

**WA2093 - EJB and JPA Programming with Java
EE 6 - Websphere 8.0 / RAD8.0**

Classroom Setup Guide

Web Age Solutions Inc.

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Part 1 - Minimum Hardware Requirements

- 2 GHz Pentium IV
- 2 GB RAM minimum, 3 GB recommended
- 25 GB in the hard disk
- USB port

Part 2 - Minimum Software Requirements

- One of the following Windows versions:
 - Windows XP Professional SP 3
 - Windows Vista (Professional, Enterprise, or Ultimate)
 - Windows 7 (Professional, Enterprise, or Ultimate)
- One of the following web browsers:
 - Internet Explorer 8 or above
 - Firefox 3.x
- Adobe Acrobat Reader
- Zip extraction utility
- Rational Application Developer 8.0.4 Trial *

* - indicates software provided as part of the courseware.

Part 3 - Software Provided

Name of the files you will receive:

- **WA2093_1.ZIP**
- **WA2093_2.ZIP**
- **WA2093_3.ZIP**

All other software listed under Minimum Software Requirements is either commercially licensed software that you must provide or software that is freely available off the Internet.

Part 4 - Important Ghosting or Imaging Information

Some of the software installed for this course will not function after changing the computer hostname. As such, cloning or imaging should not be used on a fully installed system.

You can save time by extracting the contents of the USB memory stick to C:\ on a clean OS install (no other software installed) and then imaging that hard drive. After restoring the image to the other computers and changing the hostnames, you can then install the software on each computer individually by following the instructions that are detailed later in this document.

Part 5 - Instructions

__1. Extract all the **.ZIP** files to C:\

__2. Review that the following folders were created:

- **C:\LabFiles**
- **C:\Software\RAD**
- **C:\Software\RAD_SETUP**
- **C:\Software\RESTClient**
- **C:\Software\WAS80**

Part 6 - Installing Rational Application Developer v8.0 Trial (RAD 8.0.4)

Average time for installation of RAD 8.0.4 Trial: 60 minutes.

Note: If installing on Windows Vista, Windows 7, or Windows Server 2008 there will be several notes about special steps required on these platforms. Failure to follow these additional steps will lead to an unusable installation.

__1. Before you begin, please shut down any running applications. The installation process is quite CPU/disk intensive.

__2. From C:\Software\RAD_SETUP, run **launchpad.exe**. The installer will begin.

Note: If installing on Windows Vista/7/2008 right click the **launchpad.exe** program and select '**Run as Administrator**' and accept any security prompts.

__3. Click **Install IBM Rational Application Developer for WebSphere**.



A new program – the **IBM Installation Manager** will launch. You will then be prompted to *Install Packages*.

4. From the *Install Packages* screen **Uncheck** the following software so it will not be installed:

IBM Rational Desktop Connection Toolkit for Cloud Environments

IBM WebSphere Application Server 6.1 Test Environment (32-bit and 64-bit)

IBM WebSphere Application Server 7.0 Test Environment (32-bit and 64-bit)

Note: Depending on the operating system you may not see the 64-bit WebSphere Application Server options.

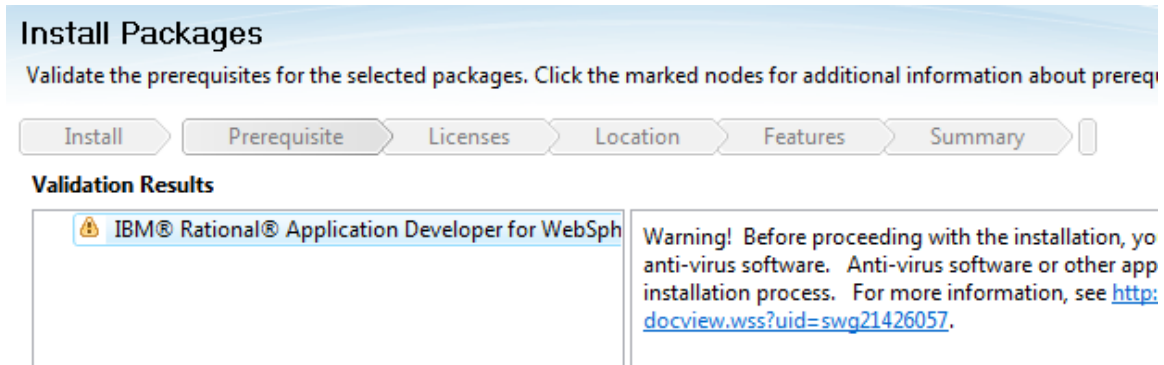
5. Make sure only **IBM Installation Manager Version 1.5.0**, **IBM WebSphere Application Server Version 8.0.0.1**, and **IBM Rational Application Developer for WebSphere Software Version 8.0.4** are selected as shown below and click **Next**.

