

IBM Software Assembly Toolkit Tutorial

Customizing and Packaging a Solution

In this tutorial, we are going to take the solution you built in the previous tutorial and add some customization, then export the solution to create an installation package. This tutorial assumes that you have already downloaded and installed IBM Software Assembly Toolkit 3.1 and you have installed WebSphere Application Server, DB2, and have completed the ISAT Deploy Tutorial and the ISAT Using Wizards Tutorial.

Part 1: Customizing the Deployment Wizard Welcome screen

During the course of Part 1 of this lab, you will use the tools provided with IBM Software Assembly Toolkit Developer to customize the Welcome panel that is displayed when the Deployment Wizard begins the installation process for a solution. For simplification, we will use the solution you created earlier.

1. Select **Start > Programs > IBM Solution Assembly Toolkit 3.1 > Express Runtime Developer** to launch the development environment.
2. In the **Express Runtime Explorer** perspective, double-click on the **ACME_Solution** (Figure 4-1).

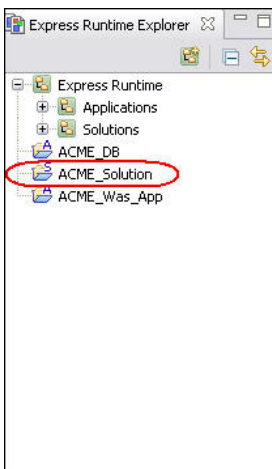
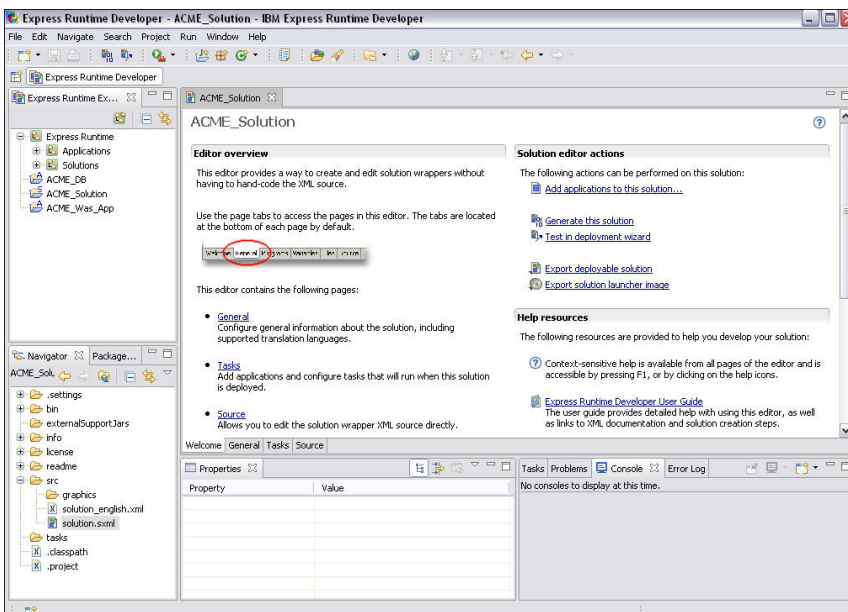


Figure 4-1 Express Runtime Explorer Perspective

3. This will launch the Solution Project wizard for the solution you want to customize (Figure 4-2).



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Figure 4-2 Solution Project wizard Welcome tab

- Click on the **General tab**, and expand the **Welcome Screen Configuration** Section (Figure 4-3).
- Set the following:
 - Title: `%solution_title`
 - Welcome screen title: `%welcomeScreenTitle`
 - Welcome screen text: `%welcomeScreenText`

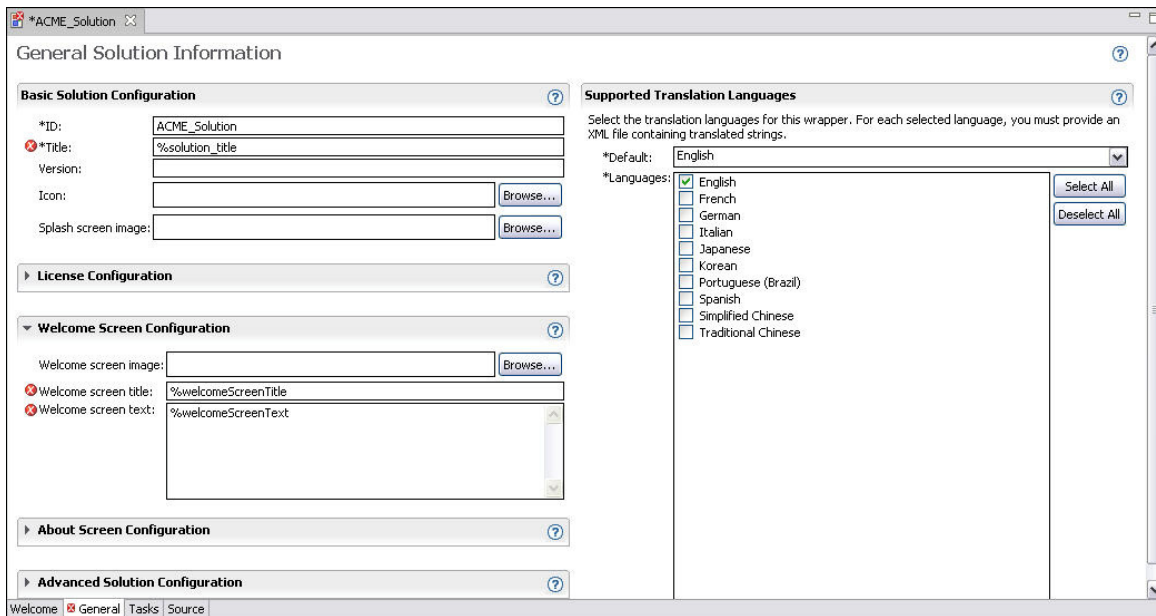


Figure 4-3 Solution Project wizard General tab

Note: This standard variable naming convention allows you to support NLS translation in your deployment. You will see errors on your solution until these variables have been resolved – we will do that next.

- In the **Navigator** perspective, expand the **src** folder (Figure 4-4).

