IBM Express Runtime Quick Start Workshop

Lab 2 – Adding a WebSphere application to an integrated solution

Part 1: Generate an application wrapper for the WebSphere application

The WebSphere Application Deployment Project wizard can automatically create an application wrapper for your Web application, provided you have already installed a working version of your application into a test or development WebSphere Application Server environment.

To create an application wrapper for the Document Manager sample application, perform the following steps:

1. Select **Start > Programs > IBM Express Runtime 2.2 > Express Runtime Developer** to launch the **Express Runtime development environment**. If you see the **Welcome** window, close it to go to the workbench.

2. Select **File > New > WebSphere Application Deployment Project**. The WebSphere Application Deployment Project wizard is displayed. (If the **WebSphere Application Deployment Project** option is not visible, make sure you are on the Express Runtime Developer perspective.)

   Provide a name for the WebSphere Application Deployment Project. For this lab, enter ***ACME_DocMgr*** as the **Project name** and click **Next** (Figure 2-1).

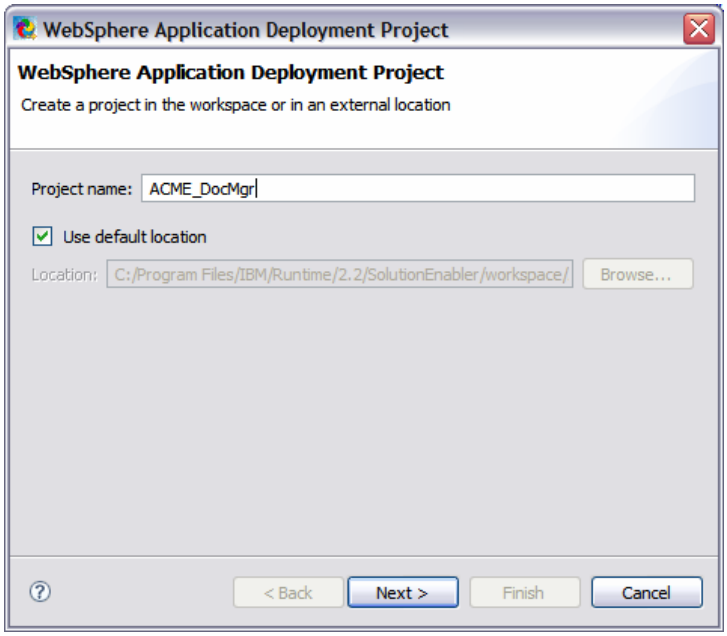

Figure 2-1 WebSphere Application Deployment Project wizard

3. You will see the **Locate Source Profile** window (Figure 2-2). In the **Local Directory** field enter:

   `C:\Program Files\IBM\WebSphere\AppServer\profiles\AppSrv01\config`

   Click **Next**.

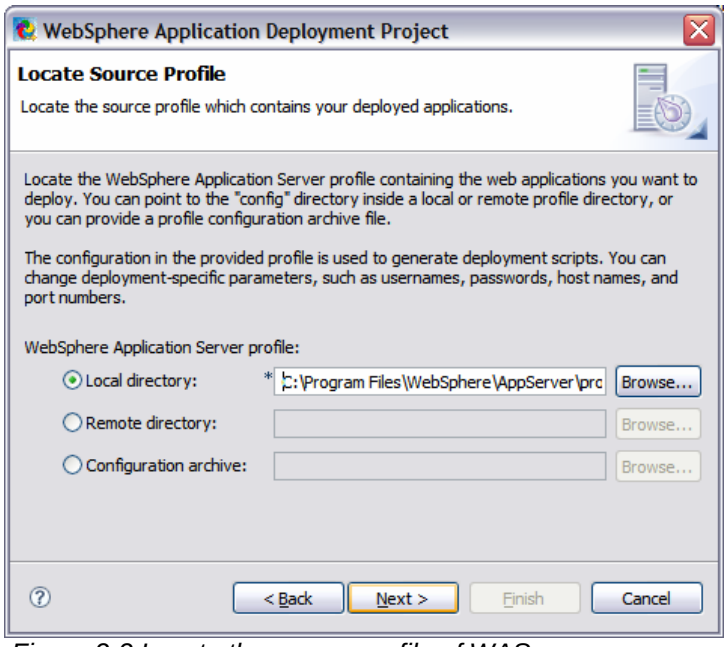

Figure 2-2 Locate the source profile of WAS server

Note: If your WAS server is running remotely, select the **Remote directory** option to browse to the configuration directory. You can also specify an archived configuration file as the source for your application information.