The screenshot shows the 'Install Packages' window with the instruction 'Select packages to install:'. Below this is a table with two columns: 'Installation Packages' and 'Status'. The table lists several IBM products, each with a checkbox and a version number. The status for each package is indicated in the 'Status' column.

Installation Packages	Status
<input checked="" type="checkbox"/> IBM® Installation Manager Version 1.5.0	Will be installed
<input checked="" type="checkbox"/> IBM WebSphere® Application Server Version 8.0.0.1	Will be installed
<input checked="" type="checkbox"/> IBM® Rational® Application Developer for WebSphere® Software Version 8.0.4	Will be installed
<input type="checkbox"/> IBM® Rational® Desktop Connection Toolkit for Cloud Environments Version 1.0.4	
<input type="checkbox"/> IBM® WebSphere® Application Server V6.1 (32-bit) Test Environment Version 6.1.0.41	
<input type="checkbox"/> IBM® WebSphere® Application Server V6.1 (64-bit) Test Environment Version 6.1.0.41	
<input type="checkbox"/> IBM® WebSphere® Application Server V7 (32-bit) Test Environment Version 7.0.0.19	
<input type="checkbox"/> IBM® WebSphere® Application Server V7 (64-bit) Test Environment Version 7.0.0.19	

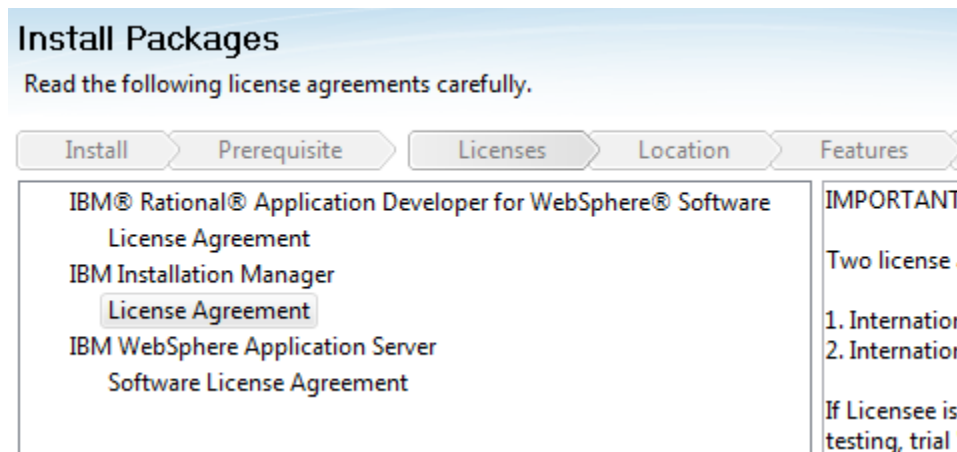
The *Validation Results* page will appear.

__6. Check that you don't have any validation errors except the warning about stopping running programs including anti-virus software and click the **Next** button.



The *License Agreement* screen will appear.

__7. At the bottom of the screen, select **I accept the terms in the license agreements** and click **Next**.



You will be asked to select a location for the Installation Manager.

8. **Change** the *Shared Resources Directory* and *Installation Manager Directory* to the values below and click **Next**.

Shared Resources Directory: C:\IBM\SDPShared

Installation Manager Directory: C:\IBM\Installation Manager\eclipse

The screenshot shows the 'Install Packages' wizard with the 'Location' step selected. It includes a warning icon and text explaining that files are stored in two locations: a shared resources directory and an installation directory. The 'Shared Resources Directory' field is set to 'C:\IBM\SDPShared' and the 'Installation Manager Directory' field is set to 'C:\IBM\Installation Manager\eclipse'. Both fields are circled in red in the original image.

Install Packages
Select a location for the shared resources directory and a location for Installation Manager.

Install Prerequisite Licenses **Location** Features Summary

When you install packages, files are stored in two locations:

- 1) The shared resources directory - resources that can be shared by multiple packages.
- 2) The installation directory - any resources that are unique to the package that you are installing.

