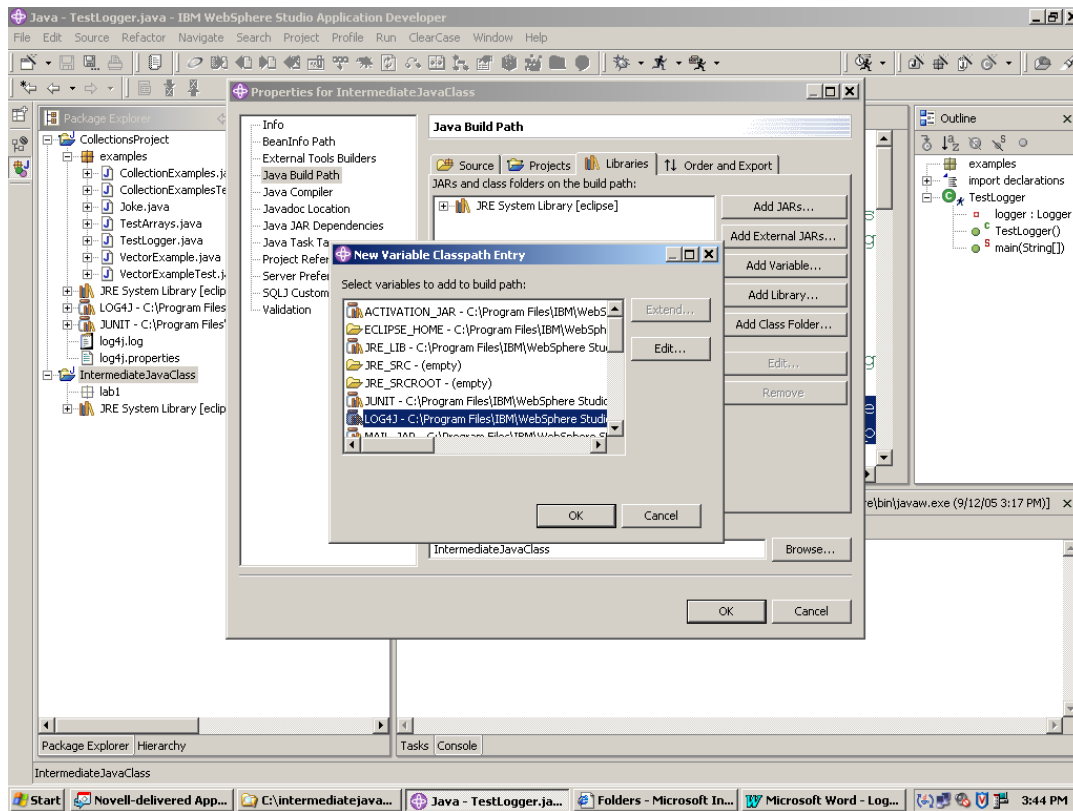
C:/Program Files/IBM/WebSphere Studio/Application Developer/v5.1/wstools/eclipse/plugins/org.apache.axis_1.0/lib/log4j-1.2.4.jar



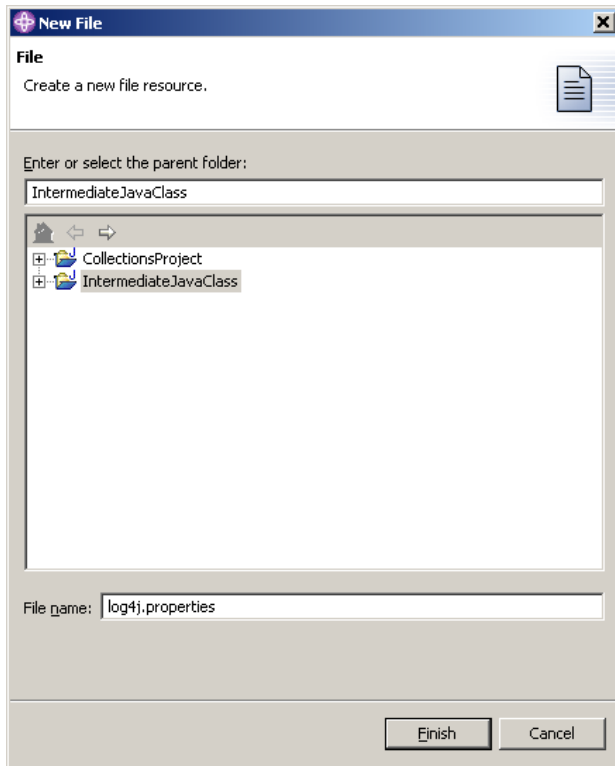
6. Click OK to close the Entry screen. Then click OK to close the Preferences screen.

Next, you need to add the Classpath Variable to your project.