4. In the **Select Applications** panel, select the checkbox that corresponds to *RuntimeDocumentMgmt* and click **Next** (Figure 2-3).

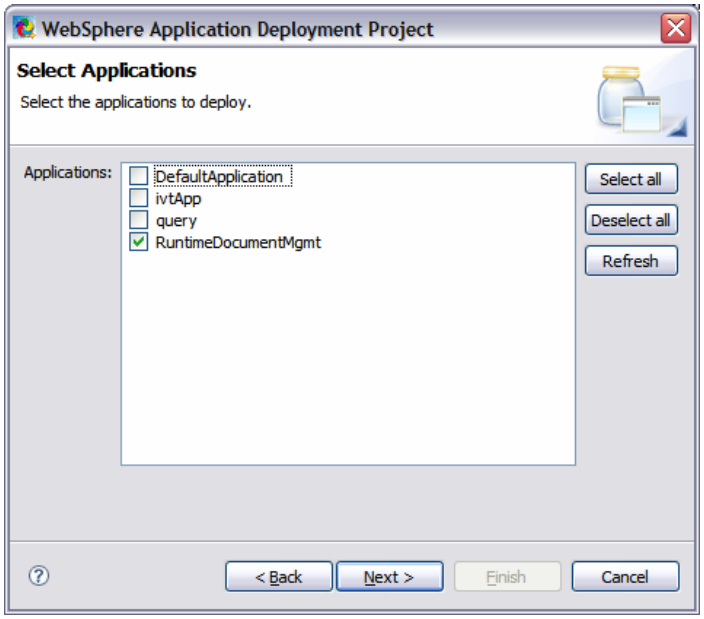

Figure 2-3 Specify WebSphere application

5. The WebSphere Application wizard loads the configuration information. In this process it will determine the type of resources the application uses (Figure 2-4). Review the summary information displayed and click **Next**.