Important: You can only select the shared resources directory the first time you install a package with the IBM Installator with the most available space because it must have adequate space for the shared resources of future packages.

Shared Resources Directory: C:\IBM\SDPShared

Once installed, IBM Installation Manager will be used to install, update, modify, manage and uninstall your packages.

Installation Manager Directory: C:\IBM\Installation Manager\eclipse

Note: This step is important to avoid permission issues with the 'Program Files' directory.

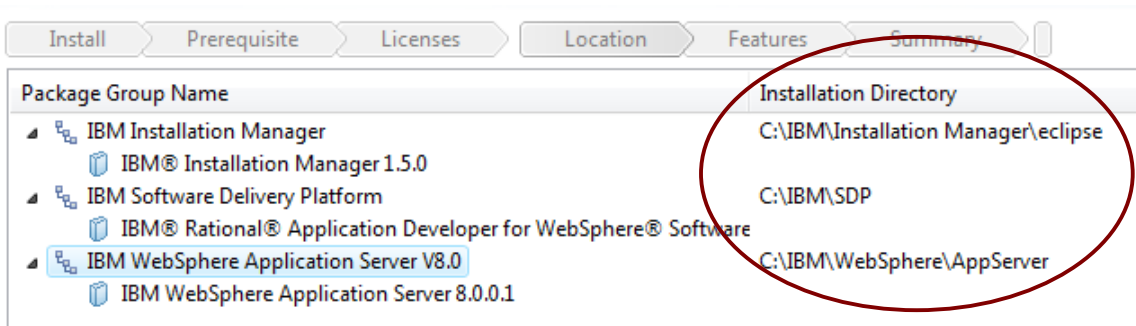
9. Select each of the following entries from the 'Package Group Name' list and **modify** the '**Installation Directory**' to the value listed.

IBM Software Delivery Platform: C:\IBM\SDP

IBM WebSphere Application Server 8.0.0.1: C:\IBM\WebSphere\AppServer

Note: It is especially critical to modify the directory the WebSphere Application Server test environment is installed to. Installing under 'Program Files' can cause permission issues with saving configuration changes.

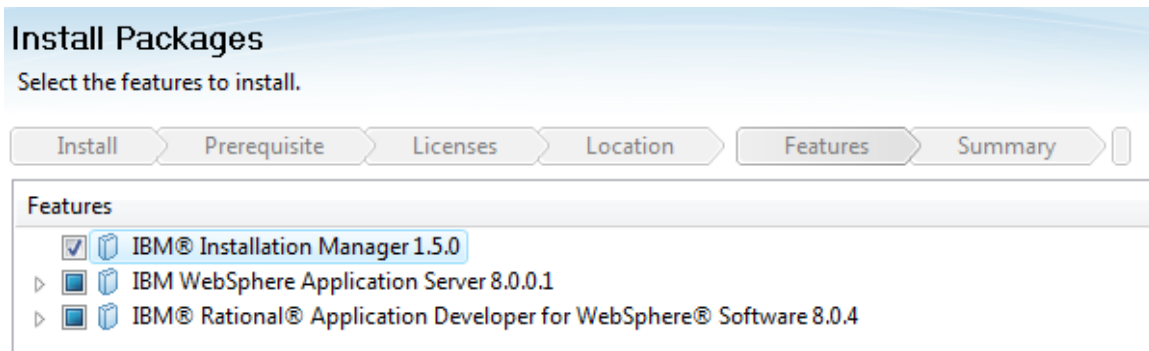
__10. Verify the installation locations as shown below and click the **Next** button.



__11. Leave the option to extend an existing Eclipse installation unselected and click the **Next** button.

__12. Leave the default language selection and click the **Next** button.

__13. Leave the default features selected and click the **Next** button.



__14. For the option for the *Help System* leave the option of **Access help from the Web** selected and click the **Next** button.

After the installation, you can change how you access help by using the help preferences option in the product.

- Access help from the Web
- Download help and access the content locally. Only limited help content is included during installation. When you first start the product, the complete online help is downloaded and installed provided that you have an Internet connection. On subsequent startups, available updates to the help are downloaded and installed.
- Access help from a server on your intranet

Host:

Note: This option is selected because otherwise RAD will want to download help information every time RAD starts. Even if students are in a classroom without an internet connection the install of RAD can still complete.

You will be asked to review summary information.