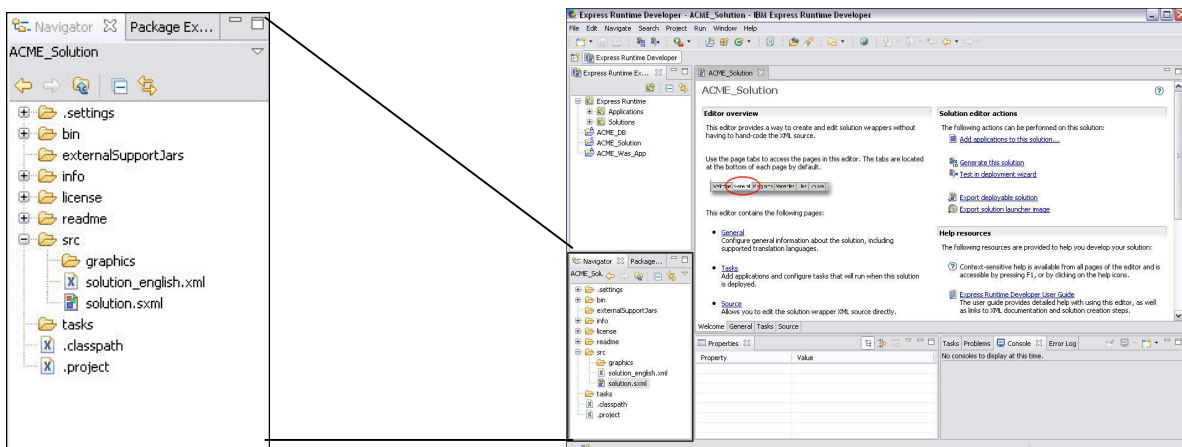


Figure 4-4 Navigator perspective

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Part 2: Customizing Configuration Parameters

During the course of Part 2 of this lab, you will use the Solution Project wizard to modify the configuration parameters that are displayed to the user.

You can retrieve the value of a variable from a system resource or response file. You can share variables across multiple applications so that their values are the same to all of the applications that use them. This will ensure that the integrated solution that you are developing will be installed on the target computer seamlessly and that the installer doesn't have to enter identical information in two different places – thus eliminating possible error.

Note: We are only going to show a quick example of how to perform this action, but you could eliminate all the configuration parameters and only show the end-customer the following:

Location to install the solution:

User ID:

Password:

Confirm Password:

The instructions in this following section provide a description of which applications to share variables with, the list of variables to add and how to modify them. Follow the Wizard panels to modify the values of the variable.

1. You need to share variables with the following applications:
 - a) DB2 Universal Database Express Edition
 - b) ACME_DB
2. In the **Tasks** tab, select *DB2 Universal Database Express Edition for Windows*, perform the following steps:
 - a) In the **Overridden Application Variables** section, click **Add** and select the following variables (Figure 4-6):
 - copyName
 - instanceName
 - dasUserName
 - dasUserPassword

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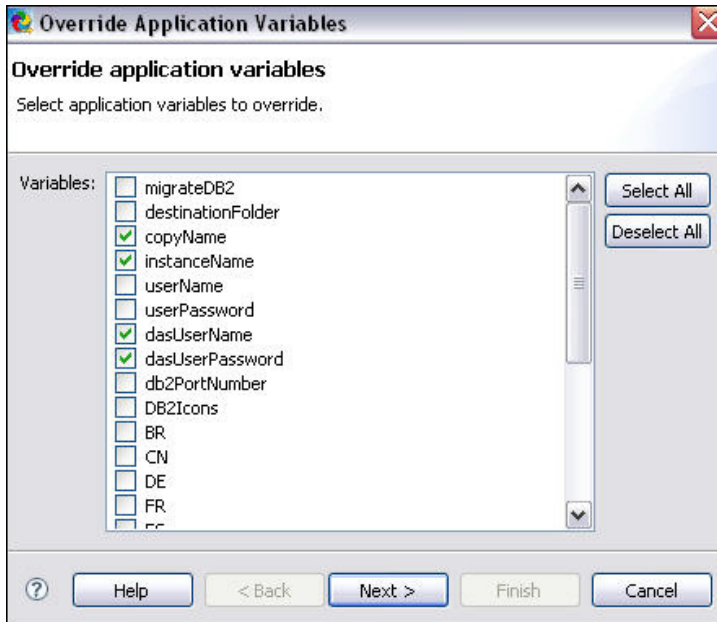


Figure 4-6 Select variables to override

- b) Click **Next** to continue with the wizard.
- c) For **copyName**, select the following - Appearance: **Hidden**, then click **Next**.
- d) For **instanceName**, select the following - Appearance: **Hidden**, then click **Next**.
- e) For **dasUserName**, select the following (see Figure 4-7):
 - Appearance: **Editable**
 - Behavior: **Share the value of dasUserName with other variables**
 - Shared as: **DB2User**
 - Click **Next**.

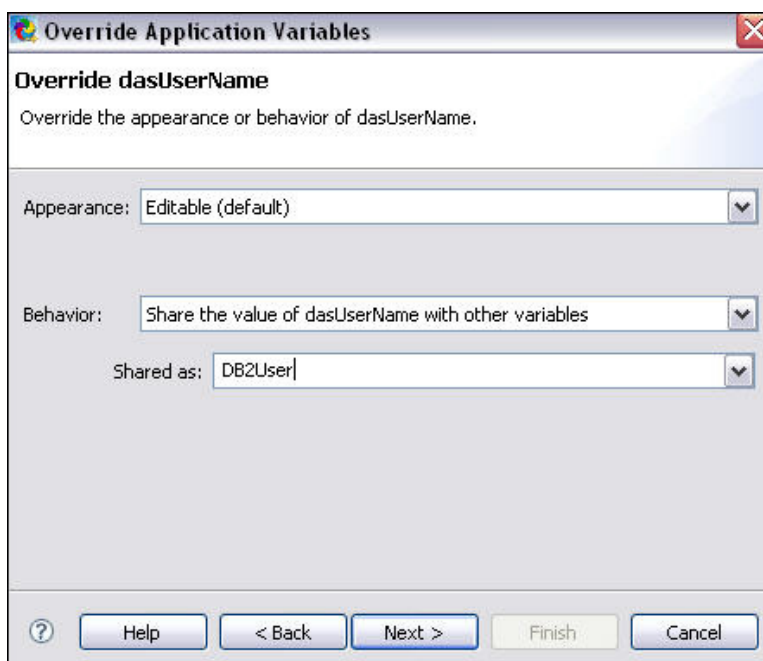


Figure 4-7 Override options for dasUserName

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- f) For **dasUserPassword**, select the following (see Figure 4-7):
- Appearance: **Editable**
 - Behavior: **Share the value of dasUserPassword with other variables**
 - Shared as: **DB2UserPassword**
 - Click **Finish**.
3. In the **Tasks** tab, select *DB2 Universal Database Express Edition for Windows*, perform the following steps:
- a) In the **Overridden Application Variables** section, select **dasUserName** and note the identifier this variable is **sharedAs** in the Properties panel – **DB2User** (Figure 4-8).
- b) Set the default value to **er22user**