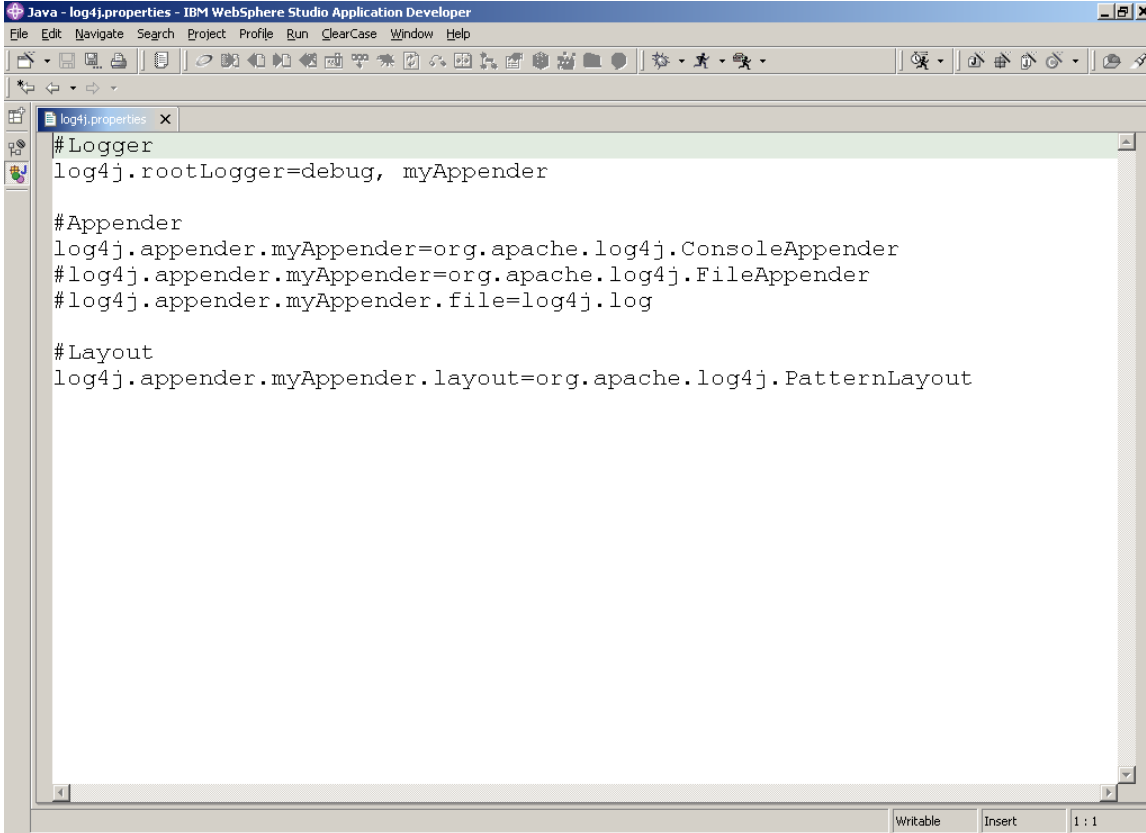
7. Select your project and from the right-mouse menu, select Properties.
8. Select Java Build Path
9. Select the Libraries tab.
10. Click Add Variable and select LOG4J.
11. Click OK.
12. Click OK to close the Properties screen.



Create a New File called log4j.properties in the root project folder, not any sub folder or package.



Add the following to the file:

A screenshot of the IBM WebSphere Studio Application Developer interface. The title bar reads "Java - log4j.properties - IBM WebSphere Studio Application Developer". The menu bar includes "File", "Edit", "Navigate", "Search", "Project", "Profile", "Run", "ClearCase", "Window", and "Help". The toolbar contains various icons for file operations and development. The main editor window shows the following configuration for log4j.properties:

```
# Logger
log4j.rootLogger=debug, myAppender

#Appender
log4j.appender.myAppender=org.apache.log4j.ConsoleAppender
#log4j.appender.myAppender=org.apache.log4j.FileAppender
#log4j.appender.myAppender.file=log4j.log

#Layout
log4j.appender.myAppender.layout=org.apache.log4j.PatternLayout
```

The status bar at the bottom right shows "Writable", "Insert", and "1 : 1".

This example will print the messages to the console. Later, you will see how to use a log file. The # is a comment.

Create a new class in you project package.

Add the import.

```
import org.apache.log4j.*;
```

Add an instance variable for the Logger class.

```
private Logger logger = null;
```