15. Click Install.

Install Packages
Review the summary information.

Install Prerequisite Licenses Location Features **Summary**

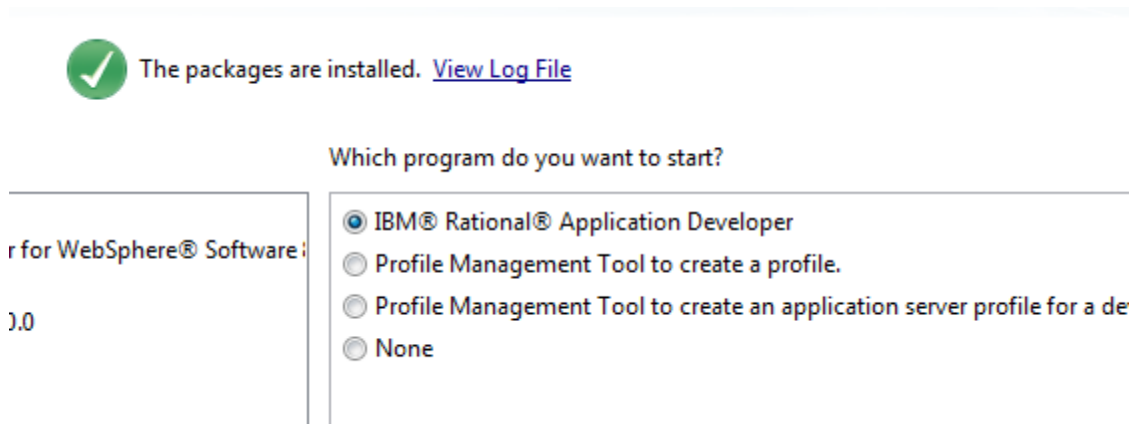
Target Location
Shared Resources Directory: C:\IBM\SDPShared

Packages

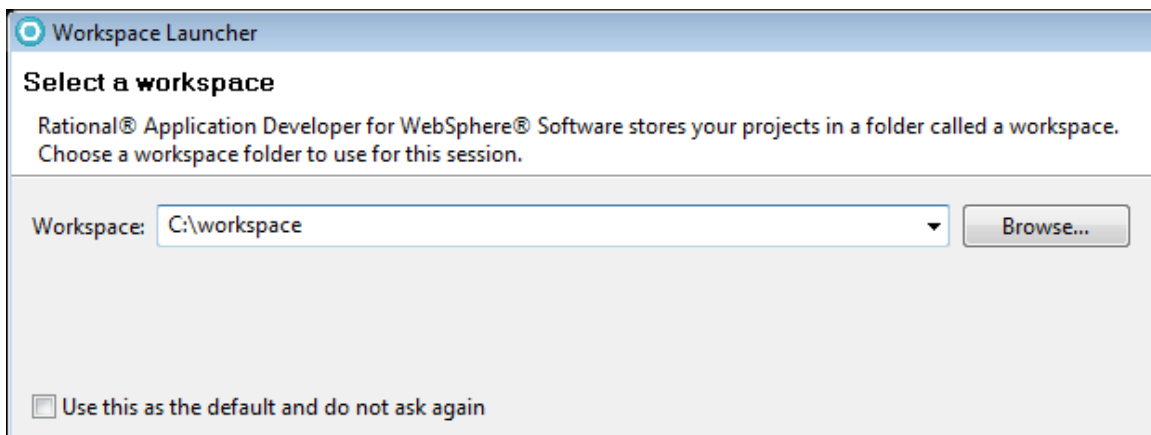
Packages	Installation Directory
IBM Software Delivery Platform	C:\IBM\SDP
IBM® Rational® Application Developer for WebSphere® Software 8.0.4	
Web development tools	
Java™ EE and Web services development tools	
WebSphere® Application Server development	
UML visualization of code and other artifacts	
Application analysis and developer test	
Business Intelligence and Reporting Tools	
Extensibility features	
IBM WebSphere Application Server V8.0	C:\IBM\WebSphere\AppServer
IBM WebSphere Application Server 8.0.0.1	
EJBDeploy tool for pre-EJB 3.0 modules	
Stand-alone thin clients, resource adapters and embeddable containers	
IBM Software Development Kit	
IBM Installation Manager	C:\IBM\Installation Manager\eclipse
IBM® Installation Manager 1.5.0	

RAD 8.0.4 will install. Eventually, it will complete.