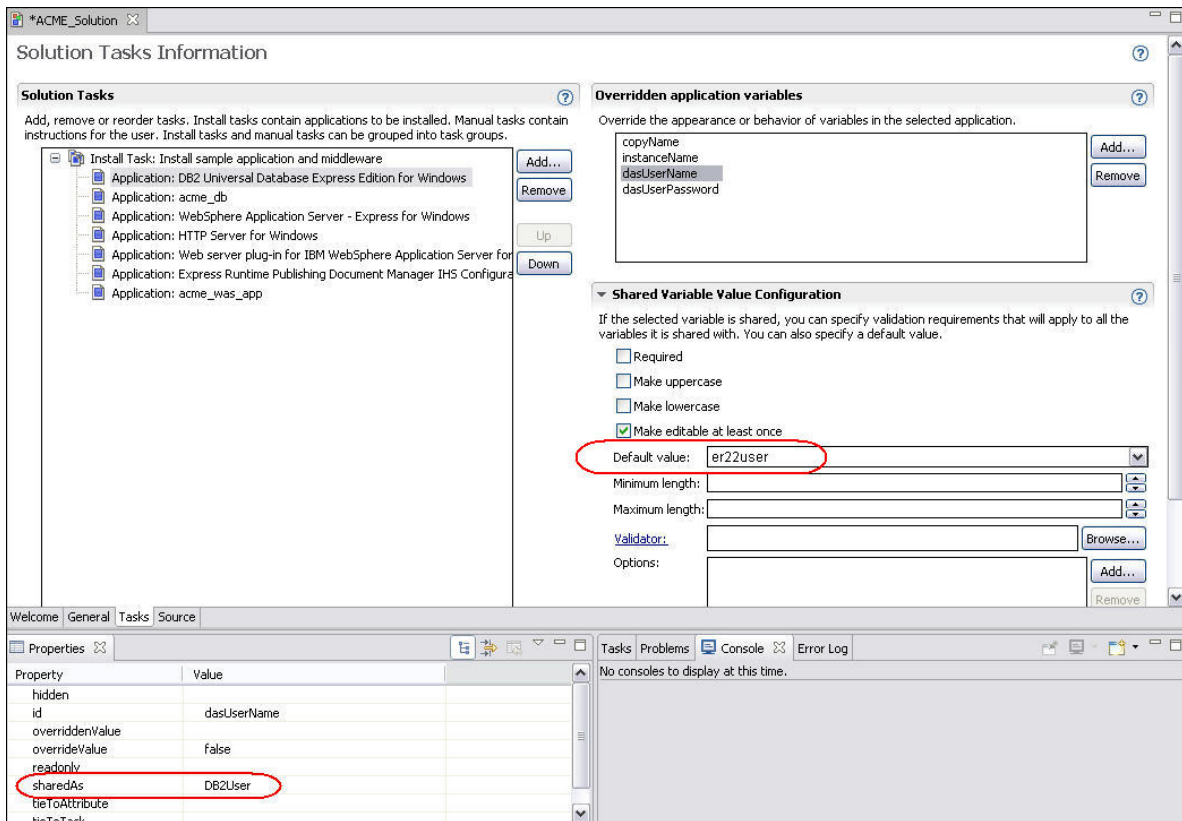


Figure 4-8 Properties of dasUserName

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4. In the **Tasks** tab, select *acme_db*, perform the following steps:
 - a) In the **Overridden Application Variables** section, click **Add** and select the following variables (Figure 4-9):
 - USER_ID
 - DATABASE_PASSWORD

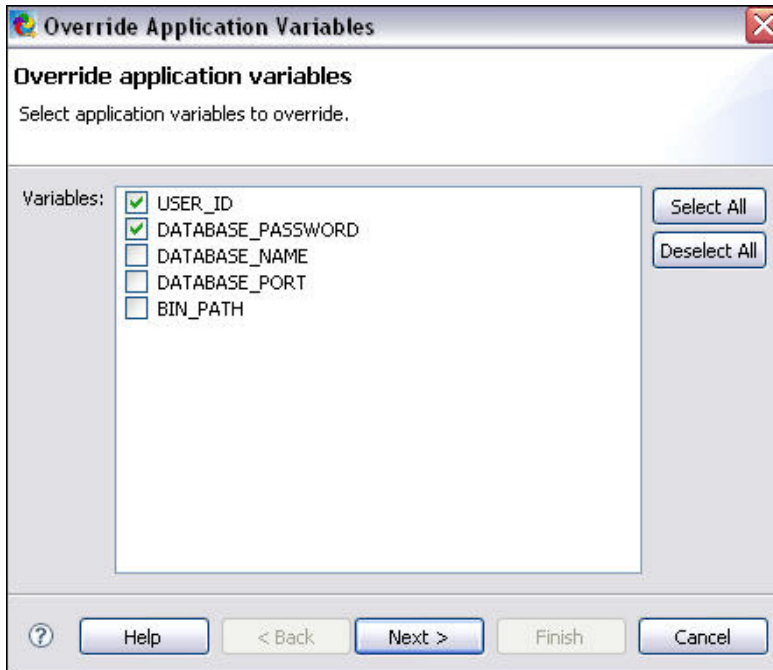


Figure 4-9 Select variables to override

- b) Click **Next** to continue with the wizard.

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- c) For **USER_ID**, select the following (see Figure 4-10):
- Appearance: **Editable**
 - Behavior: **Share the value of USER_ID with other variables**
 - Shared as: **DB2User** (use the dropdown to select this value)
 - Click **Next**.