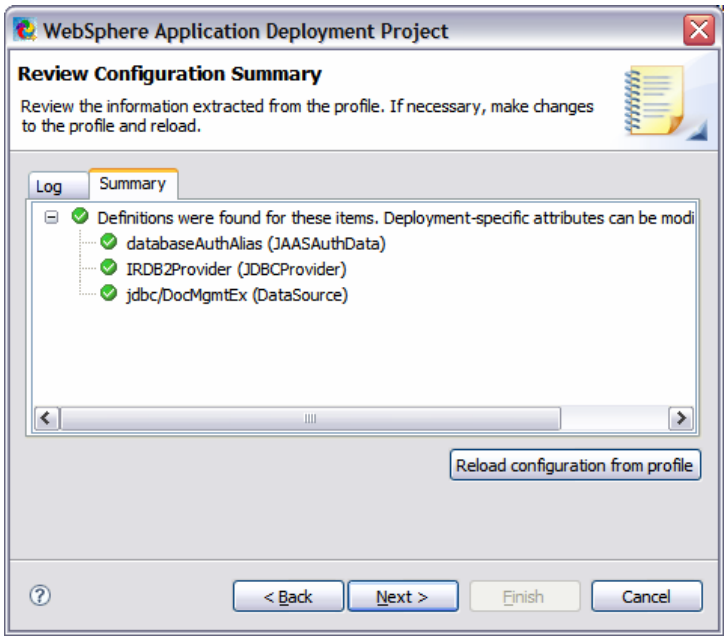

Figure 2-4 WebSphere application configuration summary

6. Accept the default selections on the **General Options** panel (Figure 2-5) and click **Next**.

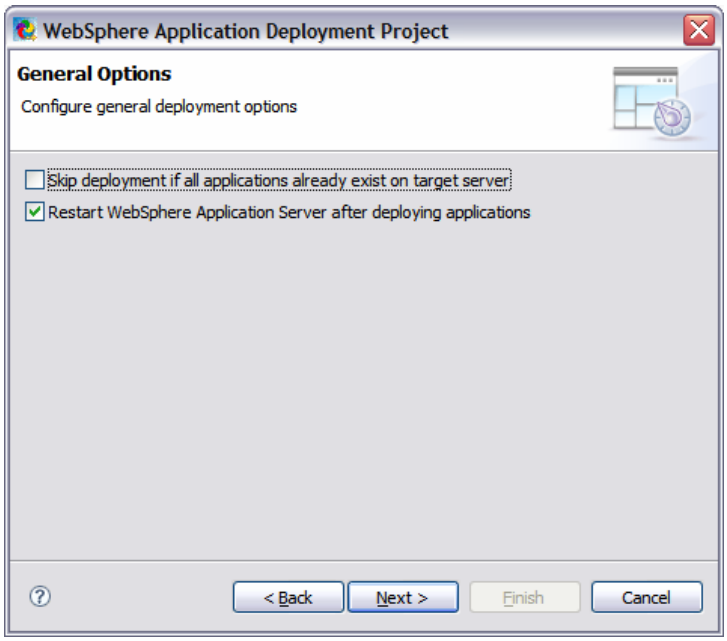

Figure 2-5 General Options panel

7. Next, the WebSphere Application wizard will prompt you to provide the location of the JAR files and the native library files that are required for the application (Figure 2-6). Click **OK** for the wizard to automatically locate the files on the local computer.

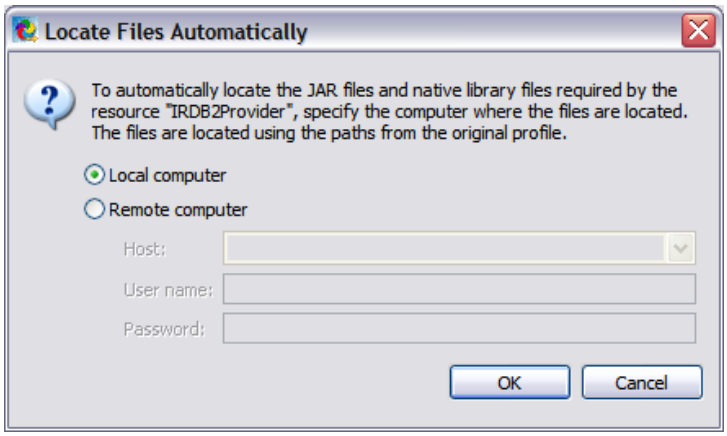

Figure 2-6 Locating JAR files and native library files

Note: This panel helps you to grab the necessary JAR and native library files for your datasource. You will not see this panel if your current application does not have a datasource resource defined.

8. You will see that the *Classpath files* and *Native libraries* are displayed on the panel (Figure 2-7). Click **Next**.

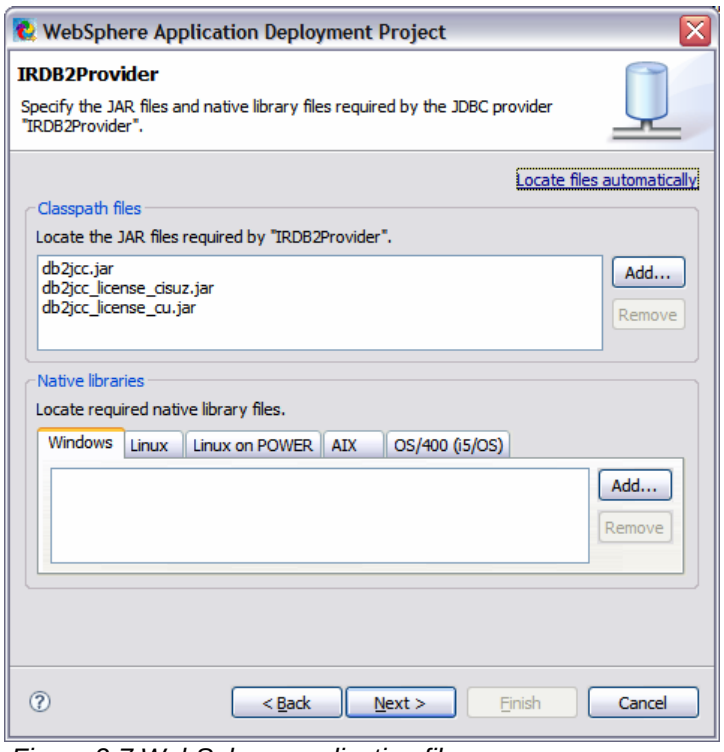

Figure 2-7 WebSphere application files

Note: If you do not see the **Locate Files Automatically** window in Figure 2-6, click on **Locate files automatically** at top right corner of the panel (refer to Figure 2-8). You could also click the **Add** button to browse to the directory that contains those files.