__16. Leave the option '**IBM Rational Application Developer**' selected and click the **Finish** button.



__17. In the workspace window, change the **Workspace** to **C:\workspace**



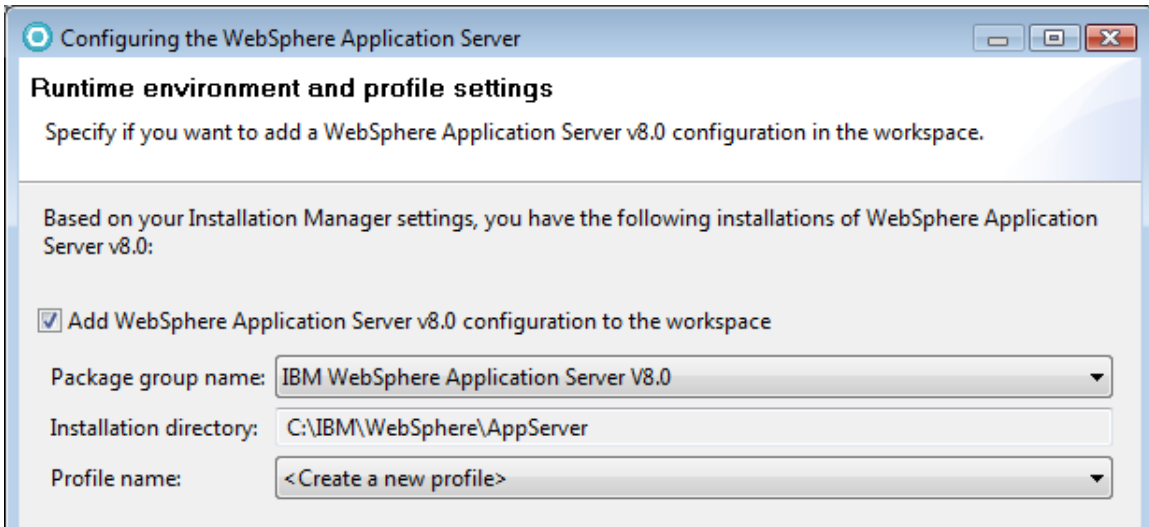
__18. Click **OK**.

RAD 8.0.4 will start.



__19. If prompted by Windows firewall security unblock the program.

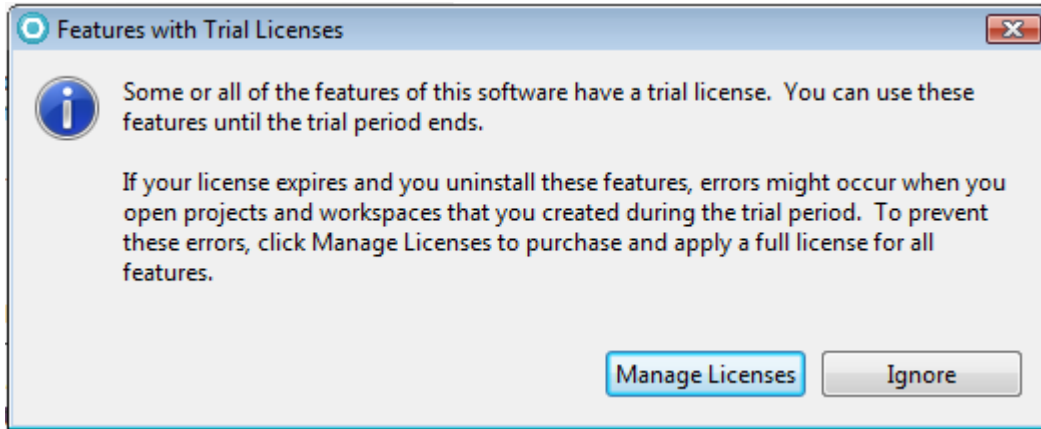
__20. In the *Runtime environment and profile settings* dialog that appears click the **Cancel** button.



Note: It is important that you cancel creating a profile. Students will create a profile to be sure it is accessible to them.

The **Features with Trial Licenses** dialog will open.