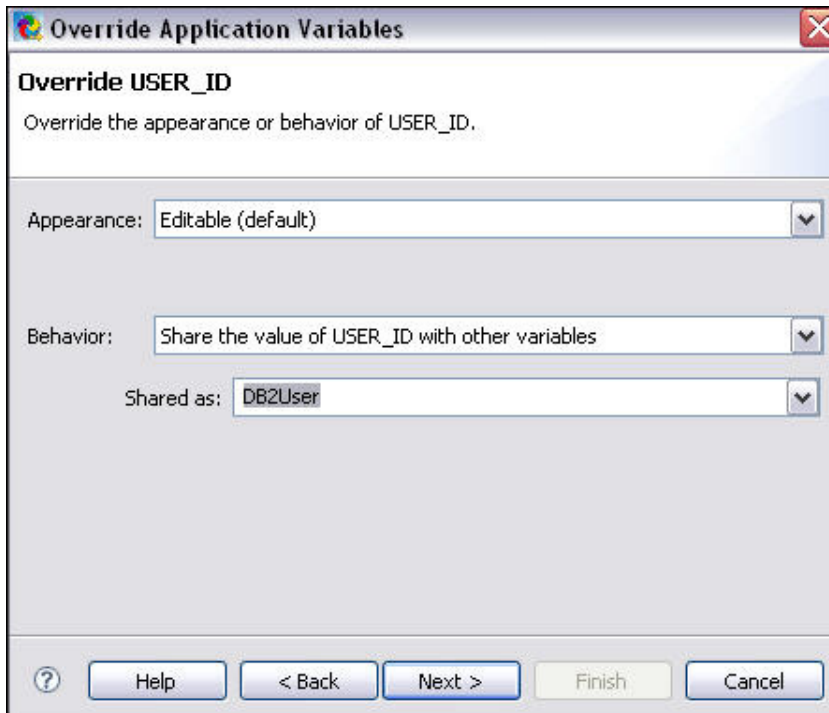


Figure 4-10 Override options for WAS_HOME_WINDOWS

- d) For **DATABASE_PASSWORD**, select the following:
- Appearance: **Editable**
 - Behavior: **Share the value of DATABASE_PASSWORD with other variables**
 - Shared as: **DB2UserPassword** (use the dropdown to select this value)
 - Click **Finish**.

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Part 3: Test in Deployment Wizard

During the course of Part 3 of this lab, you will use the option within the development environment to test your deployment to verify you have set up the configuration parameters the way you want to expose them to the end user.

1. In the **Express Runtime Explorer** perspective, right click on the **ACME_Solution** and select **Test in Deployment Wizard**.

Note: Since you've made changes to the solution deployment accelerator, you will be prompted to re-generate the solution.

2. Once the solution has been generated, you will see the results in the **Deployment Wizard**. Note that the **Welcome** panel reflects the changes you made in Part 1 (Figure 4-11).

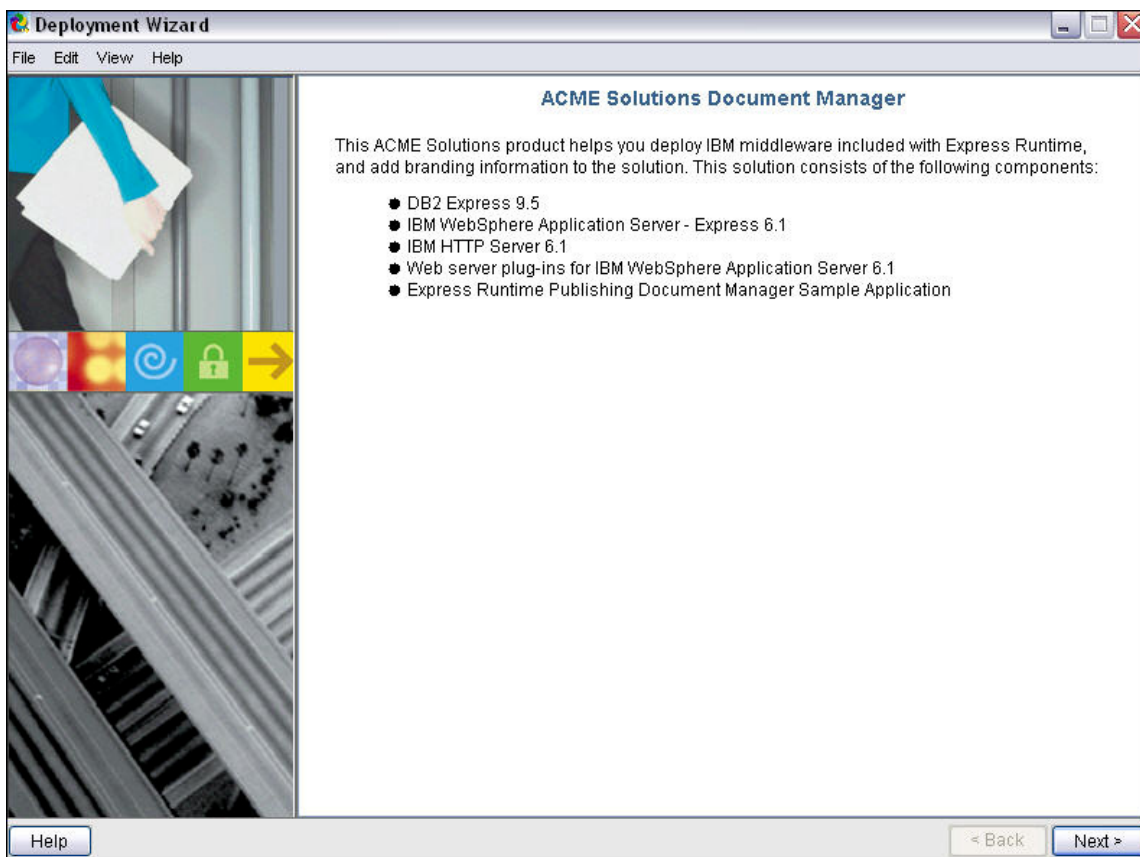


Figure 4-11 Deployment Wizard Welcome page

3. Click **Next** through the **Tasks** and **Targets** screens.

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4. On the **Configure Parameters – DB2 Express** screen, notice that the **DB2 Copy Name** and **DB2 Instance Name** are no longer being displayed and the default value for the **DB2 Administration Server (DAS) User Name** has been changed (Figure 4-12)