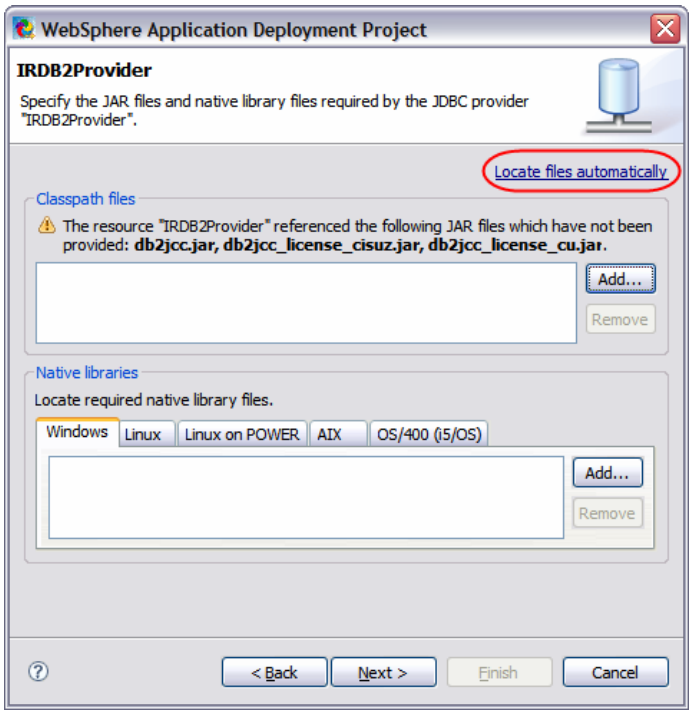

Figure 2-8 Manually locate WebSphere application files

9. You will see the datasource panel (Figure 2-9). Accept the default values and click **Next**.

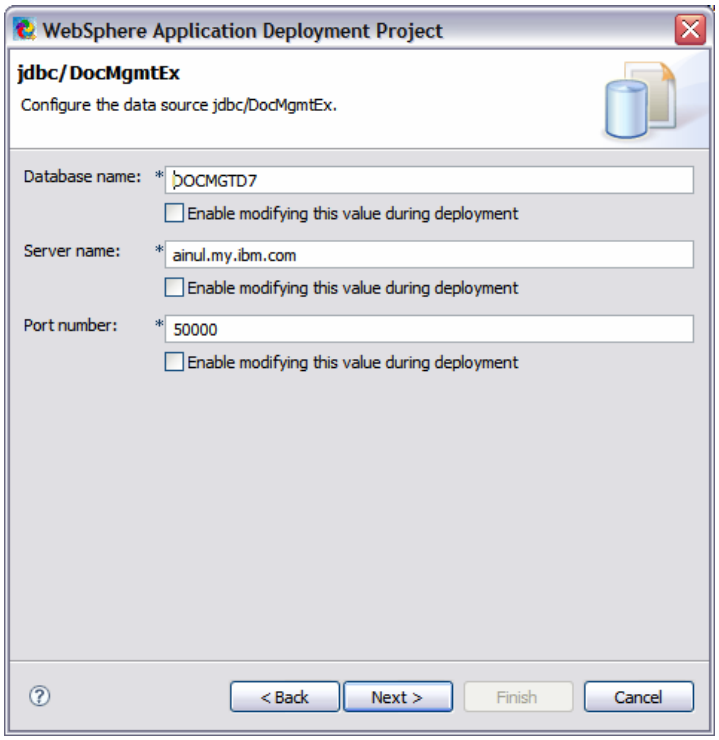

Figure 2-9 Datasource panel

10. Provide the password for the profile that is displayed. Make sure that this profile has administrator access on the computer. In this lab, enter ***er22admin*** for the userID and password (Figure 2-10). Next, click **Finish** to create the application project.