__21. Click **Ignore**.



__22. If prompted about help content select **Work without Help**.

__23. From the menu, select **File->Exit** to close Rational Application Developer.

__24. Close all open windows.

Part 7 - Verification of the installation of RAD 8.0.4

__1. Open the following file:

C:\IBM\WebSphere\AppServer\logs\postinstall\postinstall.log

__2. Look at the end of the file for the message:

```
<logger>com.ibm.ws.postinstall.LaunchUnifiedPost
<level>INFO</level>
<class>com.ibm.ws.postinstall.LaunchUnifiedPostI
<method>logReturnCode</method>
<thread>0</thread>
<message>INSTCONFSUCCESS: All config actions ran
</record>
</log>
```

If you see the message INSTCONFSUCCESS, it means that WebSphere Application Server was installed properly.

__3. Close all open files.

Part 8 - Modify File Permissions

Note: These steps allow full access to the directories used by the RAD and WebSphere installs. This is required so that students can start the WebSphere server from within RAD and will allow the WebSphere server to write to the log files. Without these steps the students won't be able to start the WebSphere server and won't be able to do the labs.

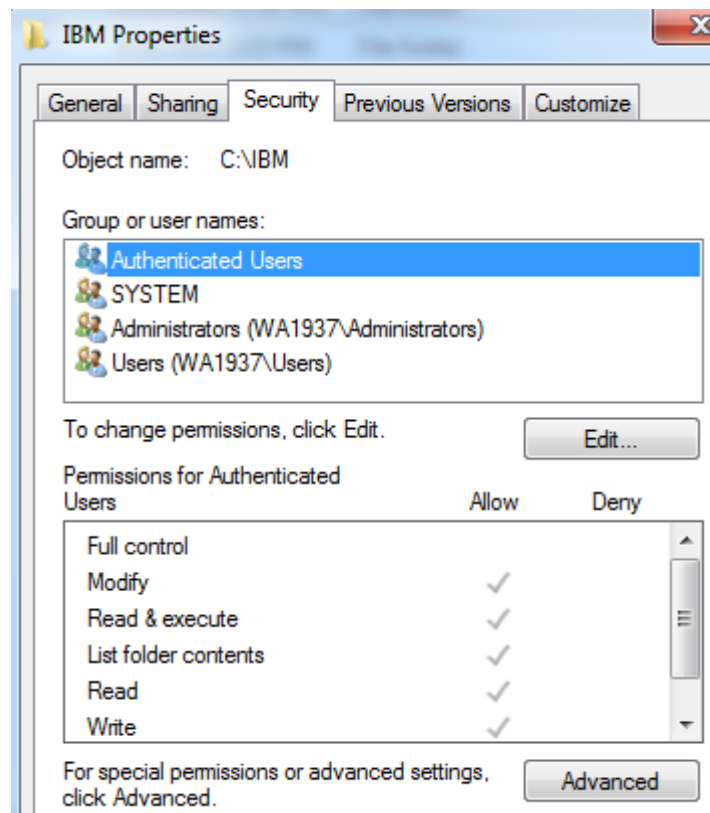
These steps to modify folder permissions should be done no matter what version of Windows is used.

The steps to accomplish this may vary by Windows version but the goal is the same, granting access to all users to the RAD and WebSphere install. If you have questions about how to accomplish this contact the setup support person for the class.

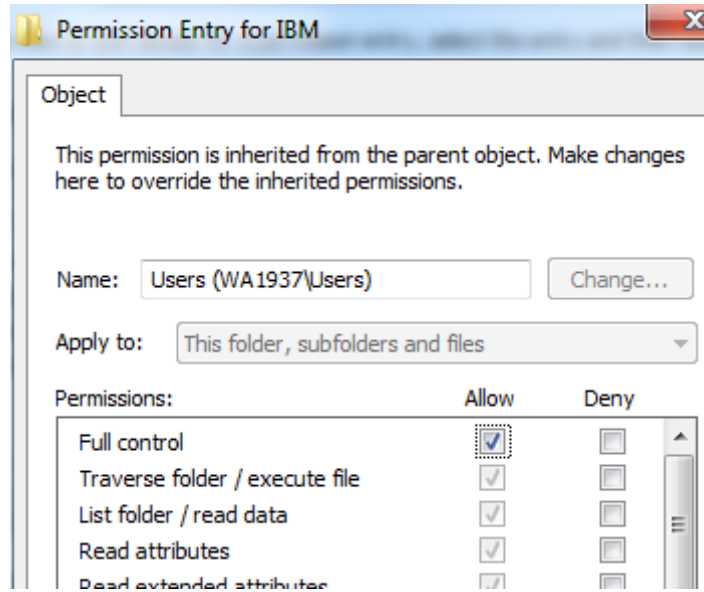
__1. Right click C:\IBM and select **Properties**.