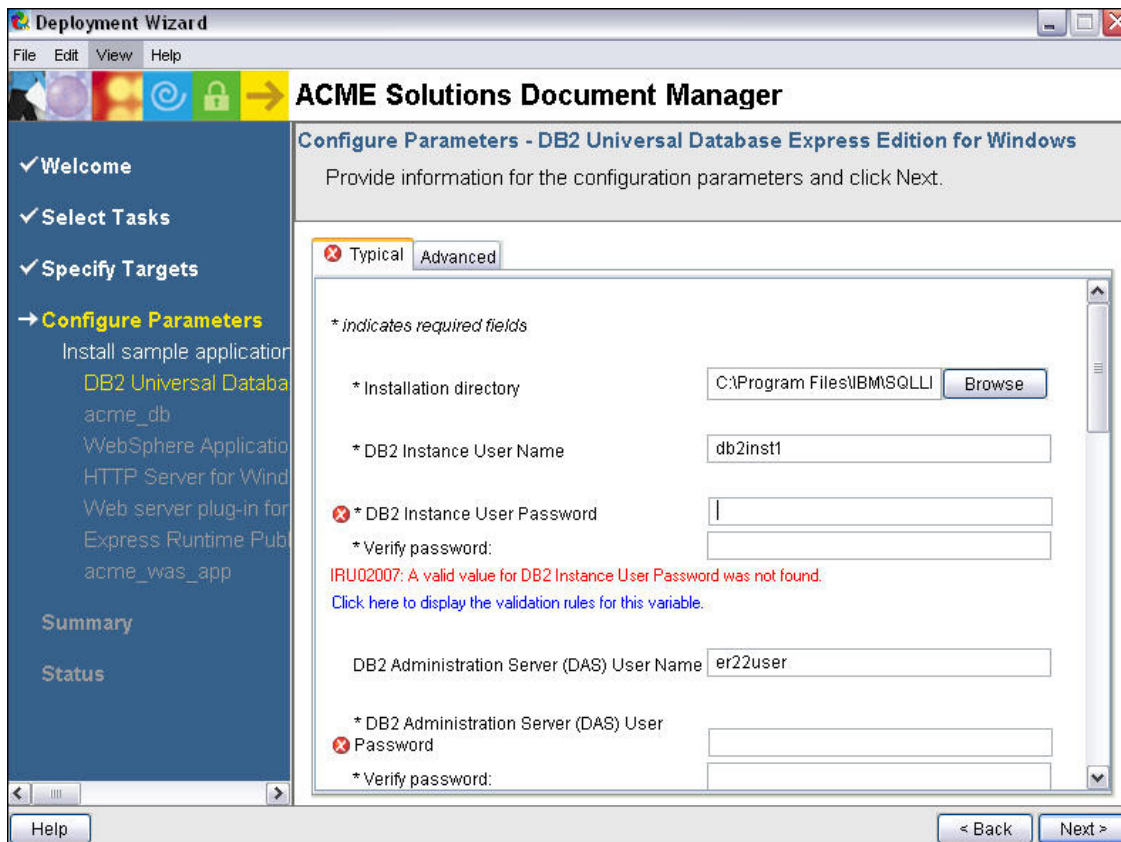


Figure 4-12 Configuration Parameters for DB2 Express

5. Specify the passwords required to move on to the next screen and click **Next**.

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6. On the **Configure Parameters – acme_db** screen (Figure 4-13), notice that the **Database user ID** and **Password** fields have been filled in to match the values specified on the DB2 screen. This indicates that the variables are being shared correctly between these applications.

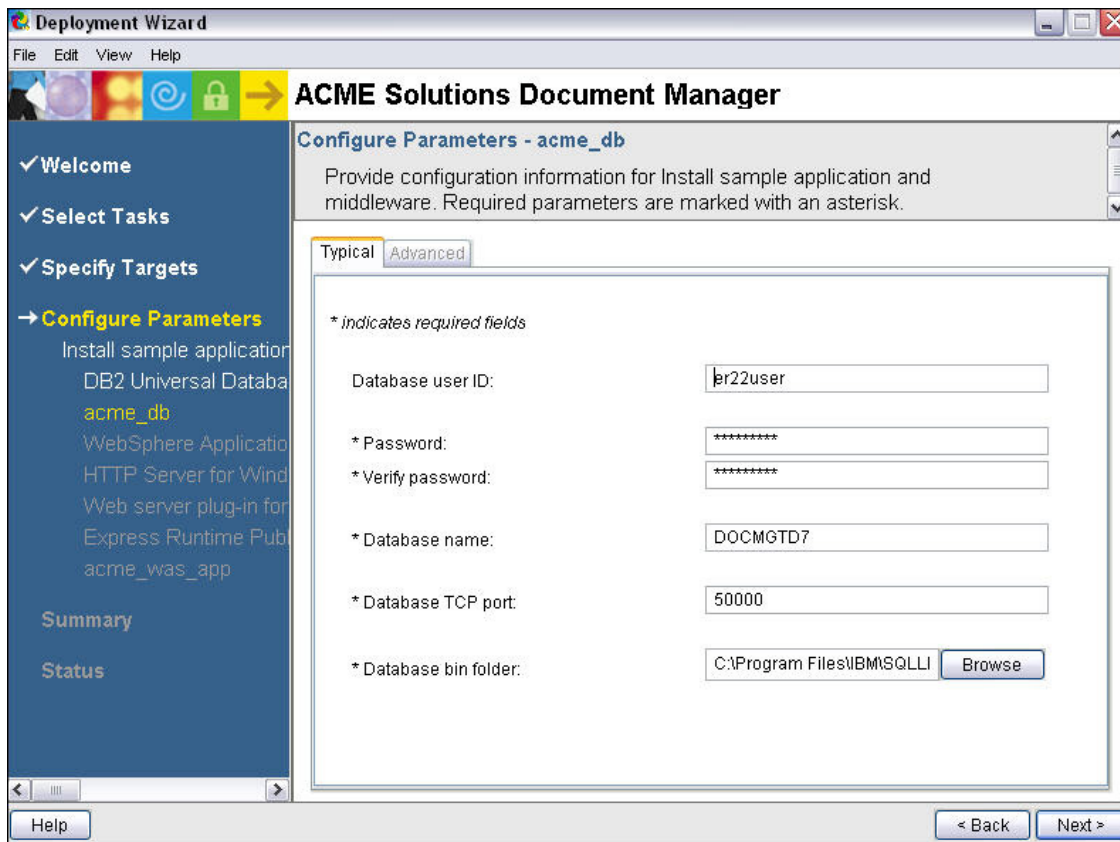


Figure 4-13 Configuration Parameters for acme_db

7. You may now close the Deployment Wizard. It's important to note that you could continue testing if you also wanted to verify the installation scripts as you developed them.

Note: There are several other variables that could be shared between these middleware deployment accelerators. Explore the sample application for more examples.


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Part 4: Branding and Packaging a Solution

During the course of Part 4 of this lab, you will add branding to your solution that will be displayed in the Launchpad before the Deployment Wizard begins the install process. You will also export your solution onto distribution media.