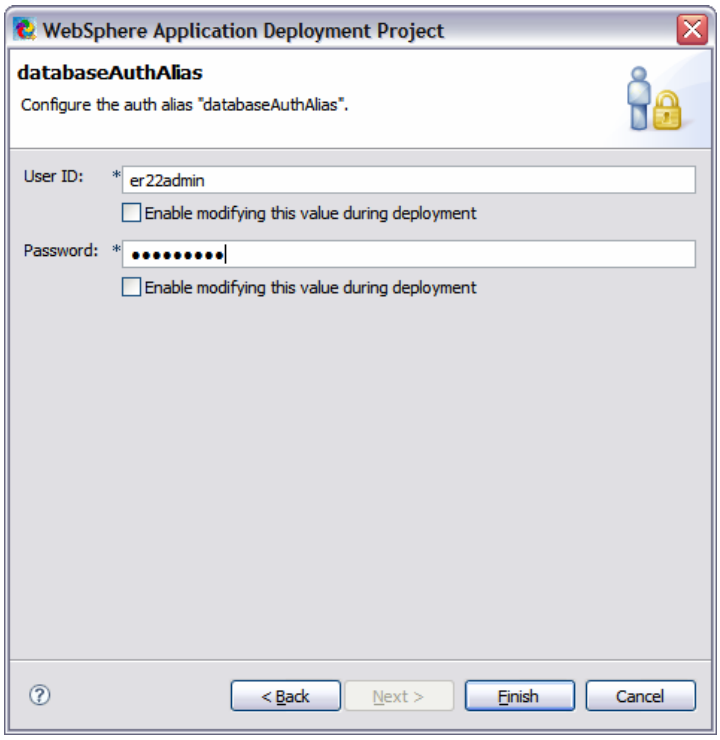

Figure 2-10 Specify administrator access

Note: This scenario is specific for this lab. When importing applications in your development environment, you should check the boxes (**Enable modifying this value during deployment**) to let these values be exposed at deployment time.

11. From the **Express Runtime Explorer**, you will see that the **ACME_DocMgr** application wrapper is created (Figure 2-11).

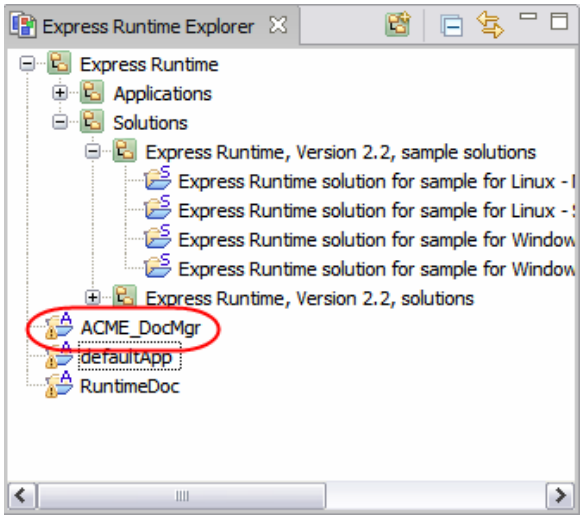

Figure 2-11 WebSphere application wrapper created

12. Close the **ACME_DocMgr** application wrapper in the Editor panel.

    Congratulations! You have successfully created an application wrapper which contains all of the necessary WebSphere Jython scripting to install the web application and to create all of the required resources and bind the application to those resources. And you have written **ZERO** lines of script code to achieve this!

IBM Express Runtime Quick Start Workshop

Lab 2 – Adding a WebSphere application to an integrated solution

Part 2: Adding the application wrapper to an integrated solution

Now, you can begin creating a solution project that combines the WebSphere application with required middleware and configuration information about this middleware. Each task is described in detail in this section.

1. In the **Express Runtime Developer** perspective, expand **Express Runtime**, **Solutions**, and **Express Runtime, Version 2.2 sample solutions** (Figure 2-12).