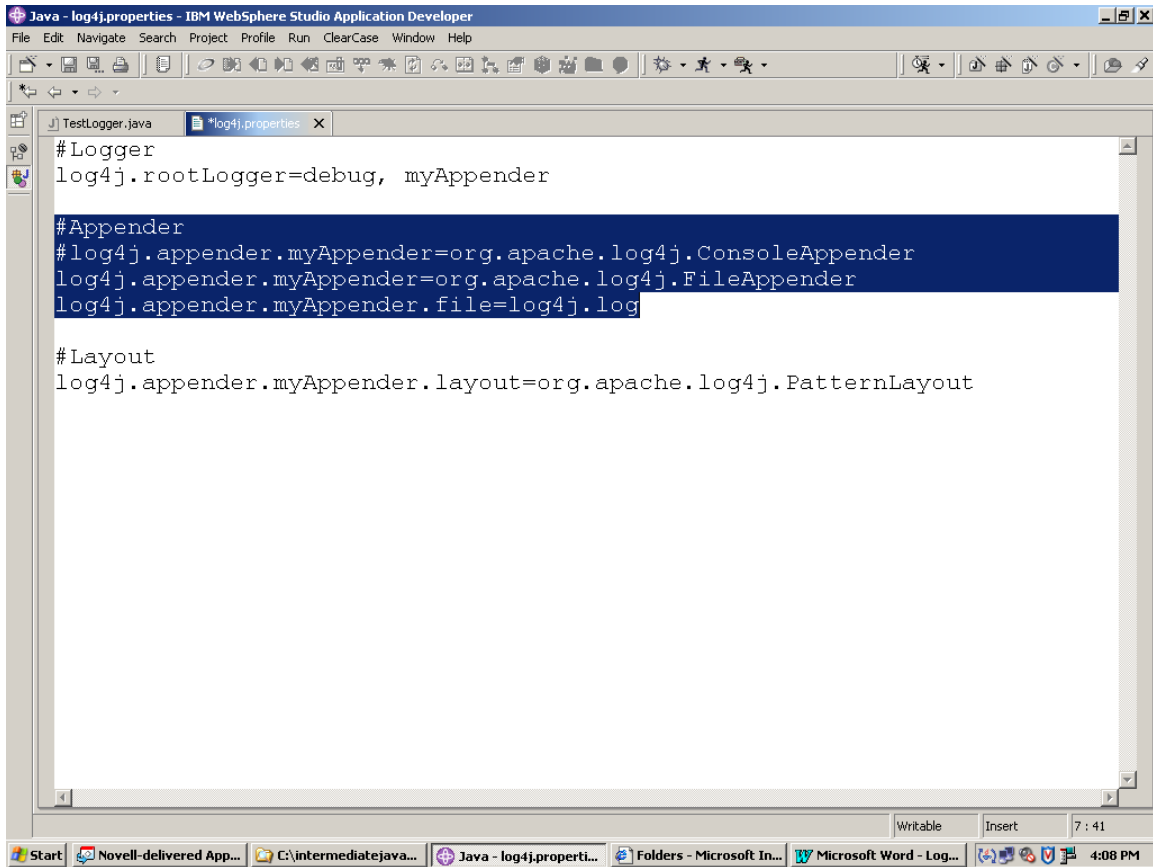
In the constructor, add the code to get the properties file.

```
System.setProperty("log4j.configuration","log4j.properties");  
logger = Logger.getLogger(TestLogger.class.getName());
```

Write code to log messages where needed.

```
logger.info("...");  
logger.error("...");  
logger.debug("...");  
logger.fatal("...");  
logger.warn("...");
```

This example will print the messages to the console. To print the messages to the file, comment the ConsoleAppender and uncomment the FileAppender and log file.



The screenshot shows the IBM WebSphere Studio Application Developer interface. The main editor window displays the contents of a file named `log4j.properties`. The configuration is as follows:

```
# Logger
log4j.rootLogger=debug, myAppender

#Appender
#log4j.appender.myAppender=org.apache.log4j.ConsoleAppender
log4j.appender.myAppender=org.apache.log4j.FileAppender
log4j.appender.myAppender.file=log4j.log

#Layout
log4j.appender.myAppender.layout=org.apache.log4j.PatternLayout
```

The `FileAppender` configuration is highlighted in blue. The status bar at the bottom of the IDE shows the time as 7:41 and the date as 4:08 PM.

After you execute the program, you will need to refresh the project view to see the log file. You do not have to create the file first. Log4j will create it for you.

Here is an example class.

```
/*
 * Created on Sep 12, 2005
 *
 * To change the template for this generated file go to
 * Window>Preferences>Java>Code Generation>Code and
Comments
 */
package examples;

//1) Import the Log4j package.
//2) You need to add the following JAR file to your project.
// C:/Program Files/IBM/WebSphere Studio/Application Developer/v5.1/
// wstools/eclipse/plugins/org.apache.axis_1.0/lib/log4j-1.2.4.jar
//3) Complete the code.
// - Create an instance of Logger.
// - Get the log4j.properties file.
// - Call the Logger methods to write messages.

import org.apache.log4j.*;

/**
 * @author systnr316
 *
 * To change the template for this generated type comment go to
 * Window>Preferences>Java>Code Generation>Code and
Comments
 */
public class TestLogger
{
    //Create an instance of the Logger class.
    private Logger logger = null;

    public TestLogger()
    {
        super();
        //Get the log4j.properties file.
        System.setProperty("log4j.configuration",
            "log4j.properties");
        logger = Logger.getLogger(TestLogger.class.getName());
    }

    public static void main(String[] args)
    {
        TestLogger testLogger = new TestLogger();
        //Write messages using Logger.
        testLogger.logger.info("Just Information...");
        testLogger.logger.error("Errors and Exceptions");
        testLogger.logger.debug("Display values...");
        testLogger.logger.fatal("Shutting Down...");
        testLogger.logger.warn("Good to know...");
    }
}
```