1. In the **Navigator** perspective, expand the **readme** folder.
2. Copy the **readme.htm** file we provided in the ACME_Solution folder (on the Desktop) to the **en** subfolder (add by dragging and dropping the file into the **en** folder or by copying and pasting into the folder). This information will be displayed as your **Release notes** within the Launchpad.
3. You may double-click to open the file and modify the content (see Figure 4-14). When you have finished editing, save the changes and close the file.

A screenshot of a text editor window titled 'ACME_DocMgr_Solution' with a tab for 'readme.htm'. The editor contains HTML code for a document. The visible code includes:

```
<span class="release"></span>
<br />
<span class="ibmdocnum"></span><br />
<div>
<p></p></div>
<div>
<span class="ednoticestitle"></span>
<p>This document applies to version 2.2 of Acme, Inc Solution<BR>
If this were a real solution, the readme would contain information about:
<a name="wq1"></a>
<div id="wq1">
<h1>Contents</h1>
<div class="head1">Known development issues</div>
<div class="head2">Known documentation issues</div>
<div class="head2">Uninstalling the Acme, Inc Solution</div>
<div class="head1">Trademarks</a></div>
</div>
</p>
</body>
</html>
```

Figure 4-14 Sample text for readme.html file

4. In the **Navigator** perspective, expand the **info** folder.
5. Copy the **Documentation.txt** file we provided in the ACME_Solution folder to the **en** subfolder. This information will be displayed as your **Product Documentation** within the Launchpad.
6. You may double-click to open the file and modify the content. When you have finished editing, save the changes and close the file.

Note: If you want to provide full NLS enablement for your solution, you would add a translated version of each of these files into the appropriate language folders. We are only giving you an example of how you would specify these files for a solution with **English** as the default language.

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7. You are now ready to export your solution.
8. In the **Express Runtime Explorer** perspective, right click on **ACME_Solution** and select **Export...**
9. In the **Export** wizard (Figure 4-15), select **Express Runtime -> Express Runtime Solution Launcher Image** and click **Next**.



Figure 4-15 Export wizard

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10. This wizard (Figure 4-16) is going to allow you to create solution files to fit on your desired media (CD/DVD).

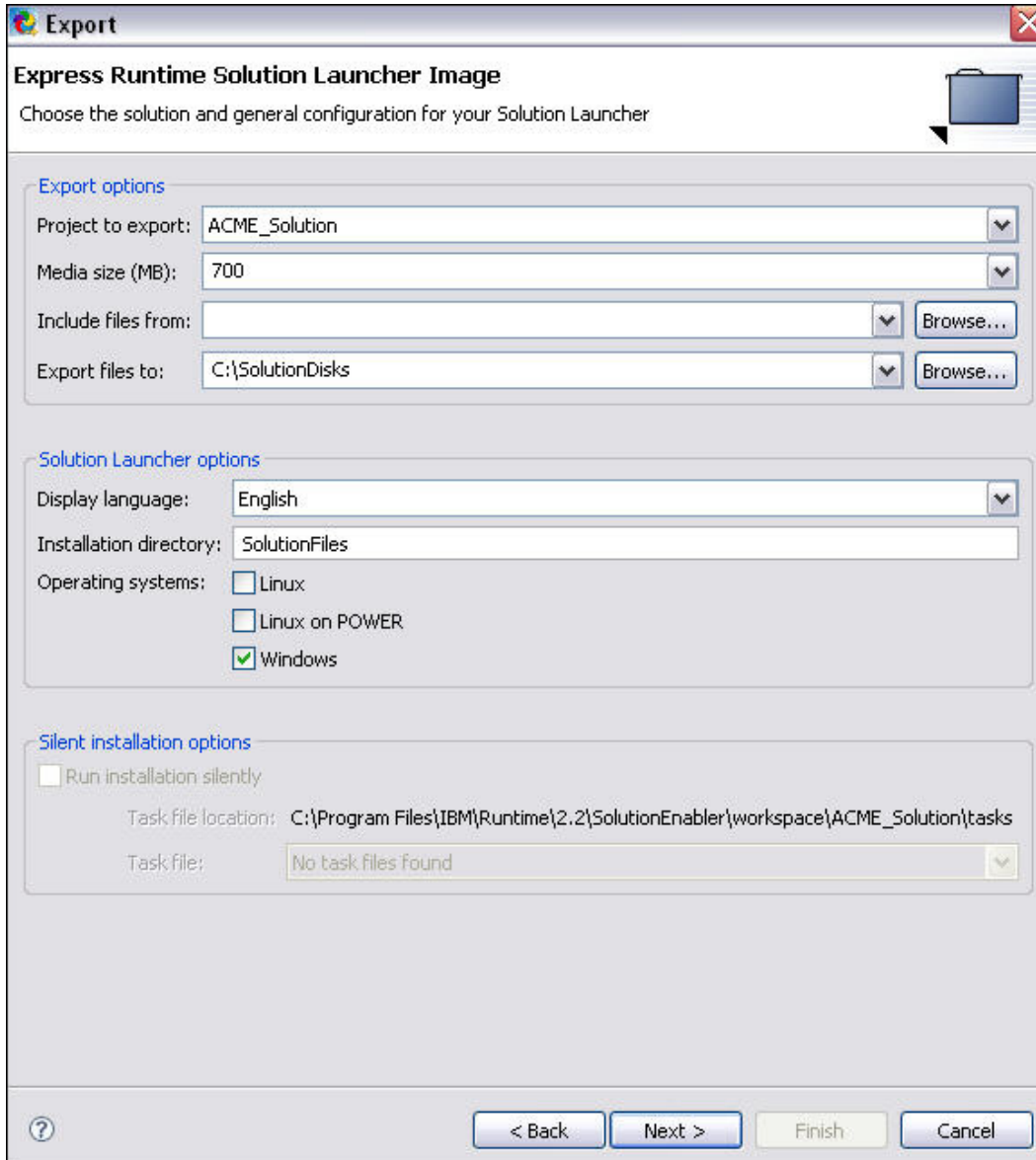


Figure 4-16 Express Runtime Solution Launcher Image export wizard

Set the following values:

- Media size: **700**
- Export files to: **C:\SolutionDisks**
- Display language: **English**
- Operating systems: **Windows**
- Click **Next**

11. On the **Package export** panel:

- Deployment package export type: **Export all deployment packages (typical)**
- Click **Next**

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- On the **Language selection** panel:
 - Default language: **English**
 - Click **Next**
- On the **License** panel:
 - Click **Next**
- On the **Documentation** panel (Figure 4-17):