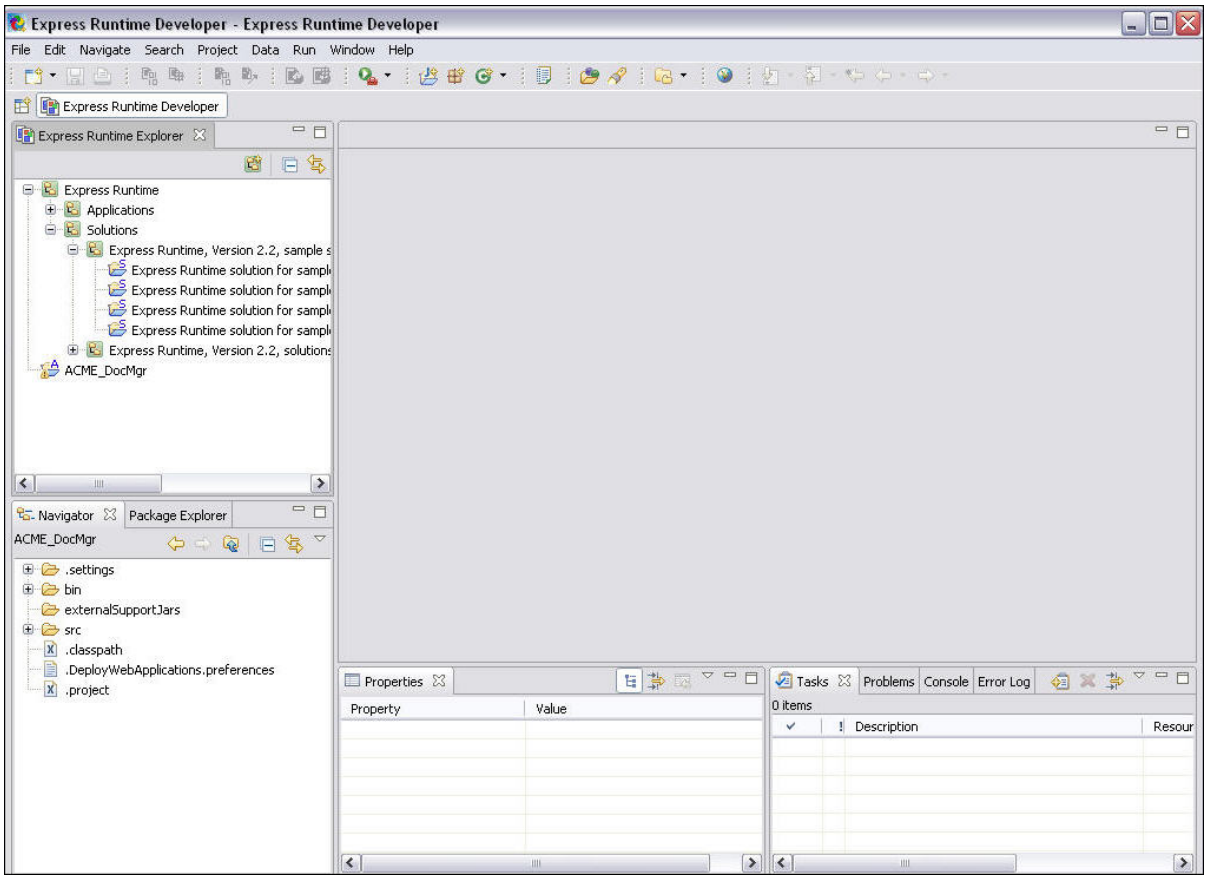

Figure 2-12 Express Runtime Developer sample Solutions

2. Select **Express Runtime solution for sample for Windows – Single target (IRU2_2SingleTargetSampleWin)**. Right click, select **Copy**.

3. Right click on white-space in the **Express Runtime Developer** perspective, select **Paste**.

4. On the **Copy Project** window, specify the name of your project file (see Figure 2-13). Make sure you have specified **Use default location** and click **OK**.

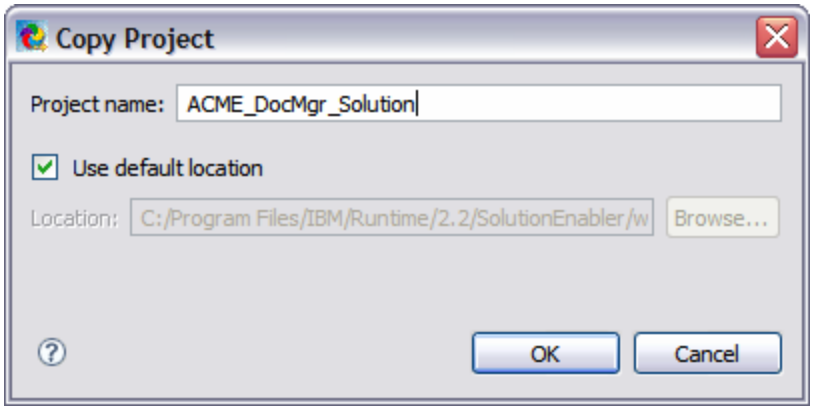

Figure 2-13 Copy project dialog box

5. Your solution will appear as: **Express Runtime solution for sample for Windows – Single target (ACME_DocMgr_Solution).** Follow the next step to change the name of your solution.

   Right click on white-space in the **Express Runtime Developer** perspective, select **Rename**. Change it to **ACME_DocMgr_Solution**. As the result, you will see that the solution project name now has been changed.

   Move the solution project to the bottom of explorer's listing as shown in Figure 2-14.