__2. Click the **Security** tab.

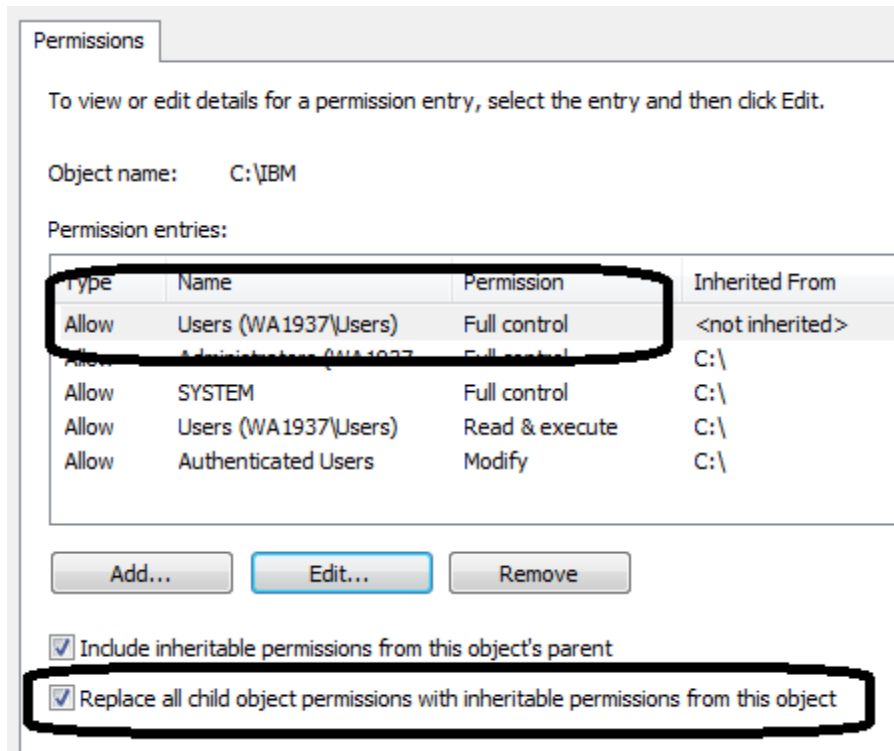
__3. Click **Advanced**.



- __4. Click **Change Permissions**.
- __5. Select the **Users** entry (**add one if not present**).
- __6. Click **Edit...**
- __7. Check **Full Control** permission option and click **OK**.

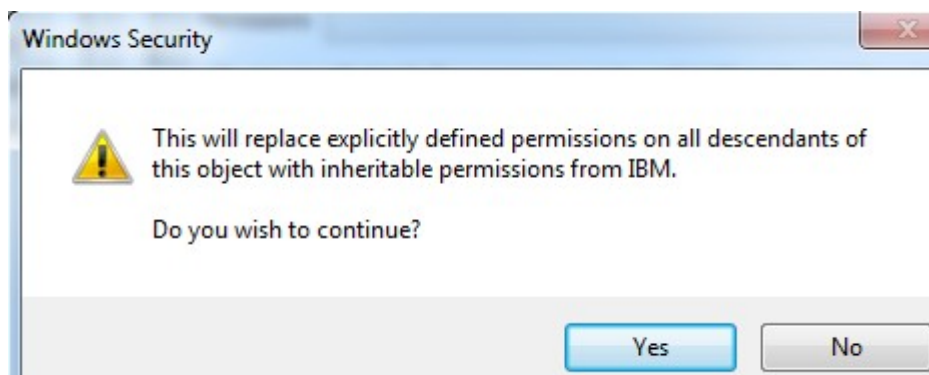


__8. Select the check box for "**Replace all child permissions with inheritable permissions from this objects**" and then click **OK**.



__9. Click OK to continue.

__10. A *Windows security* dialog will open, click **Yes**.



- __11. Wait until Windows finishes updating security, and close all windows when it is done.
- __12. Give full privileges to **C:\LabFiles** and **C:\workspace** to all users as you just did it for C:\IBM.
- __13. Restart the computer and login with the user that the student will use to do the Labs.
- __14. Make sure the user has full access to **C:\LabFiles** and **C:\workspace** as well as **C:\IBM** folders.

Congratulations, **Rational Application Developer v8.0.4** has been installed.

Congratulations. The installation for this course has been completed.