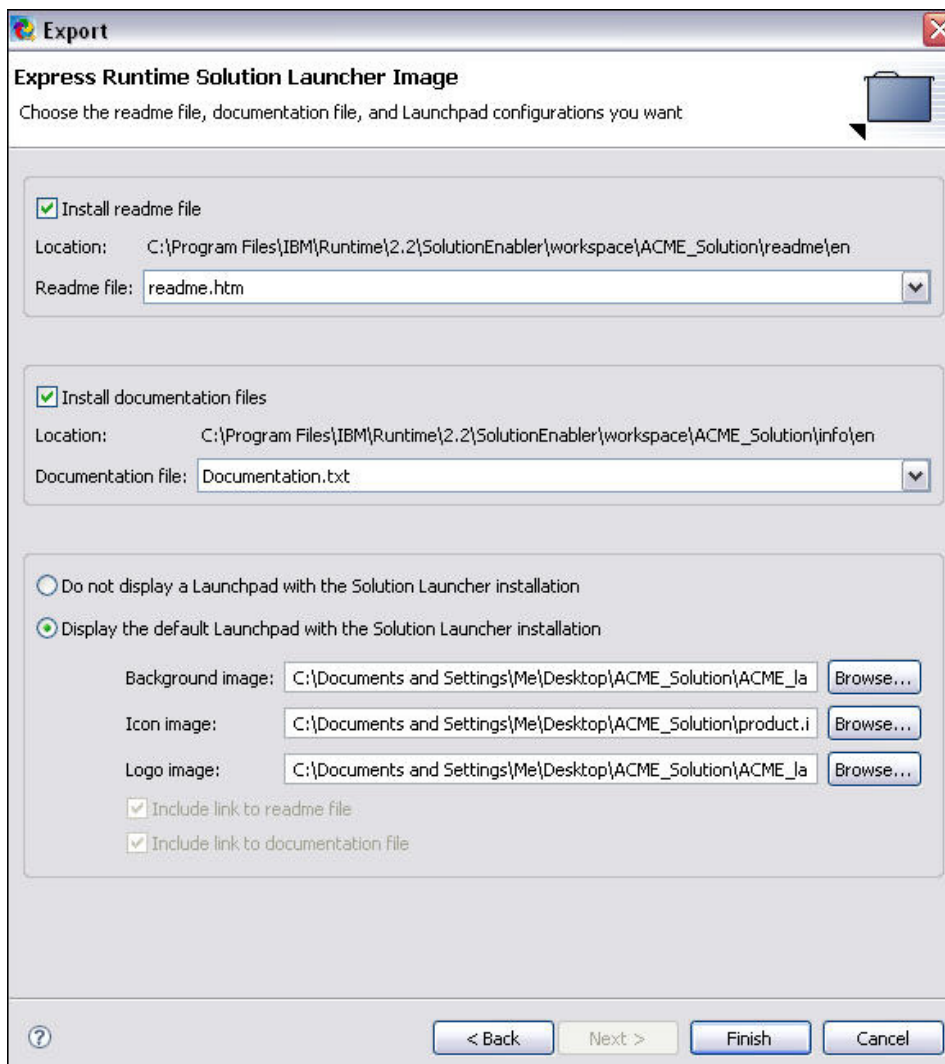


Figure 4-17 Express Runtime Solution Launcher Image export wizard

- Select **Install readme file** - (this option will be grayed out if you did not add a readme file)
- Select **readme.htm** from the dropdown list.
- Check **Install documentation files** - (this option will be grayed out if you did not add an info file)
- Select **Documentation.txt** from the dropdown list.
- Select **Display the default Launchpad with the Solution Launcher installation.**
- Background image: **ACME_launchpage_banner.jpg** (in the ACME_Solution folder)
- Icon image: **product.ico** (in the ACME_Solution folder)
- Logo image: **ACME_launchpage_logo.jpg** (in the ACME_Solution folder)

- Click **Finish** to export your solution package

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16. You will be prompted to create the Target directory, click **Yes**.



Figure 4-18 Create Target directory prompt

17. When the export has completed successfully, you are given the option to save this configuration to use later to generate another solution. In this exercise, we don't need to keep this information, click **No**.

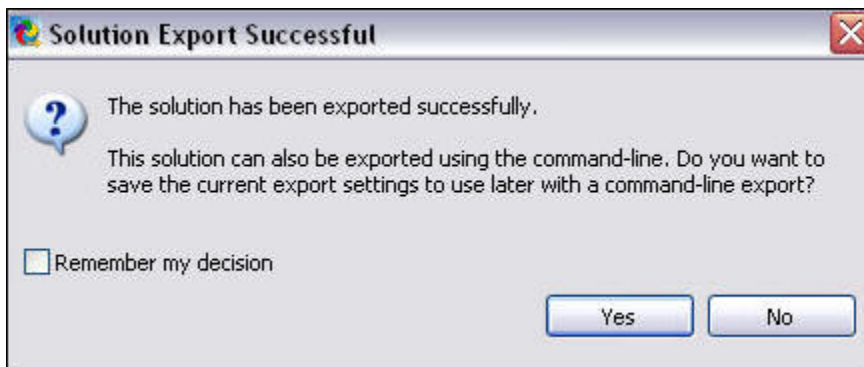


Figure 4-19 Export successful

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18. Select **Start -> Programs -> Accessories -> Windows Explorer** to locate the export results in the file system. Navigate to **C:\SolutionDisks\disk1** (Figure 4-20).