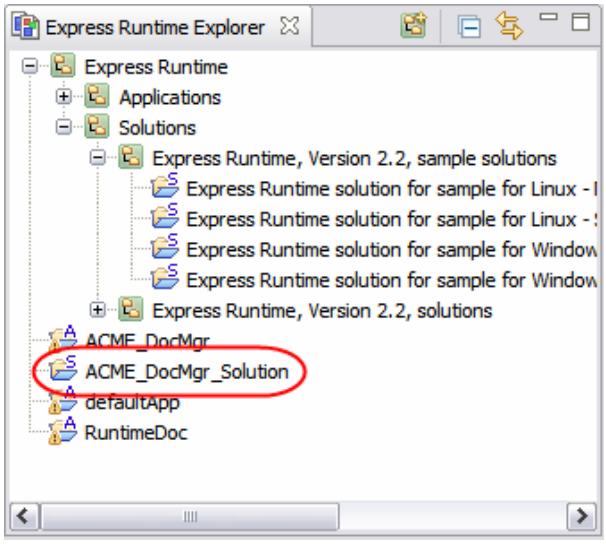

Figure 2-14 Solution project renamed and moved to the bottom of ER Explorer

6. In the **Express Runtime Developer** perspective, double-click on your new solution to open the **Solution Project wizard**.

7. In the **Solution Project wizard**, click on the **Tasks** tab. This shows the applications currently included in the solution (Figure 2-15).

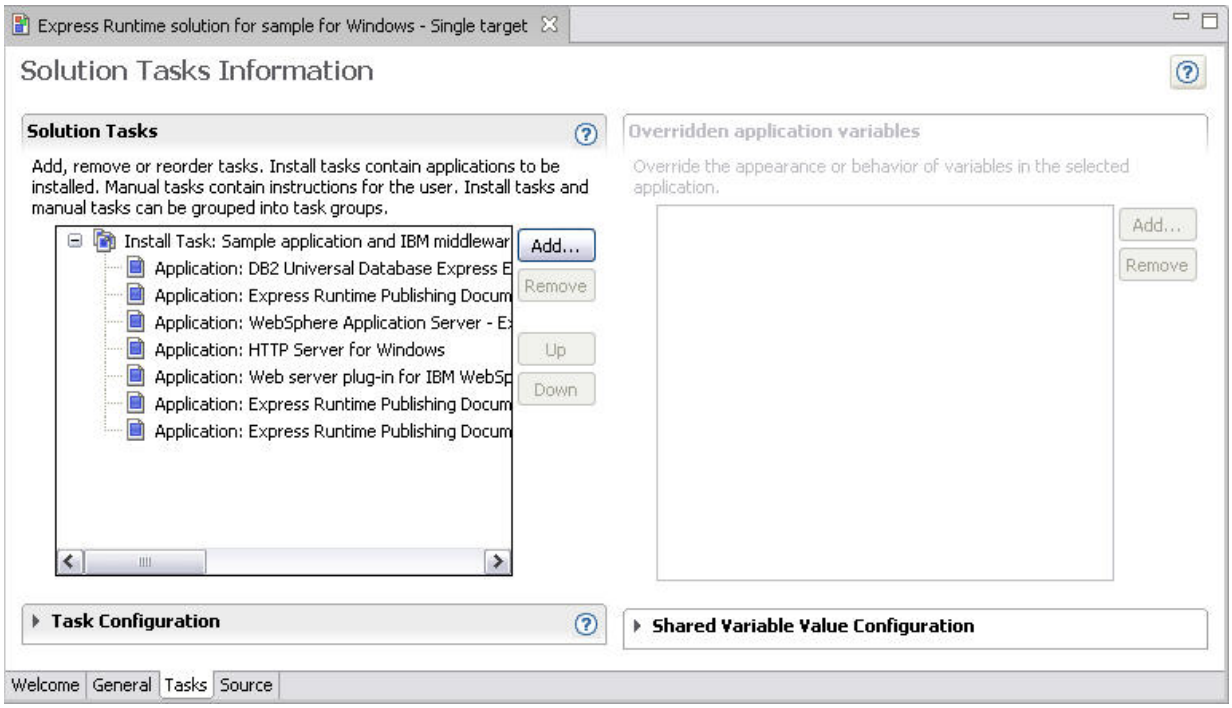

Figure 2-15 Solution Project wizard Tasks tab

8. Select **Express Runtime Publishing Document Manager WebSphere Application Server** (the last application in the list) and click **Remove**.

9. Select **Express Runtime Publishing Document Manager IHS Configuration** and click **Remove**.

10. Select **Express Runtime Publishing Document Manager DB2 Express Edition Configuration** and click **Remove**.

11. Click **Add** under **Solution Tasks**. On the **Add Solution Tasks** wizard (Figure 2-16), select **Add applications** and click **Next**.

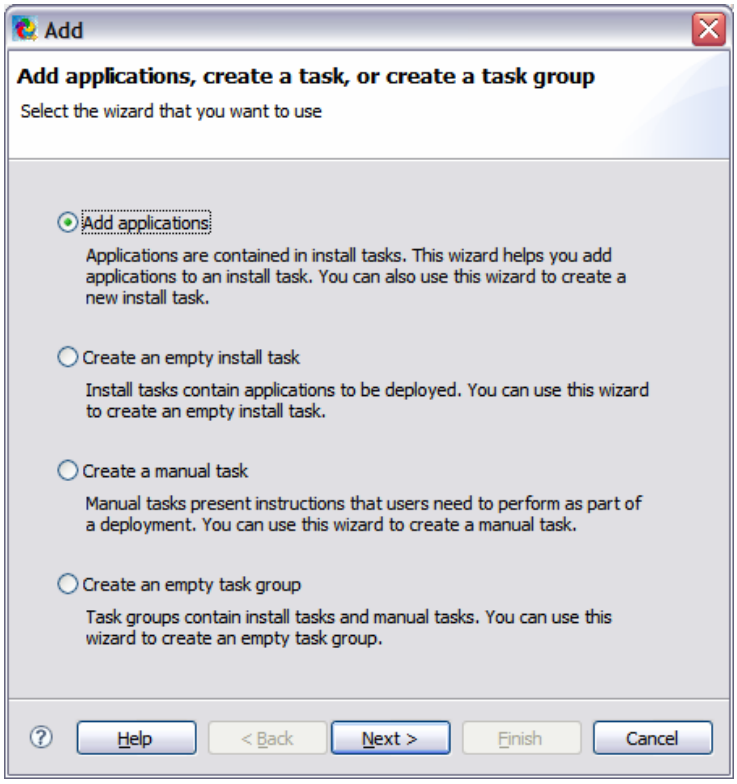

Figure 2-16 Add Solution Tasks wizard

12. Select **ACME_DocMgr** application to add to the existing task (Figure 2-17).

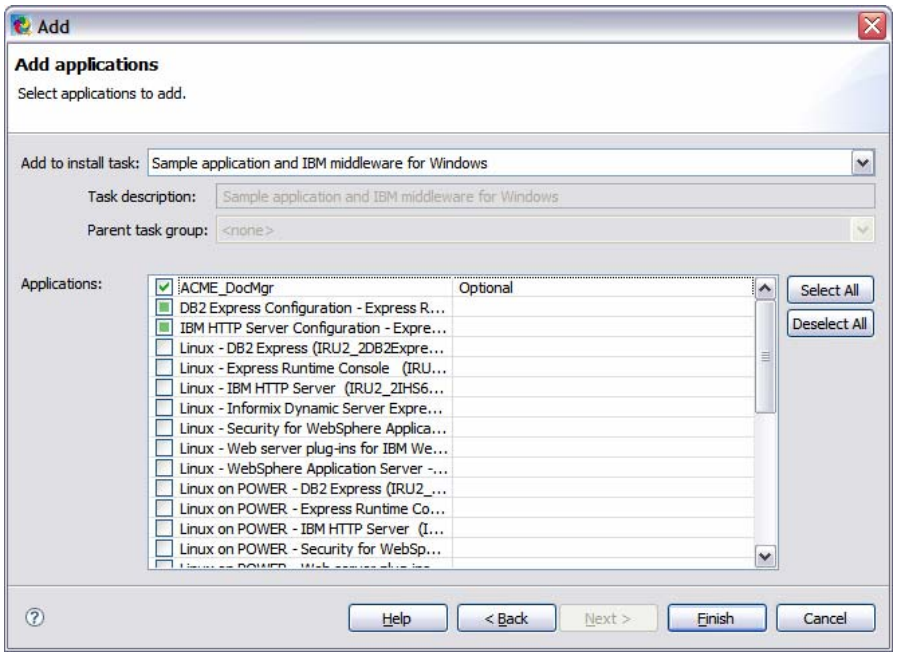

Figure 2-17 Specify tasks

13. Click **Finish** to add the selected tasks to your solution wrapper.

14. Perform the steps to generate the solution. To do this, right-click on **ACME_DocMgr_Solution**, click **Generate Solution**.

Congratulations! You have successfully created an integrated solution which includes the **ACME_DocMgr** application and the middleware components needed to run the application.