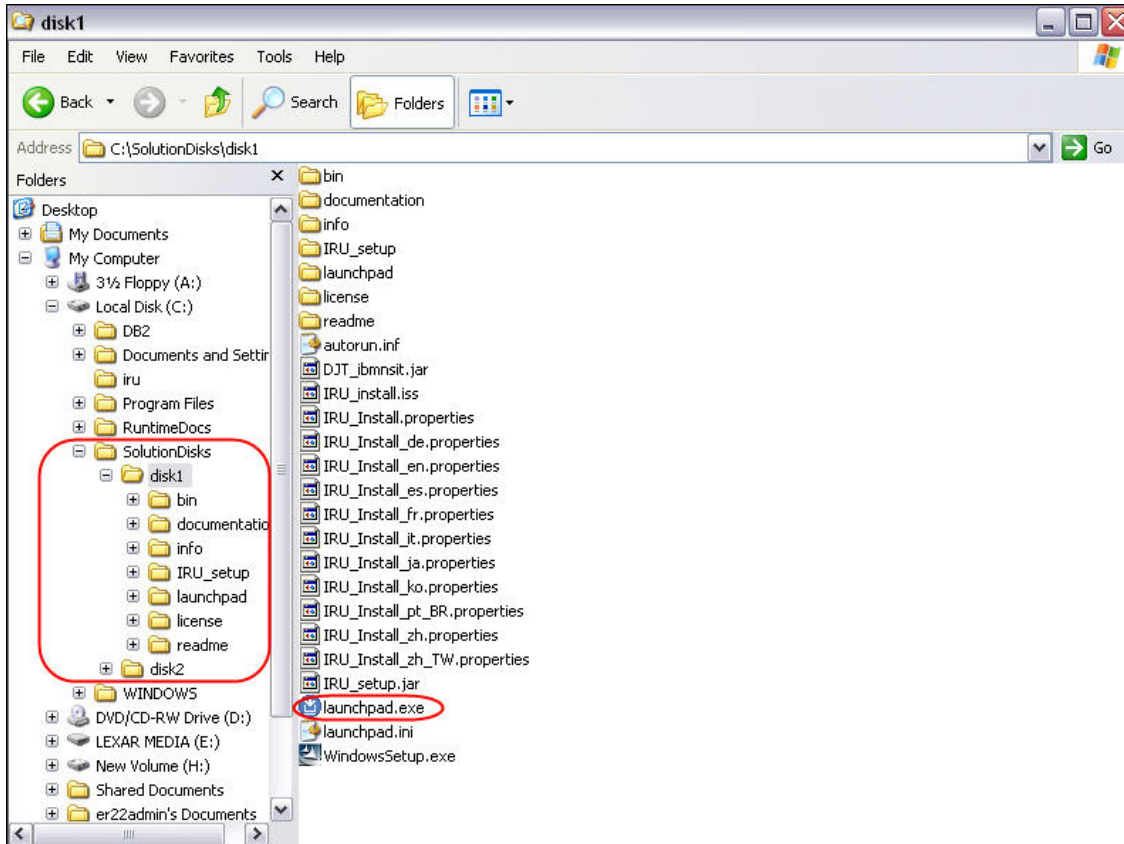


Figure 4-20 Export successful

Note: This solution contains your application, DB2 Express, IBM WebSphere Application Server – Express, and IBM HTTP Server, and it fits on 2 CDs or 1 DVD instead of a stack of CDs for each of the products.

19. If this was on media, the **autorun** feature would kick off the Launch Pad executable. You can simulate this, by double-clicking on **launchpad.exe** to deploy your solution.

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20. You will see the Launch Pad for your solution (Figure 4-21). Verify that any customizations that you made appear as they should. For example, you should see your readme file on the **Release Notes** tab and your info file on the **Product Documentation** tab.

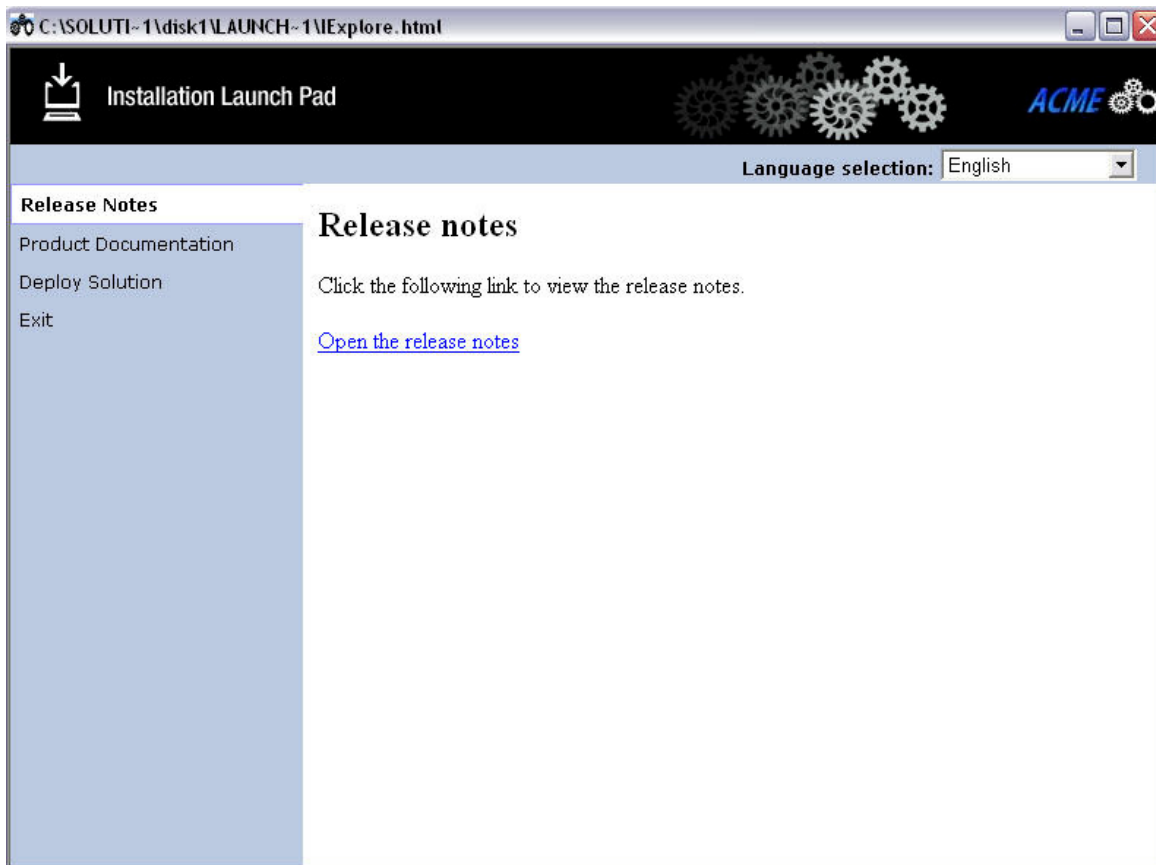


Figure 4-21 Solution Launch Pad

Note: If you click on **Deploy Solution -> Run Deployment Wizard**, the Deployment Wizard will kick off and it will look exactly the same as it did when you tested it under the IBM Software Assembly Toolkit Developer. You do not need to run the Deployment Wizard again.

Congratulations! You have customized, packaged, and verified the deployment of your solution. If this were your final solution, it would now be ready to put on DVDs and distribute to your customers.